

Report to the Legislature

Sunrise Review Optometry Scope of Practice

December 2021



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Executive Summary

Senator Cleveland, chair of the Senate Health and Long-Term Care Committee, requested the department review a proposal under the sunrise law ([chapter 18.120 RCW](#)) to expand the scope of practice for optometrists. The Optometric Physicians of Washington is the applicant group for this proposal.

Draft bill S-3085.2 makes changes to the statute defining the scope of practice for optometrists (RCW 18.53.010) including clarifying language regarding what is and is not included in the scope of practice for optometry; granting the Board of Optometry (board) greater authority over the practice of optometry; expanding the scope of medications and therapeutic procedures an optometrist may prescribe or perform; granting the board authority for rule-making regarding educational standards; and specifying in an exclusive list which procedures are not considered the practice of optometry.

The applicant group maintains the proposed scope expansion is safe and will increase access to eye care for Washingtonians. Groups opposed argue that optometrists do not receive enough education, training, and hands-on experience to safely perform the proposed procedures and that no access to care issues exist for patients seeking an ophthalmologist.

Recommendation

The department has determined aspects of the proposal meet the sunrise criteria. However, the bill as written is too broad and does not adequately describe what procedures would be allowed. We recommend the following changes to S-3085.2 to ensure patient safety:

- Restructure the bill to specifically enumerate the additional procedures rather than listing broad categories and allowing the Board of Optometry to further define those categories in rule.
- Authorize the limited advanced procedures proposed by the department as an endorsement to an optometrist credential, rather than making the expanded scope the baseline.
- Include a requirement that clinical training on the advanced procedures include supervised hands-on experience with patients, rather than just laboratory. The Board of Optometry could identify how to achieve this through rulemaking and should collaborate with the Washington Medical Commission.
- Require the national examinations for advanced procedures including [Lasers and Surgical Procedures Examination](#) (LSPE) and [ISE Injections Skill Examination](#).
- Remove or modify Section 6(3) of draft bill S-3085.2 to eliminate conflicts with the state constitution which stipulates the legislature determines scope of practice.

We also recommend maintaining, from the original proposal, the list of excluded procedures to ensure clarity on what is and is not allowable within the scope of practice for optometry, and the provision allowing optometrists to administer inoculations for systemic health reasons if authorized by the state health officer.

Summary of Information

Legislative Request

On May 27, 2021, Senator Cleveland, chair of the Senate Health and Long-Term Care committee, requested the department review a proposal under the sunrise review law ([chapter 18.120 RCW](#)) to expand the scope of practice for optometrists in Washington state.

Draft bill S-3085.2 makes changes to the statute defining the scope of practice for optometrists (RCW 18.53.010) including:

- Clarifying language regarding what is and is not included in the scope of practice for optometry, for example, including limited ophthalmologic procedures such as some laser treatments and minor surgical procedures (see Appendix B for full details).
- Granting the Board of Optometry (board) greater authority over the practice of optometry in a manner consistent with other healthcare professional boards.
- Expanding the scope of medications an optometrist may prescribe and the scope of therapeutic procedures an optometrist may perform, consistent with national standards.
- Granting the board authority for rule-making regarding educational standards for any procedure the board designates within the scope of practice for optometrists.
- Specifying in an exclusive list of procedures which are not considered the practice of optometry.

Background

The practice of optometry, as outlined in [chapter 18.53 RCW](#), involves examination of the human eye and vision system. It was established in 1975 with the passage of Substitute House Bill (SHB) 308. In 2003, the legislature expanded the scope for this profession to allow the range of drugs an optometrist may use or prescribe beyond topical drugs to include some oral drugs for diagnostic or therapeutic purposes, as well as injectable epinephrine for treatment of anaphylactic shock.¹ This was the last major change to the optometrist scope of practice in Washington, though there have been several other smaller bills passed affecting chapter 18.53 RCW since 2003 that fine-tuned but did not expand their scope.

Currently, optometrists can test patients' visual acuity, prescribe eyeglasses or contact lenses, prescribe visual therapy, and adapt prosthetic eyes. With additional education requirements, a qualified optometrist may also use or prescribe some topical or oral drugs for therapeutic or diagnostic purposes. To apply topical drugs for diagnostic purposes, an optometrist must complete 60 hours of didactic and clinical instruction in general and ocular pharmacology and receive certification from an accredited institution. To prescribe topical drugs for therapeutic purposes, an optometrist must complete the requirements above as well as an additional 75 hours of instruction. To use or prescribe oral drugs, an optometrist must meet the above

requirements for use and prescription of topical drugs as well as complete an additional 16 hours of didactic, eight hours of supervised clinical instruction, and receive certification from an accredited institution.

Summary of Applicant Report

[RCW 18.120.030](#) requires the applicant group to explain several factors about the proposed legislation, including the problem it is attempting to fix, how it ensures competence of practitioners, and how it is in the public interest. The department refers to this as the “applicant report.” The applicant report is intended to supplement the proposed legislation to help the department determine if the proposed change in scope of practice meets the criteria in [RCW 18.120.010\(2\)](#).

Once the department receives the proposed legislation and applicant report, we post the materials online and solicit public comments. We review all the data and comments received, draft our report with our initial recommendation, then solicit additional public comments on our draft recommendations. At the end of the public comment period, we review comments received and adjust our report and recommendations as necessary before submitting the final report to the legislature.

The applicant report submitted by Optometric Physicians of Washington (OPW) defines the problem and need for the proposal as addressing issues with access to care, such as a shortage of qualified eye care providers, especially ophthalmologists. It states optometrists are uniquely positioned to respond to the increase in the aging population and the associated increase in the need for eye care. Because optometrists’ specialty training in ophthalmic care far exceeds any other non-ophthalmologic profession, and training on procedures and treatments continues to advance, the applicant report asserts that they should practice to their highest level of education.

The applicant report estimates a shortage of ophthalmologists of 6,180 nationally by 2025, with a shortage of 1,310 in the west alone, indicating the largest shortage of any medical specialty within the study. It states a stagnant number of ophthalmology residency programs and graduates, retiring ophthalmologists, and the increase in the population of those 65 years and older as contributing factors. ^{ii, 1}

The report also asserts that access and affordability are also challenged when providers do not accept a patient’s insurance or require a patient to travel out-of-town for specialty procedures. According to the applicant report, this can create additional insurance costs for the public, as well as costs for travel, lodging, and missing work, impacting quality of life due to care delays. Washington optometrists currently refer to ophthalmologists for procedures the applicant report asserts optometrists could be providing, such as:

¹ Also supported by reports from Accreditation Council for Graduate Medical Education, and articles from Review of Ophthalmology and Healio.

- YAG capsulotomies²
- Selective laser trabeculoplasty
- Peripheral laser iridotomies
- Lid lesion removal
- Intra-lesional steroid injections
- Subconjunctival steroid injections

The applicant report asserts that expansion of the optometrist scope of practice could add \$600 million per year in transaction cost savings and \$4 billion per year in savings in access-related improvements in health outcomes. It also asserts that increased competition could also add to these savings. The applicant report cites examples of improvements in access to eye care in Washington and reduction in costs to the consumer and healthcare system through expanding the optometrist scope of practice, such as:

- Potential savings in facility fees when optometrists provide office-based procedures, like eye lesion removal or intralesional steroid injection, since they typically provide them in their offices, rather than ambulatory surgical centers (ASC) and hospitals.
- Preventing delays in care because they work in nearly every county in Washington and the procedures could be done in the same office visit.
- Potential savings in transportation and lodging costs for consumers by avoiding out-of-town referral.
- Increased access to care in rural counties, which are disproportionately affected by limits in scope of practice.

According to the applicant report, other factors that impact the availability of eye care services that optometrists with an expanded scope could alleviate are:

- Imbalances in geographic distribution of optometrists and ophthalmologists, especially subspecialty ophthalmic providers like retina, cornea, pediatric, and glaucoma.
- Estimated travel times for consumers.
- Lack of acceptance of insurance like Medicaid and Medicare.
- Time from referral to appointment.

The applicant report presents maps to demonstrate a disparity in distribution of ophthalmologists and optometrists, showing many counties without an ophthalmologist. It cites Okanogan County as an example, which has a population of 41,000 and has no ophthalmologists accepting Medicare within a 50-mile radius, while having eight optometry clinics within that same radius that accept Medicare.³

² Yttrium Aluminium Garnet (YAG) Capsulotomy

³ Cites Medicare Provider Search Tool included in Figure A of applicant report.

To further support the assertion of a shortage of ophthalmologists and that optometrists could alleviate some of the burden on ophthalmologists by performing some limited ophthalmologic procedures, the applicant report includes recent articles that conclude:

- States with optometrists with expanded scope experience shorter travel times for patients, with the closest optometrist who accepted Medicare more than 30 minutes closer round trip than the closest ophthalmologist, and the second closest ophthalmologist another 30 minutes away.
- In rural areas, nearly 40 percent of patients had a single ophthalmologist who would have to provide care for more than 50,000 patients in that area.⁴
- Based on 2011 data, there were only 5.7 ophthalmologists per 100,000 county residents compared to 14.3 optometrists per 100,000 residents.ⁱⁱⁱ

The applicant report also cites a 2018 U.S. Department of Health and Human Services briefing on barriers to access to care^{iv} that concluded restrictive scope of practice laws are one of the factors that lead to increased cost of care and providers, such as nurse practitioners, physician assistants, pharmacists, and optometrists, can all already provide many of the services provided by MDs or DOs effectively.

The applicant report states that a Doctor of Optometry program consists of four years post-baccalaureate specialized biomedical classroom, laboratory, and clinical education accredited by the Accreditation Council on Optometric Education (ACOE)⁵. To enter a program, prospective students must have taken prerequisite courses in the basic sciences that include anatomy and physiology, general and organic chemistry, biochemistry, physics, microbiology, calculus, statistics, and psychology⁶. They must pass the Optometry Admission Test (OAT), similar to the Medical College Admissions Test (MCAT).

Optometry programs include extensive coursework dedicated to the structure, anatomy, function, and physiology of the eye, orbit, and surrounding adnexa, including systemic disease, ocular disease, and pharmacology. Credits vary between programs, from 174 credits at Western University of Health Sciences to 226 credits at Southern California College of Optometry. Programs spend the first and second years concentrating on basic and biomedical sciences in classroom and lab-based training. Patient care experiences typically begin in the third year with an increasing level of responsibility. This is carried into the fourth year, which is spent in eight to 16-week clinical rotations at multiple clinics in a variety of settings.⁷

⁴ Data included in applicant report, with urban vs rural areas of the states examined (OK, KY, NM). (Keyword Reference: Gibson 1)

⁵ ACOE is recognized as an accrediting body by the U.S. Department of Education (USDE) and the Council on Higher Education Accreditation (CHEA). Through periodic reviews by both USDE and CHEA, the ACOE demonstrates compliance with their respective criteria.

⁶ [RCW 18.53.060](#) specifies required topics to be included in the program.

⁷ Applicant report evidence document, page 7.

The applicant report states the current minimum training offered at optometry schools covers the proposed new procedures for current students. However, optometrists who graduated prior to July 1, 2017 may or may not have taken this currently required coursework. The applicant proposed solution for optometrists who graduated before these courses were standard for all optometry schools is continuing education courses to teach the new procedures including:

- Northeastern State University Oklahoma, College of Optometry's (NSU-OCO) advanced procedure course, which includes 32 hours of approved continuing education to include 21 hours of medical knowledge, 8 hours of practice, and three hours of Grand Rounds case review. (See pages 23-24 of applicant report for details about the courses.)
- Pacific University College of Optometry (PUCO) offers a postgraduate course that covers all the advanced procedures, except laser procedures. If a proposed bill passes allowing laser procedures in Oregon, the applicant report states PUCO intends to offer a supplemental course for these procedures.
- Several other programs under development, along with testing for current and future optometry students to prove competency.

The applicant report states that the National Board of Examiners of Optometry offers additional examinations to assess skills in the advanced surgical procedures, including the Advanced Competence in Medical Optometry, and the Laser and Surgical Procedures Examination. These examinations compare with the National Board of Osteopathic Medical Examiners (NBOME), which includes both written and practical test components.

The applicant report includes a comparison of nurse practitioners and physician assistants, who are authorized to perform many of these procedures. It concluded their training does not include the diagnosis, treatment, and technical skills required for these advanced ocular procedures, even though their current scope of practice allows them to perform them.

Both professions receive training in basic eye care, screening techniques, and diagnosis and treatment of common ocular conditions. However, they don't receive significant training in the diagnosis, treatment, and management of glaucoma, cataracts, and retinal disease like optometrists and ophthalmologists do.

Physician assistants may perform the procedures if their attending physician feels they are qualified to perform them and the procedures are within the physician's scope of practice. Nurse practitioners are authorized to perform routine vision screenings but not comprehensive vision exams, glasses or contact lens prescriptions, or major surgery.

Pages 30-31 of the applicant report describe physician assistant training, which are 18-24 month programs with entrance requirements of 2-4 years of undergraduate studies or 1-2 years of undergraduate study with specific basic science prerequisites. The programs cover a wide variety of topics that cover all major diseases and some less common conditions, along with pharmacology and technical skills required for their profession. The second year consists of rotations through clinical settings with hands on patient care.

Pages 31- 32 describe nurse practitioner training, which has two levels of education, a Doctor of Nursing Practice (DNP) and a Master of Nursing (MSN), with most Washington programs now graduating DNPs. Nurse practitioner training typically begins earlier in undergraduate programs, while students work on their nursing degree (either a bachelor's in nursing or an associate in nursing), which includes basic sciences. Prerequisite training for an MSN or DNP is not consistent, but many programs require experience as a registered nurse prior to admission.

The applicant report also describes ophthalmologist residencies to demonstrate that optometry training is adequate. For ophthalmology residencies, the standards are set nationally by the Accreditation Council for Graduate Medical Education (ACGME). The applicant report states that the ACGME requirements for minimum numbers of procedures place their emphasis on higher-level surgical procedures, requiring a minimum of 86 cataract surgeries, 30 retinal procedures, and 28 oculoplastic procedures. For in-office ocular surgeries, the ACGME only requires five YAG Capsulotomies, five Laser Trabeculoplasties, four Laser Iridotomies, and three Chalazia Excisions be performed prior to completing a residency program. Though many programs include more procedures than the minimum, it is not a requirement to be deemed competent for full practice.

In addition, the applicant report points out that some of these procedures were not taught when currently licensed ophthalmologists completed their residencies, so they had to learn them through post-graduate courses. When new procedures or treatments are developed, physicians gain competence in them by continuing education courses, working with colleagues who can teach them, or training by industry representatives. The applicant report states that it's clear that their learning continues after residency.

The applicant report states the board of optometry will implement a system to designate the currently licensed optometrists who have been granted additional authority through additional training. Newly graduating optometrists will have obtained this additional training through their optometry program and must be able to pass a board examination that covers the procedures in question to allow them to begin practicing to this higher level.

To keep uniform standards of practice, the applicant report indicates that the intention is to have all practicing optometrists obtain the authorization for this advanced practice. This would ensure every optometrist has equivalent training by the date specified by the Board of Optometry. This is similar to how Washington implemented the first expanded authority to use diagnostic eye drops and then therapeutic eye drops and ensured all licensed optometrists were eventually held to the same professional standards.

Education and training

Department staff independently reviewed curriculum for 25 optometry schools across the country, as well as two post-graduate programs in Oklahoma and Oregon. All 25 optometry schools provided classroom instruction on oral steroid prescriptions, therapeutic injections, eyelid lesion removal, and in-office laser procedures. The two post-graduate programs also

offered these same types of courses, except Oregon’s post-graduate program does not include in-office laser procedures.

Of the 25 optometry schools, we were able to confirm four provide hands on training with live patients for advanced procedures. There are two other schools who provide hands on training with live patients for all the proposed advanced procedures except those involving lasers. This is largely due to scope restriction in state law in the state in which the school exists. If the optometry school is in a state that does not have expanded scope, students in that state cannot legally perform these procedures on live patients as part of their training.

Training in Proposed Advanced Procedures⁸

It appears all optometry programs in the United States include advanced procedures, such as injections, laser treatments, and certain surgeries in their curriculum. The underlying optometry training serves as the foundation for clinical knowledge and application of the proposed advanced procedures. For example, courses for anatomy and physiology provide the foundations necessary for surgical procedures. Courses on physical optics provide the foundational knowledge to understand the properties of lasers. Advanced coursework on lasers and surgical procedures build on this extensive foundation of hundreds of hours of clinical preparation.^{v,9}

The American Optometric Association and Association of Schools and Colleges of Optometry (ASCO) have developed need-based competencies in the *Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Ophthalmic Surgery*.^{vi} This framework was developed to establish general guidelines for all optometry programs and draws substantially from a number of sources, including the Accreditation Council for Graduate Medical Education (ACGME) core and the Accreditation Council on Optometric Education (ACOE) standards for the professional optometric degree. Every optometry program in the United States has submitted legal affidavits attesting that they train their graduates to perform these advanced procedures. Effective July 1, 2017, the standards outlined in the framework are required for any optometry program to be accredited.

The ASCO Framework does not specify the number of credit or contact hours required, however no optometry school can be accredited without proving the program meets the skills competencies in the ASCO Framework. We were able to confirm all optometry programs in the

⁸ Unless the context clearly implies otherwise, in this report “advanced procedures” means the specific limited procedures proposed by the department on page 40 of this report. “Advanced procedures” includes out-patient minor surgical procedures including common complication of the lids, lashes, and lacrima; Chalazion management, including injection and excision; injections – including intramuscular injections of epinephrine and subconjunctival injections of antibiotics or steroids; management of lid lesions, including intralesional injection of steroids; pre- and post-operative care related to these procedures; use of topical and injectable anesthetics; and suturing of the eyelid, and eyelid surgery, excluding any cosmetic surgery or surgery requiring the use of general anesthesia.

⁹ Applicant report and “Doctor of Optometry Professional Education: A Review of Training in Ophthalmic Surgery,” American Optometric Association and Association of Schools and Colleges of Optometry (ASCO), January 2021, and information from a number of optometry programs.

US are teaching to this minimum standard set by the ASCO. We also reviewed detailed curriculum of a sample of programs. Those programs' specific training in advanced procedures includes:

- Laser physics, biophysics, hazards, and safety
- Laser application, tissue interactions, indications, contraindications, and potential complications
- Gonioscopy
- Specific laser procedures to include Laser Trabeculoplasty, Laser Peripheral Iridotomy, and Posterior Capsulotomy
- Common complications in the lids, lashes, and lacrimal
- Minor surgical procedures
- Chalazion management
- Overview of surgical instruments, asepsis
- Surgical anatomy of the eyelids
- Emergency surgical procedures
- Local anesthesia techniques and complications¹⁰

In most schools, graduation also requires passage of the National Board of Examiners in Optometry (NBEO) examinations. Passage of these exams is also required by Washington for licensure, so any students graduating from an institution that does not require them would still be required to pass those examinations in order to receive their Washington license. Students take part I (Applied Basic Science) the spring of the third year, part II (Patient Assessment and Management) in December of the fourth year, and part III (Clinical Skills) any time during the fourth year of the program.

National certification

In addition, there are voluntary national examinations that cover advanced procedures:

- [Lasers and Surgical Procedures Examination](#) (LSPE). This is a stand-alone NBEO elective exam offered to 4th year optometric students, optometric residents, and optometric practitioners. This examination consists of a clinical skills portion and a multiple-choice portion, which is administered in a computer-based testing (CBT) format. The laser section includes Selective Laser Trabeculoplasty, Laser Peripheral Iridotomy, and YAG Capsulotomy. It also includes complications/contraindications, laser settings, pre- and post-op ophthalmic drugs, indications for treatment, treatment protocols, and follow-up protocols.

¹⁰ Review of multiple optometry program web sites, including Ohio State University College of Optometry, which states their advanced procedures curriculum “meets the Kentucky Board of Optometric Examiners laser course requirement (201 KAR 5:110 Section 1) for licensure in Kentucky.” These procedures are included in Kentucky’s regulation. [Curriculum | OSU College of Optometry](#), accessed July 27, 2021.

The surgical section covers suturing, eyelid surgery, injections, Chalazion excision, and anesthesia. It includes surgical site infections, Neoplasia screening, biopsies and report interpretation, complications/contraindications, indications for treatment, follow-up protocols, universal precautions, topical and injectable anesthetics, intramuscular injections, subconjunctival injections, intralesional injections, and management of lid lesions.

- [ISE Injections Skill Examination](#) is a voluntary NBEO clinical skills examination for optometry requiring fundamental skills that reflect actual practice. The testing facility's exam rooms simulate real-life optometric examination rooms and allow NBEO to provide the safety, security, and standardization necessary to ensure fairness and validity in a high stakes testing environment.

The required procedures to be completed are: Preparation for Intravenous (IV) Injection for Fluorescein Angiography, Preparation for Intramuscular (IM) Injection of Epinephrine, Performing an Intravenous Injection for Fluorescein Angiography, and Performing an Intramuscular Injection of Epinephrine.

Educational Programs

Clinical education on laser procedures varies based on where the school is located. The hands-on training for advanced procedures for most optometry programs is gained in the laboratory because the procedures are not currently in the state's licensing scope of practice. However, the department could confirm that three programs include the advanced procedures in their clinical training throughout the program and in their clinical rotations in the fourth year.

We highlight the following programs:

Northeastern State University Oklahoma, College of Optometry - 172 credits that includes foundational training for the advanced procedures throughout the program.^{vii}
For example:

- *5273 Ocular Disease I: Cataracts, Corneal, and External Disease*. Taken during the 2nd year of the program and includes cataract pre-operative and post-operative care, indications for treatment of posterior capsular haze with Nd: YAG laser, and instruction of office-based surgical procedures.
- *5291 Clinical Practice I* - performance of clinical procedures and observation with case discussion. Also taken during the 2nd year, students perform examinations under the supervision of clinical faculty within clinical and hospital settings, and observe office-based surgical procedures, including anterior segment laser procedures.
- *7095 Clinical Practice V* – clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision

conditions, and other health problems. Taken during the 4th year of the program, student performs optometric examinations and office-based surgical procedures, biopsies, and anterior segment laser procedures under clinical staff supervision.

The program also includes courses specific to lasers and office-based surgery:

- *7031 Ophthalmic Applications of Lasers*. Taken during the 4th year, it includes a review of laser biophysics, hazards, safety precautions, indications and contraindications for specific procedures, performance of the procedures, and follow-up care, including management of complications.
- *7042 Office Based Surgery* – the role of office-based surgical practice within the comprehensive scope of current optometric practice. Includes application of evidence-based medicine and basic science human anatomy to office-based surgical patient selection, planning, instrumentation, procedures, anesthesia, and pre- and post-operative care.

The Illinois College of Optometry - Their core curriculum includes classroom, hands-on laboratory and clinical training for management of a wide array of ocular diseases, including use of oral medications, injections, lasers, and minor surgical procedures.^{viii,11} The program consists of 264 credit hours and coursework includes:

- *Visual and Physical Optics*. This first-year course explores the optics of the human visual system, including refractive error and correction as well as the benefits and limitations of the human eye as an optical system. Emphasizing concepts from both wave theory and particle theory, this course will also address the optics behind diffraction, interference, polarization, absorption, and the impact of electromagnetic radiation on the eye.
- *General and Ocular Pharmacology I, II, and III*. These second-year courses present the quantitative and qualitative aspects of basic pharmacodynamics and drug/patient-related variables for both systemic and ocular pharmaceuticals. All of the systemic and ocular general drug categories are included. The course also includes adverse systemic reactions caused by ocular agents and adverse ocular reactions caused by systemic agents, followed by sources of drug information, new drug development, drug regulations, and prescription writing.
- *Ophthalmic Optics I, and II*. These second-year courses study the optics and clinical use of ophthalmic equipment, including spectacles, contact lenses, and examination equipment. Students will explore spectacle frame types, measurements, selection, alignment, modification, and repair. Lens types will be introduced with an emphasis on materials and designs, including characteristics of ophthalmic lenses such as curvature, thickness, and prism. The design of spectacles for high prescriptions and anisometropia will be discussed. The course

¹¹ Letter from the Vice President for Academic Affairs/Dean

concludes with the optics of ophthalmic instruments. A laboratory provides a practical setting for the application of techniques in lens selection, frame selection and the delivery of these materials to a clinical patient with an emphasis on the ophthalmic materials meeting the patient's visual needs.

- *Ophthalmic Lasers and Surgical Procedures*. This third-year course is a comprehensive overview of injection procedures for optometric practice including injectable medications, side effects, management of complications, and patient education. An associated laboratory demonstrates basic skills for injections as well as individual injection techniques. Covered procedures will include intravenous, subcutaneous, intramuscular, intradermal, subconjunctival, and intralesional injections. The minor surgical procedures portion is a comprehensive overview of surgical procedures for optometric practice, including introduction to surgical instruments, structure, function, and care of common periocular skin lesions, local anesthesia, Chalazion management, radiofrequency surgery, incision making, biopsy, post-operative wound care, and suturing. An associated lab will give participants hands-on experience with minor surgical procedures. The laser portion of this course will review basic laser physics and safety, laser-ocular tissue interactions, and medicolegal considerations in laser surgical procedures. The course will also review co-management procedures for refractive surgery such as pre-operative testing, candidacy, indications/contraindications, management of complications and post-operative care. This course will also focus on medical lasers used in anterior segment procedures such as argon laser trabeculoplasty, selective laser trabeculoplasty, posterior capsulotomy, and peripheral iridotomy. Laboratory time is devoted to hands-on use of all the medical lasers, including performance of simulated procedures on model eyes.

Southern California College of Optometry - 226 credit hours of instruction focused on ocular disease diagnosis, management, and pharmacology; clinical and ocular procedures including advanced techniques; and direct patient care. Students have extensive hands-on experience with advanced procedures including the use of lasers and minor surgical procedures on the lids.¹² Their training aligns with the "Doctor of Optometry Professional Education: A Review of Training in Ophthalmic Surgery Synopsis." Specific courses on lasers and injections include:

- *CLS 722: Ophthalmic Lasers, Injections and Medical Diagnostics* – student becomes knowledgeable in the protocol of advanced complex diagnostic and therapeutic clinical procedures involving ocular disease conditions, with special emphasis on the indications and procedural application of anterior and posterior

¹² Letter from the Dean of the Southern California College of Optometry

segment lasers, neuro-imaging, diagnostic and therapeutic injections, laboratory evaluation of patients, and emergency care.

- *CLS 723: Ophthalmic Surgery* – presents ophthalmic surgical procedures and advanced imaging techniques commonly encountered with special emphasis on pre-operative patient selection, variations of surgical procedures, assessment of normal and complicated post-surgical outcomes, and ordering and interpretation of imaging techniques.

Additional Training for Current Practitioners

Northeastern State University Oklahoma, College of Optometry (NSU-OCO) – Its advanced procedure course includes 32 hours of approved continuing education for optometrists to review and practice the procedures in a didactic review and realistic wet-lab environment. The estimated breakdown of the 32 hours of education is estimated as 21 hours of medical knowledge necessary to perform procedures, eight hours of practice, and three hours of Grand Rounds case review. This course covers:

- *Surgical procedures* - includes a review of facial and ocular anatomy; surgical instruments; asepsis; ocular lesions; anesthesia; injections including intradermal, intramuscular, sub-conjunctival, and intravenous; wound management; basic suture technique; and techniques for performing in-office optometric surgical procedures. Also covers indications for, alternatives to, risks/benefits, and management of possible complications of all techniques.
- *Laser therapy for the anterior segment* – includes technical skills required for performing anterior segment laser procedures to include laser physics, laser tissue interactions, gonioscopy, including indications, contraindications, alternative treatment options, risks, benefits, procedural techniques, and management of possible complications. Includes an in-depth discussion of the most-commonly performed clinical anterior segment laser procedures:
 - YAG laser capsulotomy
 - Laser peripheral iridotomy (PI)
 - Green laser trabeculoplasty (GLT)
 - Selective laser trabeculoplasty (SLT)
 - Green laser peripheral iridoplasty

Pacific University College of Optometry (PUCO) - Offers a postgraduate course that covers all the advanced procedures requested, with the exception of laser procedures.¹³ The Advanced Ocular Therapeutics (AOT) course is a 23-hour certificate course on systemic and injectable medications used in eye care and states that it meets the

¹³ Applicant report, page 22.

didactic requirements for optometrists in Oregon, Washington, and Alaska. Includes an online exam.^{ix}

Pacific University College of Optometry’s program includes training on advanced procedures, excluding lasers.^{x,14}

Other States

Department staff evaluated similar laws that have passed in eight other states: Alaska, Arkansas, Indiana, Kentucky, Louisiana, Mississippi, Oklahoma, and Wyoming. We also reviewed neighboring states Oregon and Idaho, however neither of these states has passed a scope expansion including all the advanced procedures proposed by the applicant report. Oregon did consider a similar law during their 2021 legislative session, but the bill did not make it out of committee before the close of the 2021 session.

Alaska

Alaska passed their most recent scope expansion for optometrists in 2017. Regulations covering the expanded therapeutic procedures are found in 12 AAC 48.040 – Expanded therapeutic procedure.^{xi} Expanded therapeutic procedures are defined as “an ophthalmic surgery approved by the board in compliance with AS 08.72.278 and may include anterior segment laser procedures, anterior segment surgical procedures, YAG laser capsulotomy, laser peripheral iridotomy, and laser trabeculoplasty.”

The board may authorize a licensee to practice these expanded procedures if their current license is in good standing, the licensee provides satisfactory evidence to the board that the licensee successfully completed a course meeting the requirements in 12 AAC 48.040(d), and the licensee passes a formal practical examination. Licenses for expanded procedures must individually list each expanded therapeutic procedure the licensee is authorized to perform. 12 AAC 48.040(h) contains a list of 17 procedures optometrists may not perform under any circumstances, including such procedures as laser-assisted in situ keratomileusis (LASIK) and photorefractive keratectomy (PRK).

The Chair of the Alaska Board of Examiners in Optometry submitted a letter affirming that they have received no complaints regarding care rendered under the expanded scope of practice since the law passed in 2017.¹⁵

Arkansas

In 2019, Arkansas passed legislation expanding the scope of optometrists in the state. Since the passage of that legislation, the practice of optometry means “the examination, diagnosis, treatment, and management of conditions of the human eye, lid, adnexa, and visual system, including the removal of foreign bodies from the cornea, conjunctiva, lid, or adnexa, but shall

¹⁴ Applicant report, page 36

¹⁵ Applicant Report, Evidence Document Page 148

exclude other surgery of the lid, adnexa, or visual system which requires anything other than a topical anesthetic.^{xii} All optometrists are prohibited from performing cataract surgery, radial keratotomy surgery, selling prescription drugs, or using ophthalmic lasers for surgical procedures with some exceptions. Those excepted procedures which optometrists may perform include:

- injections (excluding intravenous or intraocular injections)
- incision and curettage of Chalazion
- removal and biopsy of skin lesions with low risk of malignancy (excluding lesions involving the lid margin or nasal to the puncta)
- laser capsulotomy
- laser trabeculoplasty

In order to perform surgical procedures, optometrists must either have graduated from an accredited institution meeting the educational requirements or have taken additional coursework covering required topics within the last five years, and pass several written exams. Once certified, an optometrist performing any laser procedures must report the outcomes of all laser procedures performed to the State Board of Optometry at least annually.^{xiii}

Department staff reached out to the Arkansas State Board of Optometry requesting data on advanced procedures and outcomes, we have not heard back at this time.

Indiana

In Indiana, licensees can get a certificate added to their license that allows them to administer for therapeutic use, dispense, and prescribe certain legend drugs. To earn this certificate, an optometrist must apply to the board, pay a fee, provide proof of education in ocular pharmacology from a school or college approved by the board, and pass the Treatment and Management of Ocular Disease examination administered by the NBEO.^{xiv}

Although the applicant report asserts that Indiana allows for advanced procedures as authorized by the state, we can find no evidence that the state has authorized any advanced procedures. Department staff reached out to the Indiana Optometry Board, but were told they could not advise us as to the scope of practice in Indiana.

Kentucky

Kentucky passed the “Better Access to Quality Eye Care Act” in 2011. The scope of practice includes, but is not limited to:

- Prescribing and adapting lenses, contact lenses, spectacles, eyeglasses, prisms, and ocular devices
- All routes of administration of pharmaceutical agents, except controlled substances classified in Schedules I and II
- Employing vision therapy or orthoptics
- Low vision rehabilitation
- Laser surgery procedures, excluding retina, LASIK, and PRK

- “... the correction and relief of ocular abnormalities by surgical procedures not excluded in paragraph (b) of this subsection.”

Paragraph (b) includes a list of 17 procedures an optometrist may not perform under any circumstances.

A letter submitted by the President of the Kentucky Board of Optometric Examiners states that, since the passage of the “Better Access to Quality Eye Care Act” in 2011, the state has credentialed more than 410 optometrists to perform advanced procedures. As of May 19, 2021, Kentucky reports over 40,000 laser and surgical procedures performed by optometrists with no complaints or adverse outcomes reported relating to the advanced procedures in this expanded scope of practice.¹⁶

Louisiana

Louisiana Act 398 passed in 2014 and expanded the scope of optometry in that state to allow optometrists with qualified training to perform advanced ophthalmic surgery procedures, including laser procedures. To perform advanced procedures in Louisiana, a licensee must provide proof of satisfactory completion of a course of instruction approved by the board and pass a written test approved by the board on the Louisiana Optometric Practice Act pertaining to ophthalmic surgery procedures.^{xv} The code also requires any optometrist licensed to perform ophthalmic surgery procedures to report the outcomes of such procedures to the board.

The Secretary of the Louisiana State Board of Optometry Examiners submitted a letter stating that of the 489 licensed optometrists in the state, 292 have become certified to perform advanced ophthalmic surgical procedures. Data from 2015-2019 show that these certified providers have performed 11,545 procedures with no negative outcomes reported. The Secretary also states there have been no complaints to the board from patients or other doctors regarding optometrists performing these procedures, and the board is not aware of any malpractice suits filed in relation to these procedures.¹⁷

Mississippi

Optometrists in Mississippi can be certified to three different levels: diagnostic optometrist, therapeutic optometrist, and Primary Eye Care Procedures (PEP) optometrist. A diagnostic optometrist is allowed to use pharmaceutical agents in their practice and must be certified by the board to do so. An optometrist wishing to be certified as a diagnostic optometrist must submit proof to the board that they have completed courses in pharmacology with particular emphasis on the topical application of diagnostic pharmaceutical agents to the eye, and pass an exam administered by the board. Any optometrist certified to use diagnostic pharmaceutical agents may also be certified to use therapeutic pharmaceutical agents. In order to earn this certification, an optometrist must satisfactorily complete:

¹⁶ Applicant Report, Evidence Document Pages 149-150

¹⁷ Applicant Report, Evidence Document Pages 146-147

- A course consisting of a minimum 64 hours of didactic education with particular emphasis on the examination, diagnosis, and treatment of conditions of the eye and adnexa.
- A minimum of 80 hours of supervised clinical training as it applies to optometry with particular emphasis on the examination, diagnosis, and treatment of conditions of the eye and adnexa.
- Pass a written exam approved by the board.

A PEP optometrist may provide procedures that employ incision, injection, laser, radiation, cautery, cryotherapy, vaporization, ultrasound, chelation, ionization, intense light, UV, radio frequency, and other surgical methods, chemical reactions, or instruments not otherwise excluded.^{xvi} Excluded procedures include:

- Intraocular surgery, not including YAG laser posterior capsulotomy
- Intraocular injection
- Intraocular transplantation
- Intraocular aspiration or the ordering of for diagnostic purposes
- Intraocular penetration or the ordering of for diagnostic purposes
- Use of medications that must be injected or implanted into the eye or orbit
- Biopsy of any part of the globe or the ordering of for diagnostic purposes
- Injection of dermal filler and substances such as hyaluronic acid and poly-L-lactic acid for cosmetic purposes
- Removal of foreign bodies that involve the eyelid margins, lacrimal drainage structure, or extending deeper than the orbicularis muscle
- Reconstructive surgery of the eyelid
- Cataract surgery

In order to be certified as a PEP optometrist, an optometrist must provide proof of holding a Mississippi therapeutic optometry license in good standing, provide proof of satisfactory completion of a course of instruction approved by the board, pass a written test approved by the board including aspects pertaining to PEP procedures, pass a clinical assessment on YAG laser posterior capsulotomy approved by the board, and participate in 8 additional hours working under a preceptor who is a PEP licensed optometrist or an ophthalmologist. Once certified, PEP optometrists must report annually to the board on the outcomes of PEP procedures.

The Executive Director of the Mississippi State Board of Optometry provided data that the state has 434 active optometrists and 138 of those are credentialed to perform “Primary Eyecare Procedures” (PEP) which most closely aligns with the proposed scope expansion. Mississippi does require optometrists performing advanced procedures to report to the board on outcomes, however the law in Mississippi is relatively new and the first reporting year closes this year, December 31, 2021, so Mississippi has no complaint or outcomes data to share with us at this point.

Oklahoma

WASHINGTON STATE DEPARTMENT OF HEALTH

Sunrise Review – Optometry Scope of Practice

Oklahoma defines the practice of optometry as the science and art of examining the human eye and measurements of the powers of vision by the employment of any means.^{xvii} “Any means” includes:

- The use or furnishing of any self-testing device
- The use of any computerized or automatic refracting device, including applications designed to be used on a computer or video conferencing via an Internet device either in person or in remote locations
- The use of pharmaceutical agents
- The diagnosis of conditions of the human eye, and the correcting and relief of ocular abnormalities by means including, but not limited to, prescribing and adaptation of lenses, contact lenses, spectacles, eyeglasses, prisms and the employment of vision therapy or orthoptics for the aid thereof
- Low vision rehabilitation
- Prescribing controlled substances Schedule III-V, with allowances for hydrocodone or hydrocodone-containing drugs regardless of schedule for a period not exceeding five days
- Laser surgery procedures, excluding retina, laser in-situ keratomileusis (LASIK), and cosmetic lid surgery

The law also allows the Board of Examiners in Optometry to further define the scope of practice for non-laser procedures by promulgating rules.^{xviii}

For administering or prescribing dangerous drugs, an optometrist must satisfactorily complete courses in general and ocular pharmacology at an accredited institution approved by the board. Prior to June 30, 2006, this was an additional certification licensees. However, as of June 30, 2006, the board stopped renewing licenses for any optometrist who did not meet the criteria so all licensed optometrists in Oklahoma are certified to administer or prescribe scheduled drugs, as outline in their rules.^{xix}

The Executive Director of the Oklahoma Board of Examiners in Optometry submitted a letter to the department stating that between 1988 and 1998 laser procedures were allowed by law and approximately 5,000 procedures were reported in that period with no negative outcomes. Those procedures were based on an interpretation of the law in 1988 In 1998 the legislature updated the statute to clarify the statutory definition of optometry and specifically allow for laser procedures. Since 1998, when legislation allowing laser procedures was passed, an additional estimated 50,000 laser procedures have been performed with no complaints registered with the board. The board did acknowledge there were 2 insurance settlements made involving PRK treatment, which is excluded from the proposal before us.

Wyoming

Wyoming law states that the practice of optometry is occurring when a person employs primary human eye care procedures, including:

- The examination, diagnosis, and treatment of abnormal conditions and diseases of the eye, its adnexa, and visual system.
- Measuring the powers and range of vision of the eye to determine the accommodative and refractive state and general function of the eye.
- The adaptation, sale, prescribing, and dispensing of frames and ophthalmic lenses in all their forms.
- Ordering and performance of diagnostic laboratory or imaging tests.
- The prescribing and administration of pharmaceutical agents, as provided in rule.
- Preoperative and postoperative care for those procedures excluded from the practice of optometry.
- Any laser procedure as set forth by the board's rules and not excluded by rule.^{xx}

The law also includes a list of 21 excluded procedures including prohibitions on administering or performing surgeries using general anesthesia, laser procedures including corneal procedures, procedures of the vitreous chamber for treating retinal or macular disease, retinal procedures, and a lengthy list of non-laser surgical procedures. Laws also limit the use of scheduled substances to only those in Schedules III-V and allowing for prescribing of hydrocodone or hydrocodone containing pharmaceuticals regardless of schedule.

The Wyoming legislature passed their scope expansion law (House Enrolled Act 0036) during the 2021 session. The board is currently working on rulemaking to implement the changes, but those rules are not yet final. As such, we also do not yet have a full sense of the regulations in Wyoming covering advanced procedures nor can we provide any data on outcomes or reported complaints related to optometrists performing advanced procedures.

Stakeholder Engagement

Comments on Applicant Report

As part of the sunrise review process, the department solicited comments from the public and stakeholders on the applicant’s initial applicant report. 317 comments were received. This section provides a high-level summary of all comments received.

Comments in Opposition

We received 41 comments, out of 317, in opposition to the proposal. The breakdown of who the comments came from is below, followed by a summary of the comments grouped by theme. The full comments from each commenter are attached in Appendix E.

15 ophthalmologists	14 MDs – did not specify specialty
6 professional associations <ul style="list-style-type: none"> • Washington Association of Eye Physicians and Surgeons 	1 boards/commissions <ul style="list-style-type: none"> • Washington Medical Commission

<ul style="list-style-type: none"> • Washington State Medical Association • American Academy of Ophthalmology • Washington State Society of Anesthesiologists • Washington State Medical Oncology Society • Washington State Psychiatric Association 	
1 optician	1 retired MD
1 rehabilitation therapist	1 registered nurse
1 member of the public	

In general, we saw 5 main themes in the comments opposing the proposal.

Themes

Education and Training

Many of the comments received in opposition assert that optometrists lack the proper education and training to perform surgical procedures. Some specified the education was lacking around use of anesthesia in particular. Others emphasized that optometrist training does not include the type of hands-on experience necessary to safely perform these procedures.

A few commenters asserted that the only acceptable level of training would be equivalent with medical or osteopathic doctors to ensure safe surgery and prescribing. Physician training includes very specific standards governed by the Accreditation Council for Graduate Medical Education which include supervision ratios, cohort sizes, and number of procedures that must be performed on human patients prior to completion of their program. Commenters stated that there are no equivalent requirements or standards for optometry postgraduate training.

Many commenters also expressed concerns that optometrists are not required to complete any standardized training program following their formal education.

Many ophthalmologists submitted comments asserting that patients do not understand the difference between an optometrist and an ophthalmologist, and they argue that patients would choose ophthalmologists if they understood.

Risk of Patient Harm

Commenters who were opposed stressed that surgical procedures around the eye are exceedingly invasive and carry significant risk of patient harm. They assert optometrists do not have the breadth of skills and knowledge to determine when surgery is appropriate or not. Some commenters expressed strong concern that the proposal allows optometrists to

administer anesthesia as this would risk significant patient harm.¹⁸ Others acknowledged that general anesthesia and any surgeries using general anesthesia are excluded from the proposal but continue to have concerns about other forms of anesthesia that the proposal would allow, including deep sedation, infusions, and regional blocks. Some also expressed concern about the proposal allowing injections and expanded prescriptive authority citing the potential for patient harm.

Further, some commenters suggest that authorizing this scope expansion would lower the standard of surgical care in Washington. They assert that the margin of error for eye procedures is minimal and optometrists do not have the preparation and judgement formed through years of medical school and residency to safely perform eye surgery. Some also emphasized that lasers are surgical instruments and can cut as deeply as any knife. It could result in severe negative outcomes. A few comments also expressed concern that seemingly benign eyelid lesions may actually be cancerous and improper surgical techniques could cause the cancer to spread if not properly diagnosed and treated. One also expressed concern with section two of the proposed bill stating that an optometrist would not know if a lesion were malignant until after it is removed.

Lack of Access to Care

Comments suggested there is no access to care issue regarding ophthalmologists. Some feel that even if we assume there is, the solution is to increase medical residencies and investing in other solutions rather than expanding the scope of optometrists. A few cited a study performed by the University of Washington that concludes 97.6 percent of Washingtonians are within a 1-hour drive of an ophthalmologist. Some stated there has been no public request or outcry for optometrists to have this expanded scope and they assert since the proposal is not patient driven it is only for the benefit of optometrists themselves.

Oversight

Some commenters expressed concern that the proposal allows the Board of Optometry to determine their own scope and set educational and other requirements. They assert that optometrists are not trained to perform advanced procedures, therefore they are not able to determine what appropriate education and training requirements are.

Scope in Other States

A few commenters pointed out that the other states which allow the advanced procedures in this proposal are significantly worse places to receive health care and have poorer population health than Washington.

Comments in Support

¹⁸Department staff believe this was a misread of the proposed legislation, which specifically *excludes* the administration of anesthesia from the optometrist scope of practice as well as excludes any procedures which must be performed using general anesthesia. See S-3085.2 Sec. 2(1)(c)(iii-iv).

We received 274 comments, out of 317, in support of the proposal. The breakdown of who the comments came from is below, followed by a summary of the comments grouped by theme. The full comments from each commenter are attached in Appendix E.

195 optometrists	40 patients/members of the public
10 ophthalmologists	6 colleges/universities
5 MDs – did not specify specialty	5 optometry students
4 professional associations <ul style="list-style-type: none"> • Optometric Physicians of Washington • Washington State Psychological Association • Washington Association of Nurse Anesthetists • ARNPs United of Washington State 	2 optometry residents
1 board/commission (Board of Optometry)	1 hospital administrator
1 ophthalmic technician	1 occupational therapist
1 psychologist	1 retired optometrist

In general, we saw five main themes in the comments supporting the proposal.

Themes

Scope in Other States

Washington state’s scope of practice is more restrictive than many other states. Many practicing optometrists submitted comments indicating they practice in multiple states and have performed many, if not all, of the advanced procedures requested by this proposal in other states they practice in. They expressed how frustrating it is for themselves and their patients when they have to refer the patient to another provider, even though they have the education and credentials to perform the procedures in other states. They argue that expanding the optometrist scope would improve patient access to care and patient satisfaction as the patient would be able to continue treatment with a doctor they already have an established relationship with and would not have to endure the frustration of additional visits, copays, travel, time off, etc.

Many commenters also pointed out that these procedures have been performed safely in other states for many years. This aligns with letters we received from the heads of the various state boards of optometry where advanced procedures are permitted stating that no adverse outcomes had been reported.

We received letters of support from most other states with expanded scope similar to the proposal we are reviewing reporting no instances of negative outcomes or complaints regarding advanced procedures. Of particular note is Oklahoma, where optometrists have been practicing with this expanded scope since 1988. They reported record of more than 55,000

advanced procedures performed, with no complaints reported and only 2 insurance settlements known over the 30+ years of performing these procedures. Oklahoma shared that they have stopped requiring optometrists to report on advanced procedures because they are now considered common, routine procedures that do not require additional tracking and monitoring.

Some commenters also pointed out that the Veteran’s Administration has a more relaxed scope than the state of Washington and that expanding optometrists’ scope would allow practitioners in our state to provide better care to veterans. One also asserted that the Indian Health Service also has a more expanded scope and this proposal would align Washington’s scope with that of the Indian Health Service.

Education

Many of the comments we received expressed support for the education received by optometrists and felt the applicant proved sufficient education and training are provided in optometry school to support this proposed scope expansion. Many commented that optometric physicians are highly trained doctors who have completed undergraduate degrees, and at least four years of specialized biomedical training, with most going on to complete a residency and/or fellowship prior to beginning practice. They argue that Washington’s scope of practice laws has not kept pace with the educational and technological advancements of clinical eye care in the last few decades.

Many optometrists also pointed out that, although it is optional, most (commenters cited between 70 and 80 percent) optometry graduates do participate in a residency or fellowship programs following optometry school.

We also received comments emphasizing that it is standard for professional boards to determine and establish in rule the education standards for procedures deemed within the profession’s scope of practice.

Several MDs and ophthalmologists submitted letters supporting their optometry colleagues performing these procedures as they are trained and tested to perform. They praised the quality and timeliness of the care patients received and felt expanding the scope of optometrists would be a benefit to the citizens of Washington. A few expressed that other MDs and ophthalmologists support this proposal as well but are afraid to do so publicly for fear of criticism from their ophthalmology peers.

We also received letters from six colleges of optometry with detailed information about their curriculum. We included some details and curricula specifics from these comments in the education section of this report. We heard from:¹⁹

- Western University of Health Sciences

¹⁹ Department staff also performed significant independent research on education. We reached out to schools and requested information and curriculum. A summary of what we found in our research can be found in the education section of this report.

- Ferris State University – Michigan College of Optometry
- The Ohio State University College of Optometry
- Illinois College of Optometry
- Pacific University College of Optometry
- Southern California College of Optometry Marshall B. Ketchum University

Additional Costs to the Patient

We also received many comments, including from patients, who feel that the current law is burdensome to patients and forces additional costs on the patient when they must be referred to another provider. The additional costs come from additional co-pays, cost of travel and lodging, time off from work, etc. Providers and patients alike reported patients refusing necessary care rather than accept a referral to an ophthalmologist or optometrist in a neighboring state.

Some patients shared personal stories about needing more advanced care but being unable to find an ophthalmologist nearby or accepted by their insurance so the patient ended up having to go to the emergency room and incurred much more significant costs as a result.

Some patients also pointed out that they were referred to an ophthalmologist's office because they are considered "more qualified" by the state. However, when they went in for treatment with the ophthalmologist, the same tests as the optometrist performed were duplicated (adding unnecessary cost) and were performed by technicians rather than the more qualified ophthalmologist that they were referred to.

Access to and Delays in Care

The comments received, and the applicant report, assert that optometrists are sometimes the only eye care provider in a region, particularly in rural areas. Maintaining the current restrictive scope of practice harms patients. Expanding the scope of practice would allow for better, more cost-effective patient eye care, especially in rural areas where other eye care professionals may not be reasonably available. It would benefit patients to utilize all provider groups to the highest level of training. Additionally, patients and providers both report delays in care due to the requirement to transition to a new provider when the optometrist is able, but not allowed, to perform advanced procedures. Several optometrists shared stories of patients who were upset their problem could not be treated immediately and expressed frustration that visiting the optometrist was a waste of their time. Others shared stories of patients who were referred to an ophthalmologist, but the patients wished to remain with the provider they already knew and trusted and did not want to have to establish a new relationship with a new provider.

Many commented that the inconvenience to the patient of having to go to another provider often results in the patient failing to follow through with the referral and no longer seeking the necessary care. Being forced to refer patients to other, often busier, clinics creates a bottleneck in care for patients. They assert that it is not in the patient's best interest to make them wait weeks or months to see an ophthalmologist when their optometrist is trained to perform the procedure.

Several patients shared personal stories of being unable to get an appointment with an ophthalmologist in a timely manner, or not being able to find a nearby ophthalmologist at all. Several also shared stories of struggles getting needed prescriptions following treatment. For example, the optometrist could clean out an eye injury but could not prescribe the necessary antibiotics to complete the care.

Some commenters pointed out that ophthalmology is becoming an increasingly specialized area of medicine. They argue giving the ability to perform simple procedures to optometrists would improve the efficiency of eye care in the state overall, as ophthalmologists could focus on those complex procedures only they are capable of performing.

Recruiting recent graduates

Many commenters, including current optometry students and residents, commented that the restrictive scope in Washington is driving the most qualified optometrists away from Washington, especially among new or recent graduates. We also heard from some current students and residents that they had chosen not to come to Washington because of the restrictive scope, but several are watching this proposal and may choose to come to Washington if the scope is expanded.

Several optometrists shared struggles with hiring as the recent graduates they attempt to recruit decline to work in a state with such a restrictive scope. Some optometry students shared similar stories of wanting to come to Washington but choosing to pursue other options once they became aware of the restrictive scope. Some retiring optometrists shared that they have been unable to find an optometrist to take over their practice as many do not want to work in a state that “clips their wings.”

Other comments

One commenter shared concerns about the use of the term “rehabilitation therapy” and requested that be changed to “visual rehabilitation therapy.”

Some commenters pointed out that Advanced Registered Nurse Practitioners and Physician Assistants are both able to perform the advanced procedures in this proposal with much less training than an optometrist. Some asserted that, for example, a PA may only have a few dozen hours of training on a procedure such as YAG laser while an optometrist would have thousands of hours of training. They raised the question why ophthalmologists would support PAs performing such a procedure with such minimal training, yet they decry optometrists wishing to perform the procedure with significantly more training.

Neutral

We received three comments, out of 317, that were neutral towards the proposal, and in two cases included technical edits or comments. Neutral comments were received from a member of the public, the Health Care Authority (HCA), and the Pharmacy Quality Assurance Commission.

The department requested HCA review the sunrise proposals before us and provide feedback on impacts or concerns relating to reimbursement for services. HCA stated they would experience limited systems effects, and that the Public Employee and School Employee Benefit Board programs would be minimally affected. They concluded that the impacts would be minimal and that there is the potential for this proposal to positively impact access to care, however they do have concerns about the quality of care when the training requirements for the additional practices are not specifically outlined in the bill.

We also received comments from the Pharmacy Quality Assurance Commission. In general, they have concerns and do not support the bill as proposed by the applicant. They provided the following suggested edits to improve the bill:

- Section 2. (1)(iv) includes dispensing of samples as new service for optometrists which was previously banned under the former rules. This would require further amendments to RCW 69.45.010 to recognize optometrist(s) as a practitioner notwithstanding their current scope of practice. This amendment would legally authorize drug manufacturers to distribute drug samples to optometrists.
- Section 2. (10)(a) states: Any optometrist authorized by the board shall be permitted to purchase diagnostic pharmaceutical agents for use in the practice of optometry. Any optometrist authorized by the board shall be permitted to prescribe therapeutic pharmaceutical agents in the practice of optometry. *Optometrists authorized by the board to purchase pharmaceutical agents shall obtain them from licensed drug suppliers or pharmacists on written orders placed in the same or similar manner as any physician or other practitioner so authorized.* Purchases shall be limited to those pharmaceutical agents specified in this section, based upon the authority conferred upon the optometrist by the board consistent with the educational qualifications of the optometrist as established in this section.

The proposed italicized language should align with the current term of art in the pharmacy practice for both “drug suppliers” and “written orders.” Drug suppliers should be replaced with “wholesalers” and written order should be replaced with “prescription and/or chart order.”

One neutral comment came from a member of the public suggesting we should look at the national standard of care for this profession and align with that.

Comments on Draft Sunrise Report

The department posted the draft report online with our initial recommendations and shared it with interested parties for review and comment. Interested parties were given a month to provide any comments on our report and recommendations. In this section we summarize the comments received, any changes made or not made to our initial recommendations as a result of the comments, and an explanation of our reasoning.

Comments in Opposition to the Draft Proposal

We received 218 comments, out of 372, in opposition to the draft recommendations, mostly form letters. The majority of opposition comments were from ophthalmologists and did not comment on the recommendations in our draft report but continued to express overall opposition to any expansion in scope of practice for optometrists. Comments received expressed concern over the safety of advanced procedures and asserted that optometrists don't have enough education or training to perform advanced procedures. Many asserted that if optometrists want to perform advanced procedures they should go back to school and become ophthalmologists. Most argued that optometry education provides no training to perform surgery on the eye and that optometrists aren't qualified to respond to emergencies that may arise during these procedures. This was a comment we received during the initial comment period as well. The applicants (OPW) responded to this concern in their comments on our draft recommendations emphasizing that optometrists currently routinely provide pre- and post-operative care for these procedures, including laser surgeries, and are well versed in recognizing signs and symptoms of complications. The OPW also points out that it is not unusual for those performing surgical procedures in any profession to refer patients to a specialist if complications occur.

Several commenters also expressed concern about allowing the Board of Optometry to set standards regarding education and training without legislative guardrails in place. However, it is standard practice that the legislature defines the scope of practice for a profession, and the governing body for that profession sets the education, training, and other detailed requirements in rule. This is, in part, why the department has recommended reworking the bill to include a specific list, rather than a more general structure that would rely heavily on the rulemaking process to establish specific details. While this would require optometrists to approach the legislature for future scope of practice expansions, it also ensures that the safety of the procedures is evaluated before any new procedures would be allowed. The OPW has argued that specifying procedures would be burdensome in the long term as they would continually have to approach the legislature for future scope updates. However, the department feels continued legislative oversight is important at this stage. While we have proposed a more limited expansion, and there are other states practicing to this same level safely, this expansion would place Washington among the leaders in optometric scope and continued legislative oversight would ensure safety and proper scrutiny of any further expansions.

Many also argued this change should not be made because optometrists had agreed to the definition of optometric practice created by the legislature in 2003. Some also argued that all surgical procedures performed in the state of Washington should be exclusively overseen by the Washington Medical Commission (WMC). They asserted optometrists are trying to perform an "end-run" around WMC regulations and asserted that allowing optometrists to perform these procedures under regulations established by the Board of Optometry would create two different standards of care. The OPW also responded to these comments and pointed out that surgical procedures performed by dentists and podiatrists, for example, are overseen by their respective boards. Optometry is proposing the same form of oversight.

Some asserted that allowing optometrists to perform advanced procedures would confuse patients and leave them unable to identify qualified providers. Some also asserted that optometrists refer to themselves as “optometric physicians” in order to confuse the public about their qualifications. A few commenters shared concerns that expanding the optometry scope of practice to include advanced procedures would be a “slippery slope” and questioned why a student would choose to go to medical school under these conditions. Several asserted optometrists are trying to “bypass” the need for medical school to become a doctor. Some also reiterated that there is no shortage of ophthalmologists and, therefore no need to expand optometrists’ scope. A few shared anecdotes of patients they felt had been harmed by optometrists who had incorrectly diagnosed a condition and surmised that errors would increase if the proposed procedures are allowed.

Some commenters also expressed strong concern about the recommendation to allow suturing of the eye and argued that optometrists don’t have the training to suture an open globe. We agree and have modified our recommendations accordingly. We had intended to recommend that suturing of the eyelid was a safe procedure for optometrists to perform, not open globe suturing. We have corrected our recommendations.

We also received some comments requesting we not use the terms “lumps and bumps” or “advanced procedures” and instead use terms that provide a clearer understanding of the procedures. We have reviewed the report and we have not used the term “lumps and bumps” anywhere in this report. This commenter may have confused the initial applicant report with this report. We have also added a definition for our use of “advanced procedures” to ensure clarity for the reader.

One commenter objected to information provided regarding the Veteran’s Administration (VA) Policy. However, we believe this is, again, confusion between the applicant report and this report. We only mention the veteran’s administration in the summary of public comments on the applicant report. The department did not provide any discussion of the VA policy regarding use of lasers; the policy is unclear on the non-laser advanced procedures we have proposed.

We also received comments emphasizing that PAs and ARNPs do not perform the advanced procedures included in our recommendations. The Washington Association of Eye Physicians and Surgeons (WAEPS) has shared with the department that they are not aware of any instances in which PAs are performing advanced procedures in Washington. Nursing Care Quality Assurance Commission staff shared with us that while it is within the ARNP scope of practice, they do not often seek to perform such procedures and the commission requires evidence of sufficient training for ARNPs to be authorized to perform them.

A commenter also requested we review the Vermont Office of Professional Regulation’s report on a similar scope expansion proposal in their state. We did review this material and found our research and data did not align with the findings in the Vermont report. That report was released in 2019, so it is possible more information was available to us that was not available when that review was performed.

The majority of comments in opposition commented on the original applicant report rather than the more restrictive proposal made by the department in our draft report. As a result, no changes were made from review of these comments as they do not apply to the recommendations we made. Those other comments not specifically discussed above which did apply to the draft report reiterated comments we had received during our initial review. No new information or data was provided in these comments that effected the recommendations in the report.

Comments in Support of the Draft Proposal

We received 154 comments, out of 372, in support of the draft recommendations. The majority of comments were from optometrists and emphasized how important it is for regulations to keep pace with advances in technology and medical science. We also received several comments from patients supporting the proposed expansion of scope and expressing their belief that this expansion would improve their access to and satisfaction with care. Commenters expressed strong support for the assertion in our draft report that providers should be allowed to practice to their highest level of education and training, and many also requested we reconsider allowing the Board of Optometry to establish and update the scope of practice for the profession. Several commenters also emphasized that all optometry schools teach to the maximum scope of practice in any state, which includes the proposed procedures. Many asserted that approving the proposed procedures would better serve patients by improving access to care and reducing costs. Several also shared anecdotes about care shortages in their area and emphasized that expanding optometrists' scope could help alleviate those shortages.

Several commenters also pointed out that the scope of practice for optometrists hasn't been updated in two decades and is outdated when compared to advances in science and technology. Several also pointed out that there has been strong opposition to every scope expansion the optometrist profession has requested, yet every expansion they have received has been implemented safely and successfully with no increase in complaints or malpractice cases. Many also emphasized that several other states allow many or all of the proposed procedures and have seen no increase in adverse patient outcomes since authorizing an expanded scope. Some commenters provided anecdotes about patients who declined to get any treatment when faced with the hassle of seeing a specialist. A few also shared anecdotes about trouble hiring new optometry graduates as they prefer to take jobs in states that allow them to practice to their level of their training. Many also shared that they are licensed in other states and have performed the requested procedures numerous times.

The most common request of supportive commenters was to reconsider allowing the Board of Optometry to define optometrists' scope. We did not make any changes to our proposal as a result of these comments as the constitution of Washington makes clear that only the legislature can define the scope of practice for a health profession. The OPW responded to this concern and has informed us that they will amend this section of their proposal to clarify that the board may only make rules relating to their scope of practice within the confines of the

enacted legislation. We would support this change as it would eliminate any conflicts with the state constitution regarding scope of practice.

The OPW also requested we reconsider our recommendation to restructure the bill and provided the following example to illustrate:

“When ALT (Argon Laser Trabeculoplasty) technology first became available, it was an important new tool in reducing eye pressure in the treatment of glaucoma. But its successor, SLT (Selective Laser Trabeculoplasty), provides a safer, more effective alternative. If the original ALT laser had been included in optometry’s scope of practice when first introduced, with no provision for the Board of Optometry to recognize subsequent improvements in technology and treatment, optometrists would have been prohibited from performing the safer SLT procedure, even though the two procedures are performed in fundamentally the same manner to treat the same disease.”

We have included some additional recommendation on this issue that would allow the board to be responsive to new and safer modalities.

We also received a few supportive comments from optometry schools in other states where these advanced procedures are already allowed. They emphasized that education and training at these schools includes classroom instruction, laboratory training, followed by at least a year of hands-on practice with real patients under supervision of attending doctors. They also shared that all optometry schools across the country educate their students to the highest level of practice available to them anywhere in the country, with the caveat that hands on training cannot occur in states where the law does not allow optometrists to perform the procedures. They argue that allowing this scope expansion would allow Washington optometry schools to begin providing the hands-on training necessary, to ensure all Washington optometry school graduates are trained and qualified.

We also received some comments disagreeing with our recommendation that procedures should be specifically listed. The commenters argue that the whole purpose of the bill was to outline the broad practice and allow the Board of Optometry to establish the specifics, such as what specific procedures would be allowed, to ensure the profession is able to keep pace with advances in science and technology. We did not change the recommendations in our report as a result of these comments, however the legislature may make the determination to run the broader bill if they so choose. The department cannot recommend supporting the broader language, as we have no way of knowing what procedures the board may or may not allow. We were not able to confirm education and training for everything that would be covered by the broader applicant proposed language, nor are there any other states using such broad language for us to determine potential safety of the procedures included, therefore we have elected to only recommend those procedures for which we are able to determine sufficient education, training, and safety.

Additionally, for providers who have been in practice for more than a few years, there are currently only two programs to provide the training necessary to safely perform some advanced procedures. Those are a 32-hour course offered by the Northeastern State University

WASHINGTON STATE DEPARTMENT OF HEALTH

Oklahoma, College of Optometry and a 23-hour course offered by Pacific University College of Optometry. Both offer training on a limited set of advanced procedures, with only the Northeastern State University program offering training on laser procedures. With the scope of these programs being so focused, we do not feel comfortable supporting the broader bill language submitted by the applicant as we cannot confirm the availability of proper education and training for all procedures that would be considered in scope under the applicant's proposed language.

We also received a comment from the OPW regarding our recommendation to require the Laser and Surgical Procedures Exam (LSPE) and the Injection Skills Exam (ISE) offered by the National Board of Examiners in Optometry. The OPW agreed that this is an appropriate requirement for graduating optometry students as they can take these exams when they take the third portion of their national boards. However, they shared concerns that this requirement may provide a barrier to currently practicing optometrists as these exams are only offered in Charlotte, North Carolina. The OPW offers that completion of a graduate education course offered and accredited by the Council on Optometric Practitioner Education (COPE) or by the Association of Regulatory Boards of Optometry (ARBO) would be an equally valid measure of competency. We feel these courses would be a sufficient alternative to the previously discussed courses offered by Northeastern State University and Pacific University College of Optometry. However, we believe a standard national exam should be applied to all optometrists wishing to perform these procedures. We have added a recommendation to the final report that licensing for advanced procedures be an endorsement to the optometry license, rather than the baseline that all optometrists must meet. In part, this is because we believe the national exams are critical to ensure competency, and we received feedback from currently practicing optometrists who support the proposed scope expansion but expressed that they would not want to seek privileges for the advanced procedures themselves.

Department Assessment of Key Issues

Provider Shortages and Access to Care

Department staff reached out the Washington Medical Commission (WMC) and the Board of Osteopathic Medicine and Surgery (BOMS) to request data on the distribution of ophthalmology providers in Washington. Washington does not license medical providers by specialty, so we must rely on the annual demographic census, which is required by law. We have received what data they have, unfortunately that data is incomplete due to non-response from approximately 25-30 percent of providers.

The data we received shows no ophthalmologists in 13 Washington counties including Adams, Columbia, Ferry, Franklin, Garfield, Grant, Klickitat, Lincoln, Mason, Pacific, Pend Oreille, San Juan, Skamania, and Wahkiakum counties. It is likely that some of these counties may have an ophthalmologist, but it wasn't reported in the demographic census. It is also likely that some of these counties do not have ready access to an ophthalmologist.

We received many comments from optometrists and patients sharing anecdotes about being unable to find a local ophthalmologist or being unable to find one in a timely manner. There were also reported issues with finding an ophthalmologist that accepted a person's particular insurance. These reports are all anecdotal and may or may not represent an actual provider shortage in their area.

After reviewing all the comments and data received, we cannot adequately determine if a provider shortage does or does not exist, affecting access to care.

Safety of Proposed Procedures

Research on scope of practice laws and related safety shows that some of the proposed procedures have a strong track record of safety. However, we are not able to confirm safety and proper education for other parts of the proposal. The recommendations section (page 40) in this report outlines all recommendations for this proposal. In this section, we outline those procedures we are recommending. The procedures listed below are demonstrably safe and optometrists receive sufficient education and training to perform these procedures.

Procedures for which we can confirm appropriate education, training, and testing:

- Common complication of the lids, lashes, and lacrimal
- Chalazion management, including injection and excision
- Injections – including intramuscular injections of epinephrine and subconjunctival injections of antibiotics or steroids
- Management of lid lesions, including intralesional injection of steroids
- Pre- and post-operative care related to these procedures
- Use of topical and injectable anesthetics
- Suturing of the eyelid

- Eyelid surgery, excluding any cosmetic surgery or surgery requiring the use of general anesthesia

We also considered selective laser trabeculoplasty, laser peripheral iridotomy, and YAG capsulotomy. Although we found adequate training and education for these procedures, we are concerned about the potential risk and would recommend reconsidering them once we have substantive data on impact of the expansion that is being proposed.

In order to clarify the scope of practice in law, and ensure patient safety, we also recommend the following list of prohibited procedures, as proposed by the applicant:

- Retinal laser procedures, laser-assisted in situ keratomileus, photorefractive keratectomy, laser epithelial keratomileusis, or any forms of refractive surgery
- Penetrating keratoplasty, corneal transplant, or lamellar keratoplasty
- The administration of general anesthesia
- Surgery performed with general anesthesia
- Laser or nonlaser injection into the vitreous chamber of the eye to treat any macular or retinal disease
- Surgery related to the removal of the eye from a living human being
- Surgery requiring a full thickness incision or excision of the cornea or sclera other than paracentesis in an emergency situation requiring immediate reduction of the pressure inside of the eye
- Surgery requiring incision of the iris and ciliary body, including iris diathermy or cryotherapy
- Surgery requiring incision of the vitreous or retina
- Surgical extraction of the crystalline lens
- Surgical intraocular lens implants
- Incisional or excisional surgery of the extraocular muscles;
- Surgery of the eyelid for malignancies or for incisional cosmetic or mechanical repair of blepharochalasis, ptosis, or tarsorrhaphy
- Surgery of the bony orbit, including orbital implants
- Incisional or excisional surgery of the lacrimal system other than lacrimal probing or related procedures
- Surgery requiring full thickness conjunctivoplasty with graft or flap
- Any surgical procedure that does not provide for the correction and relief of ocular abnormalities
- Incision into the eyeball
- Retrobulbar or intraorbital injection
- Pterygium surgery

Curriculum from United States optometry schools demonstrate that they all include classroom instruction in advanced procedures including injections, laser treatments, and certain surgeries. The clinical training on advanced procedures at most schools is laboratory-based because their states' scope does not allow optometrists to perform the procedures. However, we confirmed

two colleges that offer hands on training under the supervision of clinical faculty for all the procedures listed above, including laser procedures: Northeastern State university Oklahoma College of Optometry, and Illinois College of Optometry. We would also note that Pacific University College of Optometry in Oregon includes hands on training on advanced procedures but does not include any laser procedures in that hands on training as their scope does not yet allow that. The Oregon State Legislature considered a bill during the 2021 session to expand their scope to include laser procedures, but the bill did not make it out of committee prior to the close of the 2021 session. Pacific University College of Optometry has shared they stand ready to include laser procedures as soon as the legislature allows it.

We received significant feedback from interested parties detailing the risks associated with the laser procedures and the dangers of negative outcomes. Due to ongoing concerns about the training and safety of laser procedures brought up during the sunrise process, we have removed the previously recommended procedures involving lasers – Selective Laser Trabeculoplasty, YAG Capsulotomy, and Laser Peripheral Iridotomy. The department recommends a more conservative approach, similar to the Oregon model, which allows limited advanced procedures and does not include laser procedures. Once the expanded scope has been implemented and we have evaluated patient safety resulting from the changes, the legislature could consider adding laser procedures in the future.

Department staff also confirmed there are national examinations administered by the National Board of Examiners in Optometry testing each of the listed procedures. They are called the Laser and Surgical Procedures Examination (LSPE) and the Injection Skills Examination (ISE), and both include a multiple-choice exam and a clinical skills portion. While we are not recommending laser procedures be included in this scope expansion, we do still recommend requiring the LSPE despite the fact that the laser procedures portion would not apply to practice in Washington.

We also contacted every state with an advanced scope similar to the proposal and requested information on complaints and negative outcomes reported. We did not hear back from one state but heard from all others that there have been no complaints nor reports of injury or negative outcomes related to optometrists performing advanced procedures. One state, Mississippi, is in their first year of allowing these procedures and reporting on outcomes is not due until December 31, 2021 so we do not have data to report from Mississippi. Some states have been allowing these procedures for many years, with Oklahoma being the longest, at 30+ years, and have no negative outcomes to report. We feel this indicates these procedures are safe to perform when performed by a trained and qualified optometrist. We did receive data from commenters in opposition to this proposal asserting that Oklahoma had roughly 60 complaints, as captured by the National Practitioner Data Bank (NPDB). Department staff went to the NPDB and pulled the relevant data, however the categorization of the data is not detailed enough to determine if those complaints were related to advanced procedures in any way.

We also reviewed the American College of Graduate Medical Education (ACGME) requirements for ophthalmologists and noted that the procedures requested by the applicant require significantly fewer procedures performed to meet ACGME requirements.^{xxi} The table below shows the minimum numbers of each category of procedures that an ophthalmologist must perform in order to complete their residency. We noted that while some surgeries, like cataracts, require as many as 86 individual procedures to be performed, the procedures included in this proposal require as few as 3 procedures.²⁰

Category	Minimum ACGME Req
Cataract (S)	86
Laser Surgery – Panretinal laser photocoagulation (S)	10
Keratoplasty (S+A)	5
Pterygium/conjunctival and other cornea (S)	3
Keratorefractive surgery (S+A)	6
Strabismus (S)	10
Glaucoma – Filtering/shunting procedures (S)	5
Retinal vitreous (S+A)	10
Intravitreal injection (S)	10
Oculoplastic and orbit (S)	28
Oculoplastic and orbit – Eyelid laceration (S)	3
Oculoplastic and orbit – Chalazion excision (S)	3
Laser Surgery – YAG capsulotomy (S)	5
Laser Surgery – Laser trabeculoplasty (S)	5
Laser Surgery – Laser iridotomy (S)	4
Oculoplastic and orbit – Ptosis/blepharoplasty (S) 3 Globe trauma (S)	4

While the department does have concerns about the broad language used in the bill, for the specific procedures listed in this section, we feel there is sufficient education, training, and testing available to ensure competent and safe delivery of care.

Oversight

After reviewing all the comments submitted, we believe a clarification is required regarding regulatory oversight. No health care licensing or regulatory entity sets their own scope of practice in Washington. Per Article 20, Section 2 of the Washington State Constitution,^{xxii} all health care scopes of practice are determined by the Washington state legislature. Once the legislature has established the scope of practice for a profession, the regulatory entity is

²⁰ The ACGME stresses that the procedure minimums do not signify competence, and that a program director may require residents to perform more than the minimum if they feel competency has not been met. From the same source above, page 3: “Minimum numbers represent what the Review Committee believes to be an acceptable minimal resident experience.”

granted permission to further define or clarify the education, training, and performance requirements for practitioners within that legislatively set scope. Regardless of whether the regulatory entity is a board, commissions, advisory committee, or otherwise, they may only establish rules for those issues that the legislature has granted them authority. Section 6(3) of draft bill S-3085.2 must be removed from the bill to eliminate conflicts with the state constitution. The OPW has informed us they will amend this section of their proposal to clarify that the board may only make rules relating to their scope of practice within the confines of enacted legislation. We would support this change as it would eliminate any conflicts with the state constitution regarding scope of practice.

Review of Proposal Using Sunrise Criteria

The Sunrise Act, in RCW 18.120.010, states that a health care profession should be regulated only when:

- Unregulated practice can clearly harm or endanger the health, safety, or welfare of the public and the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument.
- The public needs and can reasonably be expected to benefit from an assurance of initial and continuing professional ability.
- The public cannot be effectively protected by other means in a more cost-beneficial manner.

For scope of practice proposals, the department interprets the three criteria slightly differently as the criteria outlined in RCW 18.120.010 are more applicable to regulating a new profession, rather than expanding the scope of an existing profession. Proposals to increase a profession's scope of practice must demonstrate they benefit the public by:

- Protecting the public from harm.
- Providing assurance of sufficient education, training, and professional ability to perform the scope of practice.
- Demonstrating the proposal is the most cost-beneficial option to protect the public.

First Criterion: Protecting the public from harm.

The department believes portions of this proposal are supported by sufficient evidence of optometrist training and education, and that there are sufficient means available to ensure public safety. There have been no reported cases of patient harm or complaints against an optometrist's license in states where a similar advanced procedure law exists. In one state, Oklahoma, they have record of more than 55,000 advanced procedures being performed over 30 years with no negative outcomes reported.

Second Criterion: Providing assurance of sufficient education, training, and professional ability to perform the scope of practice.

It appears all optometry programs in the United States include advanced procedures, such as injections, laser treatments, and certain surgeries in their curriculum. The underlying optometry training serves as the foundation for clinical knowledge and application of the proposed advanced procedures. For example, courses for anatomy and physiology provide the foundations necessary for surgical procedures. Although we are not recommending laser procedures at this time, it is important to note that there may be sufficient education, training, and ability to perform the specified laser procedures if the scope is expanded further in the future. Courses on physical optics provide the foundational knowledge to understand the

properties of lasers. Advanced coursework on lasers and surgical procedures builds on this extensive foundation of hundreds of hours of clinical preparation.

The American Optometric Association and Association of Schools and Colleges of Optometry (ASCO) have developed need-based competencies in the *Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Ophthalmic Surgery*.^{xxiii} This framework was developed to establish general guidelines for all optometry programs and draws substantially from a number of sources, including the Accreditation Council for Graduate Medical Education (ACGME) core and the Accreditation Council on Optometric Education (ACOE) standards for the professional optometric degree. Every optometry program in the United States has submitted legal affidavits attesting that they train their graduates to perform these advanced procedures. The ACOE has required optometry schools meet the guidelines provided in the framework in order to maintain accreditation since July 1, 2017.

Licensure also requires passage of the National Board of Examiners in Optometry (NBEO) examination. Students take part I (Applied Basic Science) the spring of the third year, part II (Patient Assessment and Management) in December of the fourth year, and part III (Clinical Skills) any time during the fourth year of the program. In addition, there are voluntary national examinations that cover advanced procedures that could be required to test for proficiency.

Third Criterion: Demonstrating the proposal is the most cost-beneficial option to protect the public.

This criterion does not apply to this scope of expansion proposal. There is no financial cost to the public related to whether the scope of practice for optometrists is expanded or not. Legislation is the only means of adding procedures to the scope of practice, and rulemaking by the board of optometry is required to establish education, training, and safety requirements. There is no more cost beneficial way to expand a professions' scope and ensure patient safety.

Recommendation

The department supports aspects of this proposal because those aspects meet the sunrise criteria. However, we do not support the proposal as written because it is too broad and does not adequately describe what procedures would be allowed. The broad language used in the bill would allow for many more procedures than we are able to determine education and training for, or confirm the safety of. Furthermore, a significant component in the proposal is to have the Board of Optometry set the scope of practice, however this is unconstitutional per Article 20, Section 2 of the Washington State Constitution²¹. We recommend the following changes to the proposed bill in order to ensure adequate education, training, and safety:

1. Restructure the bill to specifically enumerate the additional procedures rather than listing broad categories and allowing the Board of Optometry to further define those categories in rule. This is the best way to ensure patient safety and proper legislative oversight. We recommend the following procedures be enumerated as we can directly tie them to education received and there are national exams to ensure a practitioner can safely perform the procedures:
 - Common complication of the lids, lashes, and lacrimal
 - Chalazion management, including injection and excision
 - Injections – including intramuscular injections of epinephrine and subconjunctival injections of antibiotics or steroids
 - Management of lid lesions, including intralesional injection of steroids
 - Pre- and post-operative care related to these procedures
 - Use of topical and injectable anesthetics
 - Suturing of the eyelid
 - Eyelid surgery, excluding any cosmetic surgery or surgery requiring the use of general anesthesia.

Rationale: The department confirmed these procedures are included in the educational programs' didactic and clinical training and are included in optional national examinations to test proficiency.

2. Include language specifying advanced procedures be authorized by the board as an endorsement to an individual's optometry license, rather than including these procedures and qualifications as a baseline.

Rationale: As discussed elsewhere in this report, there are limited options for some of our recommended requirements, such as requiring hands on training with patients. Also, we received comments from some currently practicing optometrists who support the increased scope but expressed they would not wish to seek

²¹ The applicant has indicated they are adjusting their proposal to clarify that the Board of Optometry may only make rules regarding the scope of practice within the confines of enacted legislation.

privileges for advanced procedures themselves. As such, we feel it is important advanced procedure privileges are optional.

3. Include a requirement that clinical training on the advanced procedures include supervised hands-on experience with patients, rather than just laboratory. The Board of Optometry could identify how to achieve this through rulemaking. We recommend the Board of Optometry collaborate with the Washington Medical Commission as they develop initial rules implementing the scope expansion.

Rationale: Only three educational programs offer hands-on practice with patients for advanced procedures and the department needs to ensure the bill addresses this gap.

4. Require the optional national examinations for advanced procedures, [Lasers and Surgical Procedures Examination](#) (LSPE) and [ISE Injections Skill Examination](#) . We also recommend allowing the board to include other exams that are substantially similar to the LPSE and ISE if they become available.

Rationale: These standardized exams will help ensure adequate understanding and application of the training received and should be added to the current examination requirements. The LSPE will cover laser procedures which are not included in this recommendation, but we felt it was still necessary to include that examination as it also covers the non-laser surgical procedures included in our proposal. We also recommend allowing the board to include other substantially similar exams as it is likely examination options will expand as more states adopt expanded scope of practice for this profession.

We also support the ordering of tests or labs, and any other related services necessary to support the execution of any of the listed procedures. We recommend maintaining the list of excluded procedures as provided in the draft proposal to ensure clarity on what is and is not allowable within the scope of practice for optometry. We also support maintaining the provision allowing optometrists to administer inoculations for systemic health reasons if authorized by the state health officer.

Additionally, Section 6(3) of draft bill S-3085.2 must be removed from the bill to eliminate conflicts with the state constitution. The applicant has indicated they are adjusting their proposal to clarify that the Board of Optometry may only make rules regarding the scope of practice within the confines of enacted legislation.

Additional Recommendations

In response to stakeholder comments, questions, and concerns the department has also developed the following list of recommendations that may strengthen the safety guidelines and reduce concerns for some stakeholders.

1. The legislature could require reporting on advanced procedures including outcomes and complications. We would also recommend requiring this data be made available

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on the department website for public inspection.

2. The legislature could require those optometrists seeking an advanced procedures endorsement to have an agreement with a qualified MD or DO for rapid response if complications occur during a procedure.
3. Either the legislature, or the board in its rules, could consider a requirement that any optometrist seeking an advanced procedures endorsement must demonstrate completion of a qualifying residency, fellowship, internship, or other focused training that requires hands on experience with patients.
4. If the legislature chooses to move forward with the language authorizing rehabilitation therapy, we recommend a minor modification to clarify this means rehabilitation therapy related to vision and eye care. It is a minor change that could prevent future confusion.

Notes

ⁱ SSB 5226, 2003 Biennium, 2003 Reg. Sess. (WA 2003)

ⁱⁱ U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, National Center for Health Workforce Analysis, “National and Regional Projections of Supply and Demand for Surgical Specialty Practitioners: 2013-2025,” [National and Regional Projections of Supply and Demand for Surgical Specialty Practitioners: 2013-2025 \(hrsa.gov\)](#)

ⁱⁱⁱ Gibson, Diane M., PhD, “The geographic distribution of eye care providers in the United States: Implications for a national strategy to improve vision health,”

^{iv} U.S. Department of Health and Human Services, U.S. Department of the Treasury, U.S. Department of Labor, 2018, “Reforming America’s Healthcare System Through Choice and Competition,” Reforming America's Healthcare System Through Choice and Competition (hhs.gov)

^v “Doctor of Optometry Professional Education: A Review of Training in Ophthalmic Surgery,” American Optometric Association and Association of Schools and Colleges of Optometry (ASCO), January 2021,

^{vi} Association of Schools and Colleges of Optometry, “Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Ophthalmic Surgery,” 2020, [optometriceducation.org/files/Curriculum-Framework-for-Ophthalmic-Surgical-Procedures.pdf](#)

^{vii} Oklahoma College of Optometry, “NSUOCO Curriculum,” accessed July 27, 2021, [optometry.nsuok.edu/CurrentStudents/CurriculumandCatalog.aspx](#)

^{viii} Illinois College of Optometry, “Curriculum”, accessed July 27, 2021, [www.ico.edu/curriculum](#)

^{ix} Pacific University Oregon, “College of Optometry Continuing Education,” accessed July 28, 2021, [online-opt.pacificu.edu/](#)

^x Pacific University Oregon, “Curriculum | Optometry,” accessed July 27, 2021, [www.pacificu.edu/optometry-od/curriculum](#)

^{xi} Alaska 12 AAC 48.040. Expanded therapeutic procedures (2019), [www.commerce.alaska.gov/web/Portals/5/pub/Optometry_Statutes.pdf](#), Accessed July 26, 2021

^{xii} Arkansas Law § 17-90-101, [healthy.arkansas.gov/images/uploads/pdf/ARKANSAS_OPTOMETRY_LAW.pdf](#), Accessed July 27, 2021

^{xiii} Arkansas State Board of Optometry Rules and Regulations, Chapter VIII, [www.aoptometry.org/2021_04_07-Rules-and-Regulations.pdf](#), Accessed July 27, 2021

^{xiv} Indiana Code 25-24-3-13, [184.175.130.101/legislative/laws/2021/ic/titles/025/#25-24-3](#), accessed July 27, 2021

^{xv} Louisiana Administrative Code, Title 46, Part LI, [www.doa.la.gov/media/ngudldca/46v51.pdf](#) Accessed July 29, 2021

^{xvi} Mississippi State Board of Optometry Rules and Regulations Rule 1.1, [www.msbo.ms.gov/wp-content/uploads/2021/07/MSBOO-Emergency-Rules-and-Regs-July-1-2021.pdf](#), Accessed July 29, 2021

^{xvii} 59 Okl.St. Ann. §581, [www.oklegislature.gov/osStatuesTitle.aspx](#), downloaded July 30, 2021, beginning on page 495

^{xviii} 59 Okl.St. Ann. §581, [www.oklegislature.gov/osStatuesTitle.aspx](#), downloaded July 30, 2021, beginning on page 496

^{xix} Title 505:10-5-16, [optometry.ok.gov/lawtitle505_4.htm](#), accessed July 30, 2021.

^{xx} Wyoming administrative code 33-23-101, [wyoleg.gov/statutes/compress/title33.pdf](#), beginning on page 245. Accessed July 30, 2021

^{xxi} Case Log information: Ophthalmology. Review Committee for Ophthalmology, [www.acgme.org/Portals/0/PFAssets/ProgramResources/OPH_CaseLogInfo.pdf?ver=2021-03-15-133325-270](#), accessed August 9, 2021

^{xxii} Washington State Constitution. Article 2, Section 2 Regulations concerning medicine, surgery, and pharmacy, [leg.wa.gov/CodeReviser/Pages/WAConstitution.aspx#ARTICLE_XX](#), accessed August 6, 2021

^{xxiii} Association of Schools and Colleges of Optometry, “Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Ophthalmic Surgery,” 2020, [optometriceducation.org/files/Curriculum-Framework-for-Ophthalmic-Surgical-Procedures.pdf](https://www.optometriceducation.org/files/Curriculum-Framework-for-Ophthalmic-Surgical-Procedures.pdf)

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May 27, 2021

Umair Shah, Secretary
Washington State Department of Health
111 Israel Rd SE
Tumwater, Washington 98501

Dear Secretary Shah,

I am requesting that the Department of Health consider a Sunrise Review application for a scope of practice proposal for optometry.

This proposal makes changes to the statute that defines the scope of practice of optometrists (RCW 18.53.010), including:

- Clarifying previously ambiguous language regarding what is and what is not included in the scope of practice of optometry;
- Designating the board of optometry to have authority over its domain in a more consistent manner with other healthcare professional boards;
- Expanding scope of medications optometrists may prescribe, consistent with national standards;
- Expanding the scope of therapeutic procedures an optometrist may perform to keep consistent with national standards;
- Requires the board of optometry to have authority in rule-making regarding educational standards for any procedures the board designates within the scope of optometry.

A copy of this proposal is attached (S-3085.2.pdf and S-3085.2.docx).

I appreciate your consideration of this application and look forward to receiving your report. Please contact my office if you have any questions.

Respectfully,

Annette Cleveland, State Senator
Chair, Senate Health and Long Term Care Committee

CC: Kelly Cooper, Washington State Department of Health
Greg Attanasio, Senate Committee Services
Judy Chan, MD, Optometric Physicians of Washington, President
Kim Jones, Optometric Physicians of Washington, Executive Director
Mike Burgess, Optometric Physicians of Washington

BILL REQUEST - CODE REVISER'S OFFICE

BILL REQ. #: S-3085.2/21 2nd draft

ATTY/TYPIST: ES:eab

BRIEF DESCRIPTION: Regarding the practice of optometry.

1 AN ACT Relating to the practice of optometry; and amending RCW
2 18.53.005, 18.53.010, 18.54.030, 18.54.060, 18.54.050, and 18.54.070.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4 **Sec. 1.** RCW 18.53.005 and 1981 c 58 s 1 are each amended to read
5 as follows:

6 ~~((The legislature finds and declares that the practice of~~
7 ~~optometry is a learned profession and affects the health, welfare and~~
8 ~~safety of the people of this state, and should be regulated in the~~
9 ~~public interest and limited to qualified persons licensed and~~
10 ~~authorized to practice under the provisions of chapters 18.53 and~~
11 ~~18.54 RCW)) The practice of optometry in the state of Washington is a
12 professional practice and is considered to be a matter of public
13 interest and concern. Therefore, it is subject to regulation and
14 control in the public interest. Only a qualified person may be
15 admitted to the practice of optometry and be permitted to practice in
16 the state of Washington. This chapter shall be liberally construed to
17 carry out these objectives and purposes in accordance with this
18 declaration.~~

19 **Sec. 2.** RCW 18.53.010 and 2015 c 113 s 1 are each amended to
20 read as follows:

1 ~~(1) ((The practice of optometry is defined as the examination of~~
2 ~~the human eye, the examination and ascertaining any defects of the~~
3 ~~human vision system and the analysis of the process of vision. The~~
4 ~~practice of optometry may include, but not necessarily be limited to,~~
5 ~~the following:~~

6 ~~(a) The employment of any objective or subjective means or~~
7 ~~method, including the use of drugs, for diagnostic and therapeutic~~
8 ~~purposes by those licensed under this chapter and who meet the~~
9 ~~requirements of subsections (2) and (3) of this section, and the use~~
10 ~~of any diagnostic instruments or devices for the examination or~~
11 ~~analysis of the human vision system, the measurement of the powers or~~
12 ~~range of human vision, or the determination of the refractive powers~~
13 ~~of the human eye or its functions in general; and~~

14 ~~(b) The prescription and fitting of lenses, prisms, therapeutic~~
15 ~~or refractive contact lenses and the adaption or adjustment of frames~~
16 ~~and lenses used in connection therewith; and~~

17 ~~(c) The prescription and provision of visual therapy, therapeutic~~
18 ~~aids, and other optical devices; and~~

19 ~~(d) The ascertainment of the perceptive, neural, muscular, or~~
20 ~~pathological condition of the visual system; and~~

21 ~~(e) The adaptation of prosthetic eyes))~~ (a) The practice of
22 optometry is defined as the evaluation of ocular health and
23 refractive state, diagnosis, and treatment of the eye and its
24 appendages to correct and relieve ocular abnormalities in any
25 authorized manner, including, but not limited to:

26 (i) Prescribing and adapting lenses, contact lenses, spectacle
27 eyeglasses, prisms, other ocular devices, and of administration of
28 pharmaceutical agents;

29 (ii) The use of oral, topical, and other medications to treat and
30 relieve disease or abnormalities of the ocular tissues and ocular
31 adnexa;

32 (iii) The prescription and provision of visual therapy, ocular
33 exercises, rehabilitation therapy, subnormal vision therapy,
34 orthoptics, and the adaptation of prosthetic eyes;

35 (iv) Ordering necessary diagnostic lab or imaging tests and the
36 dispensing of samples to initiate treatment;

37 (v) Performing nonpenetrating ocular foreign body removal by any
38 means, epilation of misaligned eyelashes, placement of punctal or
39 lacrimal plugs, dilation and irrigation of the lacrimal system,
40 placement of biologic membranes, orthokeratology, prescription and

1 fitting of contact lenses with the purpose of altering refractive
2 error, or other similar procedures;

3 (vi) The use of diagnostic or therapeutic instruments utilizing
4 laser, ultrasound, or other technology in the performance of primary
5 eye care; and

6 (vii) Other ophthalmic surgery procedures, except those listed in
7 (c) of this subsection, that are within the scope of the licensee's
8 education and training taught by an accredited school of optometry
9 and authorized by regulations adopted by the board of optometry which
10 demonstrate the licensee's proficiency in performing the procedure.

11 (b) "Ophthalmic surgery procedures" means a procedure upon the
12 human eye in which in vivo human tissue is injected, cut, burned,
13 frozen, sutured, vaporized, coagulated, or photodisrupted by the use
14 of surgical instrumentation such as, but not limited to, a scalpel,
15 cryoprobe, laser, electric cautery, or ionizing radiation.

16 (c) The practice of optometry does not include:

17 (i) Retinal laser procedures, laser-assisted in situ
18 keratomileus, photorefractive keratectomy, laser epithelial
19 keratomileusis, or any forms of refractive surgery;

20 (ii) Penetrating keratoplasty, corneal transplant, or lamellar
21 keratoplasty;

22 (iii) The administration of general anesthesia;

23 (iv) Surgery performed with general anesthesia;

24 (v) Laser or nonlaser injection into the vitreous chamber of the
25 eye to treat any macular or retinal disease;

26 (vi) Surgery related to the removal of the eye from a living
27 human being;

28 (vii) Surgery requiring a full thickness incision or excision of
29 the cornea or sclera other than paracentesis in an emergency
30 situation requiring immediate reduction of the pressure inside of the
31 eye;

32 (viii) Surgery requiring incision of the iris and ciliary body,
33 including iris diathermy or cryotherapy;

34 (ix) Surgery requiring incision of the vitreous or retina;

35 (x) Surgical extraction of the crystalline lens;

36 (xi) Surgical intraocular lens implants;

37 (xii) Incisional or excisional surgery of the extraocular
38 muscles;

1 (xiii) Surgery of the eyelid for malignancies or for incisional
2 cosmetic or mechanical repair of blepharochalasis, ptosis, or
3 tarsorrhaphy;

4 (xiv) Surgery of the bony orbit, including orbital implants;

5 (xv) Incisional or excisional surgery of the lacrimal system
6 other than lacrimal probing or related procedures;

7 (xvi) Surgery requiring full thickness conjunctivoplasty with
8 graft or flap;

9 (xvii) Any surgical procedure that does not provide for the
10 correction and relief of ocular abnormalities;

11 (xviii) Incision into the eyeball;

12 (xix) Retrobulbar or intraorbital injection; or

13 (xx) Pterygium surgery.

14 (2) An optometrist shall not administer drugs, prescribe drugs,
15 or perform laser or nonlaser surgical procedures until he or she is
16 authorized, licensed, or certified by the board. Any advanced
17 procedure licensed optometrist authorized to practice under this
18 chapter shall meet the educational and competence criteria set forth
19 by the board in order to perform expanded therapeutic procedures.

20 (3)(a) Those persons using topical and oral drugs for diagnostic
21 and therapeutic purposes in the practice of optometry shall have ((a
22 minimum of sixty hours of)) didactic and clinical instruction in
23 general and ocular pharmacology as applied to optometry, as
24 established by the board, and certification from an institution of
25 higher learning, accredited by those agencies recognized by the
26 United States office of education or the council on postsecondary
27 accreditation to qualify for certification by the optometry board of
28 Washington to use drugs for diagnostic and therapeutic purposes.

29 (b) Those persons ((using or prescribing topical drugs for
30 therapeutic purposes)) administering injection and advanced
31 procedures for treatment in the practice of optometry must be
32 certified under (a) of this subsection, and must have ((an))
33 additional ((minimum of seventy-five hours of)) didactic and
34 supervised clinical instruction, as established by the board, and
35 certification from an institution of higher learning, accredited by
36 those agencies recognized by the United States office of education or
37 the council on postsecondary accreditation to qualify for
38 certification by the optometry board ((of Washington to use drugs for
39 therapeutic purposes)) to administer injections and advanced
40 procedures.

1 (c) ~~((Those persons using or prescribing drugs administered~~
2 ~~orally for diagnostic or therapeutic purposes in the practice of~~
3 ~~optometry shall be certified under (b) of this subsection, and shall~~
4 ~~have an additional minimum of sixteen hours of didactic and eight~~
5 ~~hours of supervised clinical instruction as established by the board,~~
6 ~~and certification from an institution of higher learning,)) The board~~
7 ~~shall designate what postgraduate courses may be accepted for~~
8 ~~certification to provide advanced ophthalmic surgical procedures. If~~
9 ~~a course is offered by an institution of higher education accredited~~
10 ~~by those agencies recognized by the United States office of education~~
11 ~~or the council on postsecondary accreditation to qualify for~~
12 ~~certification by the ((optometry board of Washington to administer,~~
13 ~~dispense, or prescribe oral drugs for diagnostic or therapeutic~~
14 ~~purposes)) board to perform advanced procedures, this course should~~
15 ~~contain continuing education including didactic and practical~~
16 ~~training or an equivalent course or exam may be ruled as acceptable.~~

17 (d) ~~((Those persons administering epinephrine by injection for~~
18 ~~treatment of anaphylactic shock in the practice of optometry must be~~
19 ~~certified under (b) of this subsection and must have an additional~~
20 ~~minimum of four hours of didactic and supervised clinical~~
21 ~~instruction, as established by the board, and certification from an~~
22 ~~institution of higher learning, accredited by those agencies~~
23 ~~recognized by the United States office of education or the council on~~
24 ~~postsecondary accreditation to qualify for certification by the~~
25 ~~optometry board to administer epinephrine by injection.~~

26 (e) ~~Such course or courses shall be the fiscal responsibility of~~
27 ~~the participating and attending optometrist.~~

28 (f) (i) ~~All persons receiving their initial license under this~~
29 ~~chapter on or after January 1, 2007, must be certified under (a),~~
30 ~~(b), (c), and (d) of this subsection.~~

31 (ii) ~~All persons licensed under this chapter on or after January~~
32 ~~1, 2009, must be certified under (a) and (b) of this subsection.~~

33 (iii) ~~All persons licensed under this chapter on or after January~~
34 ~~1, 2011, must be certified under (a), (b), (c), and (d) of this~~
35 ~~subsection.~~

36 ~~(3))~~ Such course or courses shall be the fiscal responsibility
37 of the participating and attending optometrist. The board shall
38 determine a date in which all persons licensed under this chapter
39 must be certified under (a) and (b) of this subsection.

1 (4) The board shall establish a list of topical drugs for
2 diagnostic and treatment purposes limited to the practice of
3 optometry, and no person licensed pursuant to this chapter shall
4 prescribe, dispense, purchase, possess, or administer drugs except as
5 authorized and to the extent permitted by the board.

6 ~~((4))~~ (5) The board must establish a list of oral Schedule III
7 through V controlled substances and any oral legend drugs, with the
8 approval of and after consultation with the pharmacy quality
9 assurance commission. The board may include Schedule II hydrocodone
10 combination products consistent with subsection ~~((6))~~ (7) of this
11 section. No person licensed under this chapter may use, prescribe,
12 dispense, purchase, possess, or administer these drugs except as
13 authorized and to the extent permitted by the board. ~~((No optometrist
14 may use, prescribe, dispense, or administer oral corticosteroids.))~~

15 (a) The board, with the approval of and in consultation with the
16 pharmacy quality assurance commission, must establish, by rule,
17 specific guidelines for the prescription and administration of drugs
18 by optometrists, so that licensed optometrists and persons filling
19 their prescriptions have a clear understanding of which drugs and
20 which dosages or forms are included in the authority granted by this
21 section.

22 (b) An optometrist may not ~~((~~
23 ~~i) Prescribe))~~ prescribe, dispense, or administer a controlled
24 substance for more than seven days in treating a particular patient
25 for a single trauma, episode, or condition or for pain associated
26 with or related to the trauma, episode, or condition ~~((~~
27 ~~or~~

28 ~~ii) Prescribe an oral drug within ninety days following
29 ophthalmic surgery unless the optometrist consults with the treating
ophthalmologist))~~.

30 (c) If treatment exceeding the limitation in (b) ~~((i))~~ of this
31 subsection is indicated, the patient must be referred to a physician
32 licensed under chapter 18.71 RCW.

33 (d) The prescription or administration of drugs as authorized in
34 this section is specifically limited to those drugs appropriate to
35 treatment of diseases or conditions of the human eye and the adnexa
36 that are within the scope of practice of optometry. The prescription
37 or administration of drugs for any other purpose is not authorized by
38 this section.

1 ~~((5))~~ (6) The board shall develop a means of identification and
2 verification of optometrists certified to use therapeutic drugs for
3 the purpose of issuing prescriptions as authorized by this section.

4 ~~((6))~~ (7) Nothing in this chapter may be construed to authorize
5 the use, prescription, dispensing, purchase, possession, or
6 administration of any Schedule I or II controlled substance, except
7 Schedule II hydrocodone combination products. The provisions of this
8 subsection must be strictly construed.

9 ~~((7) With the exception of the administration of epinephrine by
10 injection for the treatment of anaphylactic shock, no injections or
11 infusions may be administered by an optometrist.~~

12 ~~(8) Nothing in this chapter may be construed to authorize
13 optometrists to perform ophthalmic surgery. Ophthalmic surgery is
14 defined as any invasive procedure in which human tissue is cut,
15 ablated, or otherwise penetrated by incision, injection, laser,
16 ultrasound, or other means, in order to: Treat human eye diseases;
17 alter or correct refractive error; or alter or enhance cosmetic
18 appearance. Nothing in this chapter limits an optometrist's ability
19 to use diagnostic instruments utilizing laser or ultrasound
20 technology. Ophthalmic surgery, as defined in this subsection, does
21 not include removal of superficial ocular foreign bodies, epilation
22 of misaligned eyelashes, placement of punctal or lacrimal plugs,
23 diagnostic dilation and irrigation of the lacrimal system,
24 orthokeratology, prescription and fitting of contact lenses with the
25 purpose of altering refractive error, or other similar procedures
26 within the scope of practice of optometry.)~~ (8) In addition to
27 therapeutic intralesional and subconjunctival injections to the
28 ocular tissues and adnexa, epinephrine may be administered by
29 injection for the treatment of anaphylactic shock.

30 (9) In a public health emergency, the state health officer may
31 authorize therapeutically licensed optometrists to administer
32 inoculations for systemic health reasons.

33 (10)(a) Any optometrist authorized by the board shall be
34 permitted to purchase diagnostic pharmaceutical agents for use in the
35 practice of optometry. Any optometrist authorized by the board shall
36 be permitted to prescribe therapeutic pharmaceutical agents in the
37 practice of optometry. Optometrists authorized by the board to
38 purchase pharmaceutical agents shall obtain them from licensed drug
39 suppliers or pharmacists on written orders placed in the same or
40 similar manner as any physician or other practitioner so authorized.

1 Purchases shall be limited to those pharmaceutical agents specified
2 in this section, based upon the authority conferred upon the
3 optometrist by the board consistent with the educational
4 qualifications of the optometrist as established in this section.

5 (b) Diagnostic and therapeutic pharmaceutical agents are any
6 prescription or nonprescription drug delivered via any route of
7 administration used or prescribed for the diagnosis, treatment, or
8 mitigation of abnormal conditions and pathology of the human eye and
9 its adnexa. Diagnostic and therapeutic pharmaceutical agents do not
10 include Schedule I and Schedule II drugs, except for hydrocodone
11 combination products.

12 **Sec. 3.** RCW 18.54.030 and 2011 c 336 s 489 are each amended to
13 read as follows:

14 ~~((The initial composition of the optometry board includes the~~
15 ~~three members of the examining committee for optometry plus two more~~
16 ~~optometrists to be appointed by the governor.~~

17 ~~The governor must make all appointments to the optometry board.~~
18 ~~Only optometrists who are citizens of the United States, residents of~~
19 ~~this state, having been licensed to practice and practicing optometry~~
20 ~~in this state for a period of at least four years immediately~~
21 ~~preceding the effective date of appointment, and who have no~~
22 ~~connection with any school or college embracing the teaching of~~
23 ~~optometry or with any optical supply business may be appointed.~~

24 ~~The governor may set the terms of office of the initial board at~~
25 ~~his or her discretion, to establish the following perpetual~~
26 ~~succession: The terms of the initial board include one position for~~
27 ~~one year, two for two years, and two for three years; and upon the~~
28 ~~expiration of the terms of the initial board, all appointments are~~
29 ~~for three years.~~

30 ~~In addition to the members specified in this section, the~~
31 ~~governor shall appoint a consumer member of the board, who shall~~
32 ~~serve for a term of three years.))~~

33 The board of optometry shall consist of six members appointed by
34 the governor. Five members shall be Washington licensed practicing
35 optometrists whose licenses are in good standing. One member shall be
36 a consumer member who is not associated with or financially
37 interested in the practice or business regulated.

38 Each optometrist member shall be a Washington licensed practicing
39 optometrist in good standing for not less than five years immediately

1 preceding his or her appointment to the board. The member shall not
2 be in any way connected with or interested in any optometric school,
3 college, or institution of learning or optometric supply business.

4 The members shall serve for a term of three years with the option
5 of reappointment for subsequent three year terms at the governor's
6 discretion.

7 In the event that a vacancy occurs on the board in the middle of
8 an appointee's term, the governor must appoint a successor for the
9 unexpired portion of the term only.

10 **Sec. 4.** RCW 18.54.060 and 1963 c 25 s 6 are each amended to read
11 as follows:

12 ((Three)) A majority of members constitute a quorum for the
13 transaction of business of the board.

14 **Sec. 5.** RCW 18.54.050 and 2011 c 336 s 491 are each amended to
15 read as follows:

16 The board must meet at least once yearly or more frequently upon
17 call of the ((chair)) board's officers or the secretary of health at
18 such times and places as the ((chair)) board's officers or the
19 secretary of health may designate by giving three days' notice or as
20 otherwise required by RCW 42.30.075. A full record of the board's
21 proceedings shall be kept in the office of the board and shall be
22 open to inspection at all reasonable times.

23 **Sec. 6.** RCW 18.54.070 and 1995 c 198 s 7 are each amended to
24 read as follows:

25 The board has the following powers and duties:

26 (1) To develop and administer, or approve, or both, a licensure
27 examination. The board may approve an examination prepared or
28 administered by a private testing agency or association of licensing
29 authorities.

30 (2) The board shall adopt rules and regulations to promote
31 safety, protection and the welfare of the public, to carry out the
32 purposes of this chapter, to aid the board in the performance of its
33 powers and duties, and to govern the practice of optometry. The
34 administrative regulations shall include the classification and
35 licensure of optometrists by examination or credentials, retirement
36 of a license, and reinstatement of a license.

1 (3) The board shall have the sole authority to determine what
2 constitutes the practice of optometry.

3 (4) The board shall keep a register containing the name, address,
4 license number, email, and cell phone number of every person licensed
5 to practice optometry in this state.

--- **END** ---

COVER SHEET:

**Optometric Physicians of Washington
Sunrise Application**

Bill number: N/A

Name and title of profession for which the applicant seeks to change scope of practice: Optometry

Approximate number of individuals practicing in Washington: 1260

Applicant organization:

- o **Organization name:** Optometric Physicians of Washington (OPW)
- o **Contact person:** Kim Jones
- o **Address:** P.O. Box 1610 Woodinville, WA 98072
- o **Telephone number:** (425) 455-0874
- o **Email address:** opw@eyes.org
- o **Number of members in the organization:** 882 total members

Name(s) and address(es) of national organization(s) with which the state organization is affiliated and number of members in the organization:

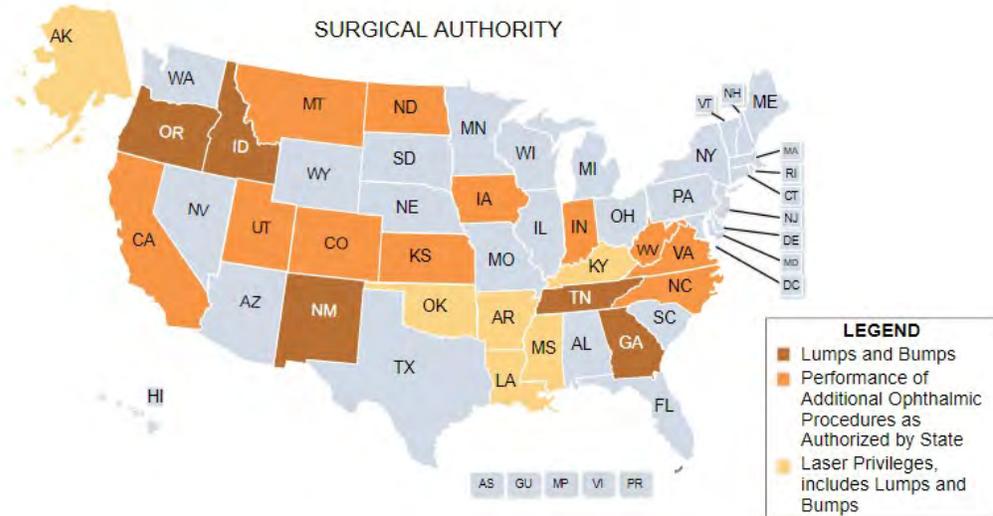
Organization	Phone	Fax	Address	Membership
American Optometric Association (AOA)	(314)983-4111	(314)991-4101	243 N Lindberg Blvd Fl 1 Saint Louis MO, 63141	44,000+

Name(s) of other state or national organizations representing the profession:

Please see the included spreadsheet containing all other state and national organizations representing the profession. Additionally, a contact list is included below with several groups of interest for the review committee's convenience.

Name	Organization	Title	Phone	Email
Dr. Lindsey Wright	Armed Forces Optometric Society	Executive Director	720.442.8209	LWright@afos2020.org
Dr. Brett Bence	American Academy of Optometry	Past President	425.512.1035	BBence@nweyes.com

List states where this profession includes this expanded scope of practice:



As of April 2021, there are currently 8 states which allow for optometrists to perform advanced procedures including laser procedures: Oklahoma, Louisiana, Kentucky, Alaska, Arkansas, Wyoming, Indiana, and Mississippi. In addition, 16 other states allow for the removal of eyelid lesions (including biopsy), injections of therapeutic medications, and or oral steroid prescriptions. When Washington last passed legislation allowing optometrists to provide more therapeutic treatments for patients in 2003, it was designated as a leader in improving patient access and advancing the practice of optometry. Washington is now considered one of the most restrictive states in terms of breadth of procedures allowed. This has had unintended effects including losing the most capable and promising new graduates to other states with increased scope. As more states continue advancing their scope of practice, Washington will lag further behind.

Oklahoma has had laser privileges in their state since 1988 (with a short break when legislation was introduced to clarify legality in 1996), when a group of optometrists were trained by ophthalmologists to perform these procedures. Since that time, there have been no reported cases of complaint or complication to the Oklahoma Board of Optometry. According to a letter from the Board of Examiners of Optometry in Oklahoma, over 30 years and an estimated 50,000+ laser procedures performed, there are no complaints filed against any optometrists performing the proposed laser procedures. There were two complaints made against optometrists regarding PRK

refractive surgery, however this is not a procedure requested in the proposed legislation.

In 2011 the Kentucky legislature passed the “Better Access to Quality Eye Care ” bill, allowing comparable advanced procedures within the state. It also allowed the Kentucky Board of Optometry to determine scope of optometric practice outside of a specific exclusionary list. To date, 410 optometrists in Kentucky have been credentialed in advanced procedures, performing more than 40,000 laser and surgical procedures, with no report of adverse outcomes. It was also noted that there was no increase in malpractice rates between advanced procedure certified optometrists and non-certified within the state nor with optometrists in the surrounding states who do not have advanced therapeutic privileges. Please see attached letter in evidence documents from the current President of the Kentucky Board of Optometric Examiners.

In 2014, Louisiana approved the use of laser treatment for YAG Capsulotomy, Laser Peripheral Iridotomy, and Selective Laser Trabeculoplasty procedures. Since that time over half of the state’s optometrists have received their laser certification privileges. The data provided tells that between 2015-2019 there have been more than 11,000 procedures performed and there have been no complaints filed and no negative outcomes reported.

Below is a table that shows a brief summary of several of our neighboring states, as well as other states who have the highest level of scope of practice for optometry. These are the states that many new optometrists are planning to move to practice rather than Washington due to our restrictive level of practice.

State	Washington	Oregon	Idaho	Alaska	Oklahoma	Kentucky	Louisiana	Arkansas	Wyoming
Topical Prescriptions	X	X	X	X	X	X	X	X	X
Some Oral Prescriptions	X	X	X	X	X	X	X	X	X
Oral Steroid Prescriptions		X	X	X	X	X	X	X	X
Minor Surgical Procedures*	X	X	X	X	X	X	X	X	X
Therapeutic Injections		X	X	X	X	X	X	X	X
Eyelid Lesion Removal		X	X	X	X	X	X	X	X
In Office Laser Procedures				X	X	X	X	X	X

*Minor surgical procedures refers to corneal/conjunctival foreign body removal, punctal plug placement, dilation and irrigation of the lacrimal system, biologic membrane placement all of which are billed under surgical CPT codes based on the AMA’s definition for those codes. Optometrists also provide post operative care for refractive surgery (LASIK/PRK), cataract surgery, YAG capsulotomies, and many other procedures.

Additionally, there are many states that are intending to advance their scope of practice to the level of Oklahoma, Kentucky, et al. As of June 2021, several states are currently seeking to advance their scope of practice including Alabama, Texas, Florida, and Oregon. We believe there are many other states which intend to move forward with an increase in scope of practice in the upcoming legislative sessions.

Currently, the following states allow for eyelid lesion removal and injections, but do not allow for laser procedures:

- Oregon
- Idaho
- New Mexico
- Tennessee
- Georgia

The following states allow for eyelid lesion removals, but do not allow injections and laser procedures.

- California
- Colorado
- Utah
- Kansas
- Montana
- North Dakota
- Iowa
- Indiana
- West Virginia
- Virginia
- North Carolina

Included in our reference document, letters are provided from states that have laser procedures within their scope illustrating that there have been no reported negative outcomes related to the procedures granted that are being sought in Washington state.

Federal Practice

Specific to federal standards of practice within the Veterans Health Administration (VA) and Indian Health Services (HIS), optometrists have recently advanced scope of practice.

The VA has allowed optometrists to remove eyelid lesions and provide injections for many years. In August of 2020, the VA system announced their decision to allow any optometrist licensed in a state that allows advanced procedures to practice to his or her full ability at any VAMC nationwide. Indian Health Services currently allows for optometrists to perform advanced procedures in any state upon request.

1. Define the problem and why the change in regulation is necessary (refer to RCW 18.120.030(1)).

18.120.0301

(1) A definition of the problem and why regulation is necessary:

Scope expansion of advanced practice providers has been a leading solution to improve access and reduce cost within the American healthcare system. With an ever-increasing aging population in need of access to full scope primary eyecare and a fixed number of ophthalmologists, optometrists are best suited to bridge the disparity that will soon become apparent. Washington is no exception, with a population of 7.6 million residents comprising a diverse array of population sizes and densities, upcoming state healthcare policies will need to include accessibility and cost saving measures to be viable. Policymakers in many other state legislatures have recognized optometrists as an integral part of the healthcare system, expanding their scope of practice to the full extent of their training to meet this increasing need. Optometrists in Washington state are ready to do the same, utilizing their training to its fullest extent and with it, bridging the burgeoning disparity in eyecare.

Washington state has a population of more than 7.6 million citizens, and will continue to grow in the next decade. With an ever-increasing aging population in need of access to full scope primary eyecare and a fixed number of ophthalmologists, optometrists are best suited to bridge the disparity that is already apparent. There is a shortage of qualified eye care providers based on the current scope of practice in the state of Washington, which removes a substantial number of providers from being able to provide this level of care, especially in rural areas. When looking at access to eye care beyond routine examinations, preventive care and screening of eye disease it only makes sense to utilize all provider groups and ancillary staff to their highest and most trained level, including training obtained post graduate; as medical knowledge, techniques, procedures and treatments continue to advance. We believe optometrists are uniquely positioned to answer this need for Washington patients, as our specialty training within ophthalmic care far exceeds any other non-ophthalmologic health care profession.

(a) The nature of the potential harm to the public if the health profession is not regulated, and the extent to which there is a threat to public health and safety;

The profession is thoroughly regulated by the current board of optometry. This includes establishing competency to grant licensure, ensure consistent standards of practice and investigating complaints against practitioners. The board will continue in its mission to

protect public health by designating what is required to demonstrate proficiency in advanced procedures.

(b) The extent to which consumers need and will benefit from a method of regulation identifying competent practitioners, indicating typical employers, if any, of practitioners in the health profession; and

The current board of optometry ensures competent practitioners and is the primary source of formal complaints on behalf of the public if concerns for patient safety arise.

(c) The extent of autonomy a practitioner has, as indicated by:

(i) The extent to which the health profession calls for independent judgment and the extent of skill or experience required in making the independent judgment; and

Not applicable - Independent practice is already established for the profession of optometry.

(ii) The extent to which practitioners are supervised;

Not applicable - See above

2. Explain how the proposal addresses the problem and benefits the public (refer to RCW 18.120.030(4)).

18.120.0304

(4) The benefit to the public if regulation is granted:

Medical care and eye care has been demonstrated to be a top priority for many Americans, the citizens of Washington state included. In this regard, access and affordability are on the forefront of concerns for many families. Challenges arise when local providers do not take their insurance, or require referral out of town for specialty procedures. Not only is there a concern for insurance premiums and copays, but also the costs inherent in traveling to see specialists and establish with new providers. This includes transportation and lodging, time off of work, and even the quality of life reduction related to delayed care. Particular to this legislation, Washington optometrists currently refer out to ophthalmologists for procedures such as YAG capsulotomies, selective laser trabeculoplasty, and peripheral laser iridotomies. They must also send patients out for lid lesion removal, intra-lesional steroid injections, and subconjunctival steroid injections. All of these procedures are taught within optometry school and are allowed in states in which legislation like this has passed. Rural counties are

disproportionately affected by these restrictions, but suburban and urban areas are becoming affected by specific disparities in insurance taken by ophthalmology (specifically Medicaid). Outlined below are specific examples in eye care that improve access to citizens in Washington state and reduce costs, both to the consumer as well as the healthcare system, particularly Medicare/Medicaid.

YAG Capsulotomy

In 2018 there were 26,460 YAG Capsulotomies billed to Medicare in the state of Washington for procedure code 66821 (see Figure A). This underestimates the total number of YAG procedures performed as commercial insurances and supplemental insurances are not included in this data set.

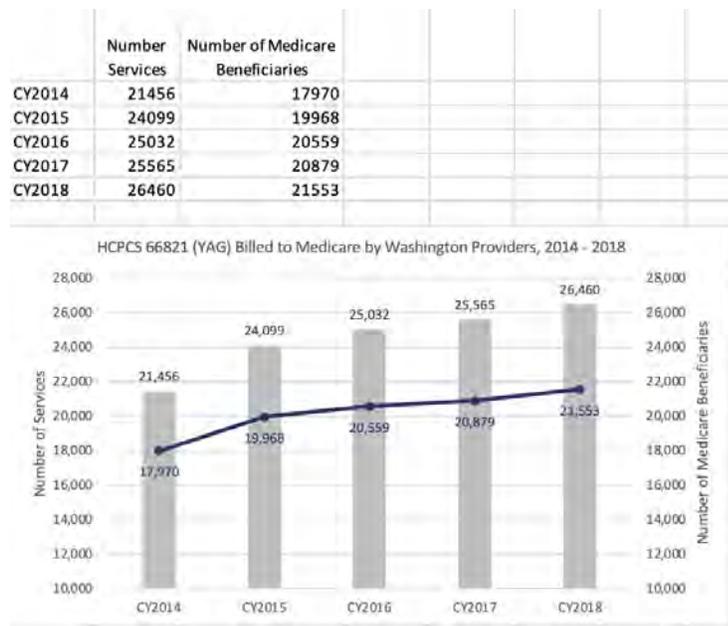


Figure A.

Please note the breakdown of cost to the patient and Medicare in figure B below.



Figure B.

Of note is the difference in facility fees, an ambulatory surgical center vs a hospital outpatient department. In the case of the hospital facility fee, it is more than the doctor fee. Optometrists in large part work outside of a hospital or ambulatory surgery center setting in which these facility fees would be noticeably less burdensome to Medicare billing. Excluding facility fees alone has significant potential savings: Ambulatory surgical centers would cost \$6,261,760 vs \$13,388,760 through hospital outpatient departments.

Selective Laser Trabeculoplasty

In 2018 there were 2,666 SLTs billed to Medicare in the state of Washington for procedure code 65855. See Figure C. *This is likely an underestimate of total procedures performed as commercial plans and supplemental plans are not included in this data set.*

HCPCS 65855 (SLT)					
	Number Services	Number of Medicare Beneficiaries			
CY2014	3103	2365			
CY2015	3191	2448			
CY2016	3123	2333			
CY2017	3197	2479			
CY2018	2666	2110			

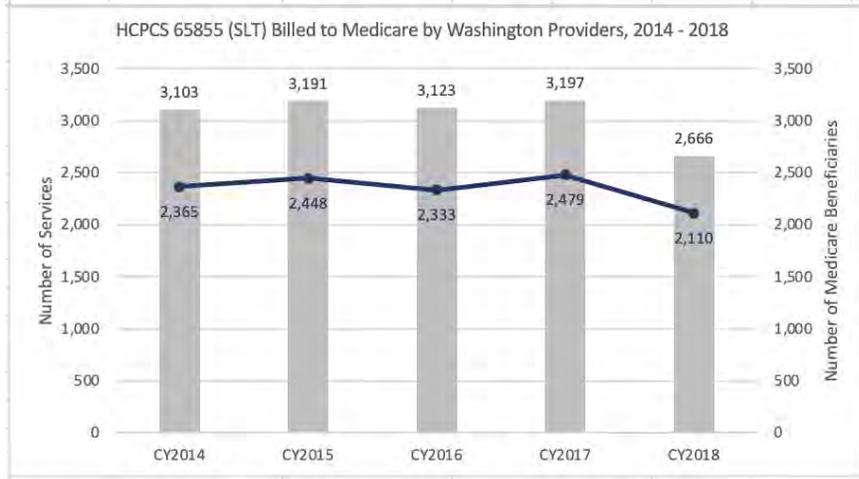


Figure C.

Beyond making the argument that there is the potential for a \$682,000 to \$1,300,000 savings by excluding facility fees in which optometrists typically do not bill (see Figure D). *Selective laser trabeculoplasty is increasingly becoming a first line therapy for primary open angle glaucoma due to improved compliance and cost reduction.* Please see “Selective Laser Trabeculoplasty as a first-line therapy: a Review from Pubmed in the attached evidence for more detail on costs associated with topical glaucoma medications.

Laser repair to improve eye fluid flow, 1 or more sessions

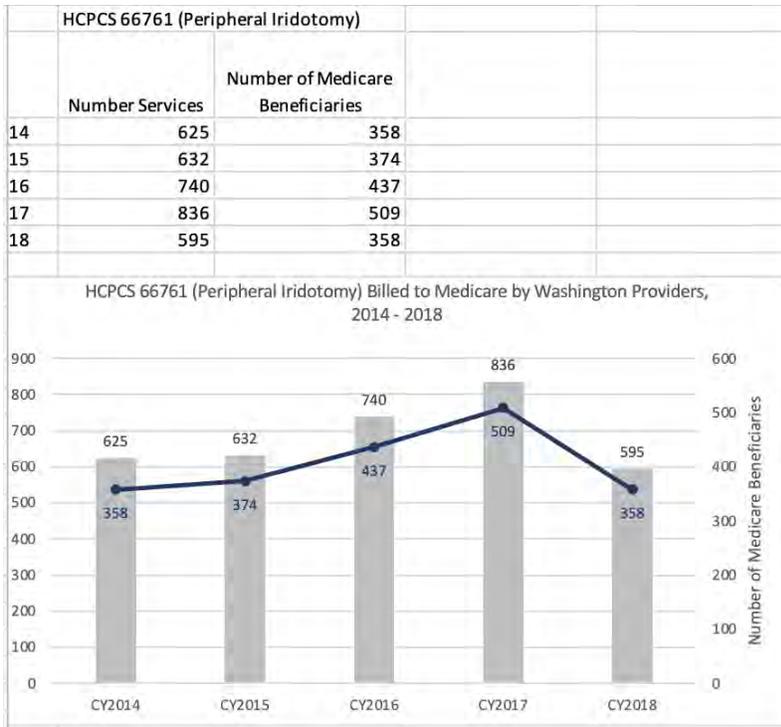
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Figure D.

Laser Peripheral Iridotomy

Although incidence of angle closure glaucoma is considerably less than primary open angle and secondary glaucomas, it is often much more acute and visually devastating when it occurs. Timing of treatment becomes of utmost importance, including immediate reduction in intraocular pressure. Due to urgency, patients awaiting the referral process to ophthalmology are at risk for severe vision loss if unable to be treated promptly. Medicare billing in 2018 shows 595 LPs performed, although it should be noted LPs often are performed prior to age 65 and subsequently should be included in commercial and Medicaid data sets. Regardless of the payor, due to its urgency and potential for vision loss, *there is considerable risk to many patients in delaying this procedure*. For economic impact related to severe visual impairment see the Prevent Blindness published study by the University of Chicago listed in the attached evidence document.



Lid Lesion Excision/Injection, Subconjunctival Injection

Optometrists provide eyecare in 36 of the 39 counties in Washington state, and in 12 counties, optometrists are the only eyecare provider; therefore improved access equates to lower costs (see Washington 2020 Access to Eye Care). Optometrists being able to provide safe and effective office based procedures such as lid lesion removal, intralesional injection of steroid, and subconjunctival injection of steroid lessens referrals out of area to the nearest urban area with an ophthalmology clinic. Often these procedures can be done in the same office visit as initial presentation, treated immediately and without delay of transitioning care. Currently, referral out to ophthalmology for such procedures adds burdensome costs to the patient and accompanying family member for transportation, lodging, and additional new patient office visits and procedure co-pays. If there is insurance provided by DSHS, there is increased cost to the state to provide transportation for the patient and one caretaker for specialized treatment out of the local area.

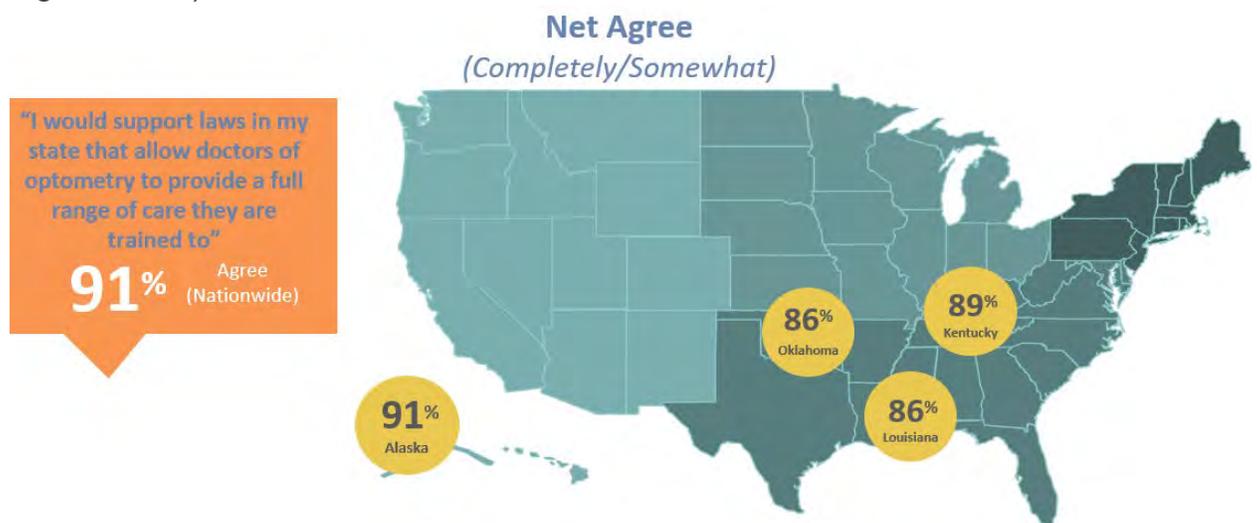
Between minimizing facility fees for laser procedures and increasing access to first line glaucoma therapies like SLT, optometry has an enormous cost saving benefit to the healthcare system. With optometrists covering nearly every county in Washington state, minimizing costs related to travel expenses and time off work for citizens equates to direct cost savings to the public.

Professional Studies on Cost Reduction in Eyecare

Adjusted for population, an independent study provided by Avalon Health Economics (attached in the references) shows a saving in cost to patients and the healthcare system of 90 million dollars per year to Washington state. This includes patient costs (copays, travel) and insurance reimbursement (fewer E/M visits with different providers/no facility fee) and slower increase premium raises (cost of the state of WA to provide benefits to employees and Apple Health participants).

Avalon Health Economics: Optometry’s Essential and Expanding Role in Health Care: Assured Quality and Greater Access for Healthier Communities:

Excerpt: In a cost-benefit analysis, we determined that scope of practice expansion adds \$600 million per year in transaction costs savings and another \$4 billion per year in savings attributable to access-related improvements in health outcomes. This is likely an underestimate, as it does not consider the added benefits associated with competition and the positive “multiplier effect” on local economies. Finally, the public perception survey found that nearly all voters nationwide consider having access to eye health and vision care a priority; 96% of voters deemed it as either very or somewhat important. Americans want access and ease. Nine out of ten voters nationwide support laws that allow doctors of optometry to provide a full range of care. This sentiment is shared among voters residing in Alaska, Oklahoma, Louisiana, and Kentucky (see Figure below).



Public Support of Laws that Allow Doctors of Optometry to Provide Full Range of Care

Access:

As mentioned in the introduction, scope expansion of advanced practice providers has been a leading solution to improve access and reduce cost within the American healthcare system. With an ever-increasing aging population in need of access to full scope primary eyecare and a fixed number of ophthalmologists, optometrists are best suited to bridge the disparity that is already apparent.

The National Center for Health Workforce Analysis (HRSA) report on “national and regional projections of supply and demand for surgical specialty practitioners: 2013-2025” estimates a national shortage of ophthalmologists by 2025 of 6,180 nationally, 1310 in the west alone. These numbers indicate the largest shortage of any medical specialty within the study and is due to a number of factors including a stagnant number of ophthalmology residency programs/graduates, retiring ophthalmologists, as well as the expected increase in the aging population of those 65 years of age or older. These numbers are supported by reports from Accreditation Council for Graduate Medical Education, and articles from Review of Ophthalmology and Healio (attached).

- Regionally, the South is projected to have the largest shortage of surgical specialty physicians in 2025, with a total deficit of 10,210 FTEs. The Midwest is projected to have a surgical specialty deficit of 7,040 FTE physicians in 2025, while the West is forecast to have a deficit of 5,330 FTEs. In the Northeast, the 2025 deficit equals 1,750 FTE physicians. In all four regions, the surgical specialty with the greatest shortage is ophthalmology.

An excerpt from “National and Regional Projections of Supply and Demand for Surgical Specialty Practitioners: 2013-2025; page 4.

Exhibit 1: National Estimates of Supply and Demand of Surgical Specialty Physicians, 2013 -2025

Specialty ^a	Baseline Estimates (FTEs, 2013)	Projections (FTEs, 2025)		
	Supply = Demand ^b	Supply	Demand	Difference ^c
General Surgery	28,190	30,760	33,730	-2,970
Colon/Rectal Surgery	1,710	2,120	1,990	130
Neurological Surgery	5,160	4,930	6,130	-1,200
Ophthalmology	18,470	16,510	22,690	-6,180
Orthopedic Surgery	25,420	24,350	29,400	-5,050
Cardiothoracic Surgery	4,490	3,600	5,410	-1,810
Otolaryngology	9,440	9,190	10,810	-1,620
Plastic Surgery	7,720	7,280	8,770	-1,490
Urology	9,910	8,830	12,460	-3,630
Vascular Surgery	3,050	3,410	3,930	-520
Total	113,560	110,980	135,320	-24,340

Notes: Numbers may not sum to totals due to rounding. All estimates are rounded to the nearest 10.

^a Specialties reflect physicians' primary reported discipline.

^b Supply and demand for 2013 surgical specialty physicians were assumed to be in approximate equilibrium at the national level.

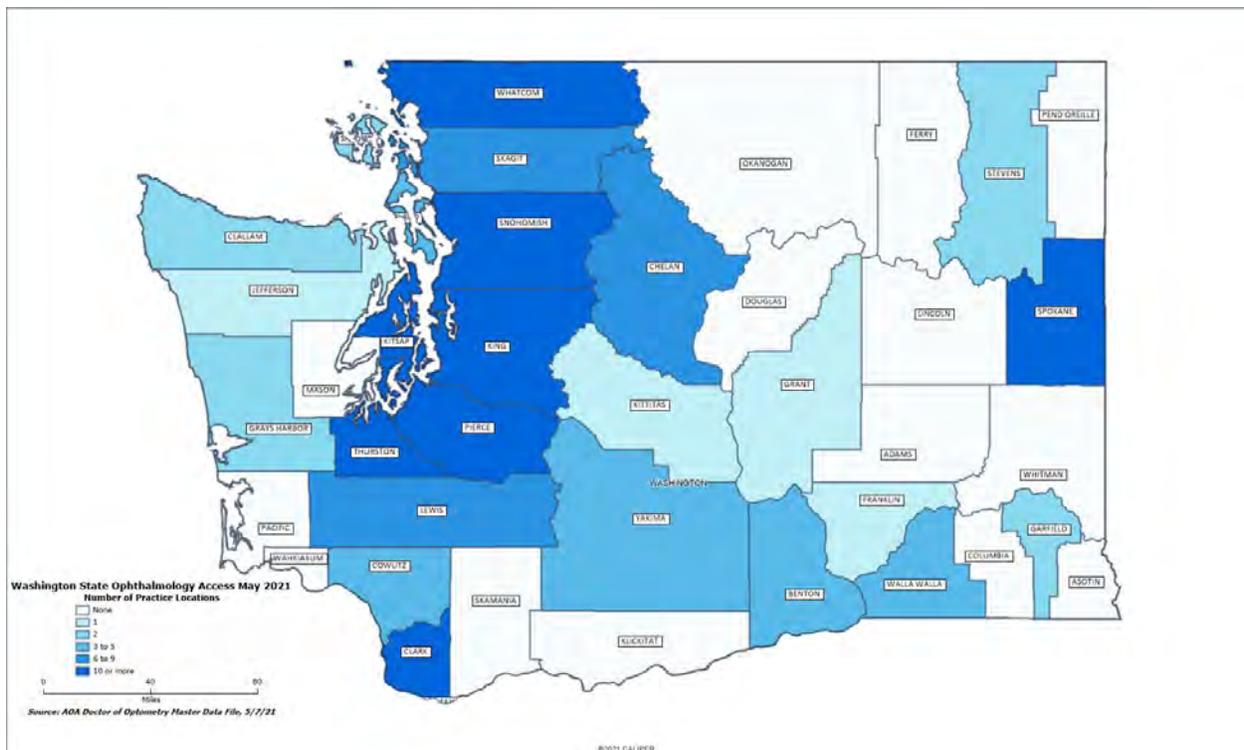
^c Difference = (supply – demand); a negative difference reflects a shortage (i.e., supply is less than demand), while a positive difference indicates a surplus (i.e., supply is greater than demand).

Region ^a and Specialty ^b	Baseline Estimates (FTEs, 2013)			Projections (FTEs, 2025)		
	Supply	Demand	Difference ^c	Supply	Demand	Difference ^c
South						
General Surgery	10,090	10,750	-660	11,390	13,140	-1,750
Colon/Rectal Surgery	570	670	-100	700	790	-90
Neurological Surgery	1,960	2,030	-70	1,900	2,460	-560
Ophthalmology	6,370	6,700	-330	5,840	8,380	-2,540
Orthopedic Surgery	8,960	9,260	-300	8,860	10,940	-2,080
Cardiothoracic Surgery	1,650	1,650	0	1,340	2,010	-670
Otolaryngology	3,520	3,330	190	3,460	3,880	-420
Plastic Surgery	2,880	2,850	30	2,770	3,270	-500
Urology	3,690	3,700	-10	3,360	4,730	-1,370
Vascular Surgery	1,070	1,170	-100	1,310	1,540	-230
Total	40,760	42,110	-1,350	40,930	51,140	-10,210
West						
General Surgery	6,090	5,950	140	7,470	7,970	-500
Colon/Rectal Surgery	290	360	-70	350	470	-120
Neurological Surgery	1,130	1,080	50	1,190	1,440	-250
Ophthalmology	4,210	4,010	200	4,220	5,530	-1,310
Orthopedic Surgery	5,970	5,360	610	6,200	6,930	730
Cardiothoracic Surgery	890	1,020	-130	750	1,380	-630
Otolaryngology	2,190	2,120	70	2,350	2,710	-360
Plastic Surgery	1,980	1,730	250	2,010	2,170	-160
Urology	2,080	2,230	-150	2,040	3,130	-1,090
Vascular Surgery	590	620	-30	720	900	-180
Total	25,420	24,480	940	27,300	32,630	-5,330

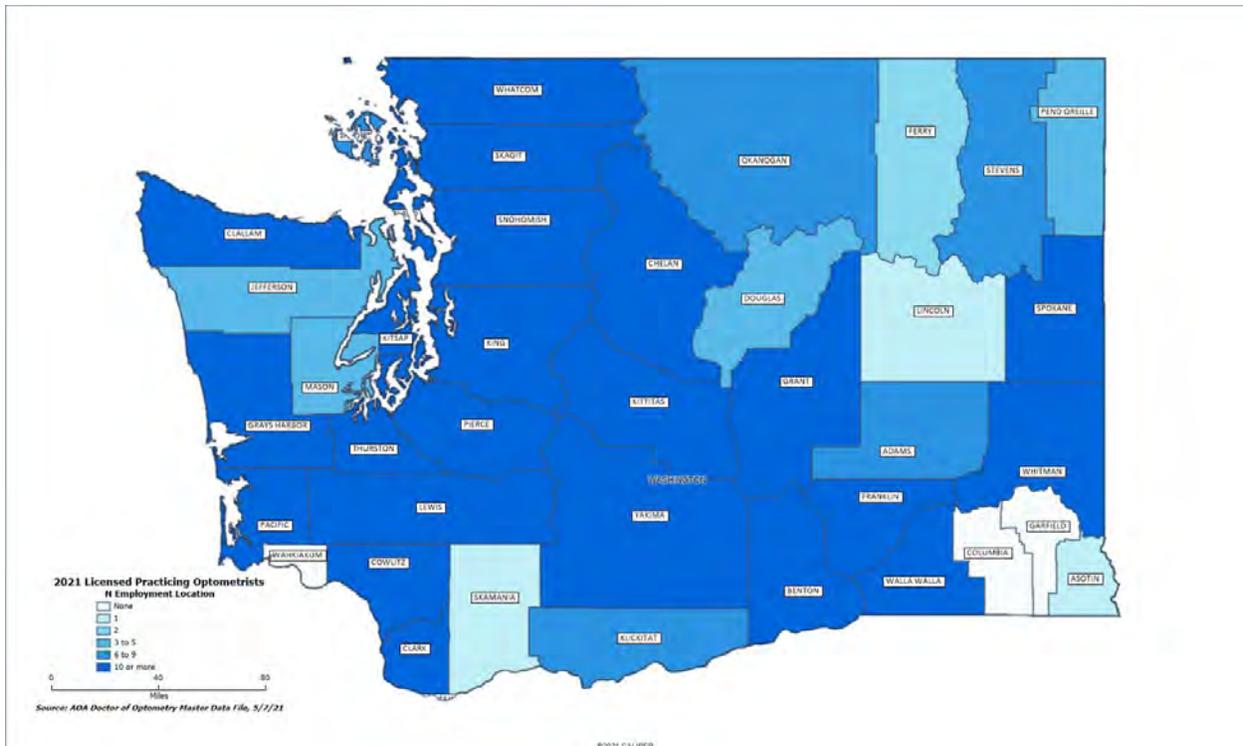
This shortage of ophthalmology services both nationally as well as in Washington State of course is just one part of the issue of access to care. Geographic proximity does not necessarily correlate with availability of needed eye care services due to a variety of

factors including geographic distribution of both optometrists and ophthalmologists and “estimated travel times” CITE ATTACHMENT Other factors include acceptance (or lack thereof) of insurances(Medicaid and Medicare in particular), time from referral to appointment for non-urgent appointments; sub-specialty ophthalmology care. Subspecialties providers, including retina, cornea, pediatric and glaucoma,often do not provide general ophthalmologic care, and several sub-specialties are even more concentrated in metro areas and far more sparse geographically. Ophthalmology recognizes this impending shortage and are increasing their utilization of optometrists, physician assistants, nurse practitioners, and telehealth solutions, where appropriate.

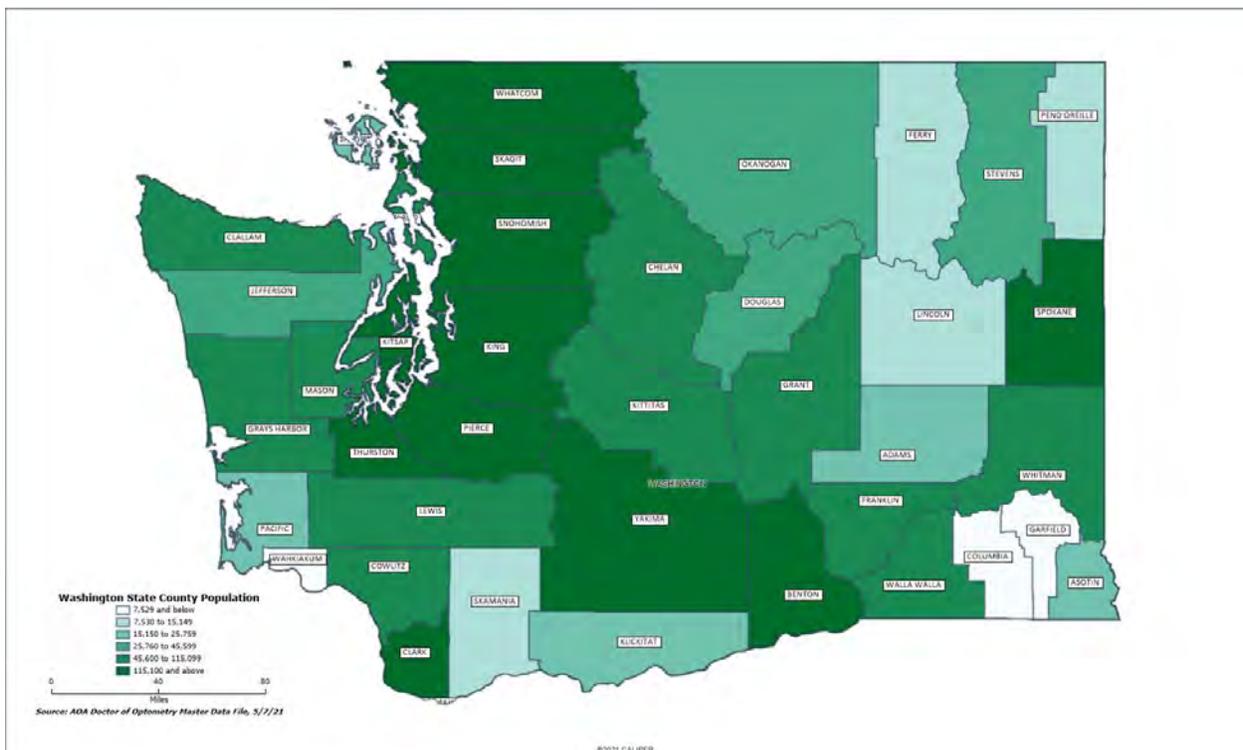
Number/Density of Ophthalmologists by County



Number/Density of Optometrists by County



Below is another map which outlines the counties within the state and their estimated population sizes based on the most recent data available for 2020.



As a more direct example, Okanogan county has a population of 41,000 citizens. In the entire county there are no ophthalmologists who accept medicare within a 50 mile radius, according to the medicare provider search tool (figure A).

In contrast, Okanogan county has eight optometry clinics within the 50 mile radius per the medicare provider search tool, as seen in figure B below. This is not an isolated incident, as there are many counties that do not have a single ophthalmologist in the entire county. In these cases, senior citizens who are often on fixed incomes will have to delay care until they can make a trip into the closest city with an ophthalmologist. Of course there is no guarantee that the closest ophthalmologist will accept their specific medicare plan.

Figure A

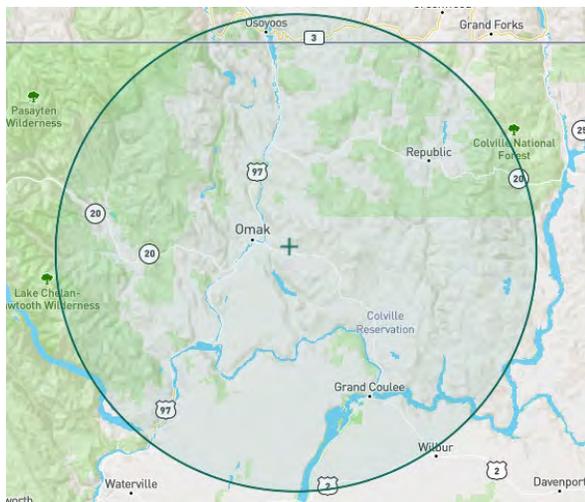
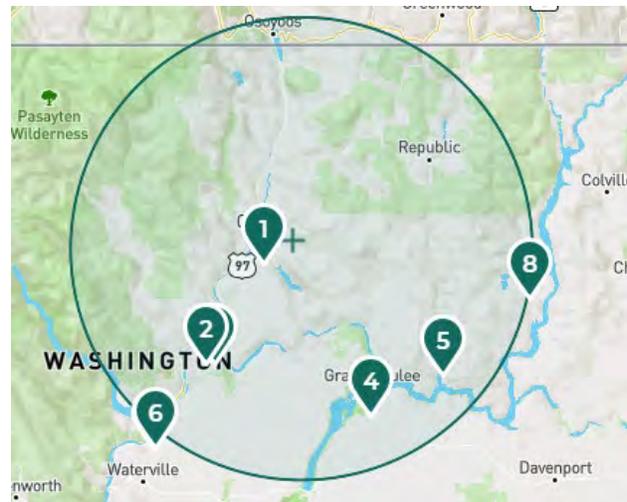


Figure B



This is not an isolated instance for this county alone. Many counties in central Washington have 0-1 ophthalmologists to service the entire county, as well as surrounding counties without any ophthalmologists.

On a national level, a recent article by Diane Gibson PhD, concludes that states with expanded scope of practice for optometrists, travel times for residents were shorter to their closest optometrist who accepted Medicare than to the closest ophthalmologist by more than 30 minutes round trip. She also notes that there is no guarantee that the closest ophthalmologist accepts Medicare or provides the services that the patient would require, and the second closest ophthalmologist would be an additional >30 minutes round trip for the patients. This includes urban and rural areas of the state, thus reducing the time it would normally take in the more rural settings. Below is a table that summarizes the data, with urban vs rural areas of the states examined (OK, KY, NM). Please note the travel times listed below are for one way trips, not for the round trip. (Keyword Reference: Gibson 1)

TABLE 1. Estimated travel times to eye care providers who accepted Medicare fee-for-service patients for the total Medicare population and the Medicare population stratified by urbanicity in Kentucky

	Medicare population,* %	Medicare population in urban areas,† %	Medicare population in urban clusters,† %	Medicare population in rural areas,† %
ETT to the closest ophthalmologist				
≤15 min	49.6	84.2	51.6	6.0
>15 and ≤30 min	25.5	15.2	26.6	37.0
>30 and ≤45 min	15.9	0.6	17.7	32.9
>45 and ≤60 min	6.5	0	3.2	17.3
>60 min	2.5	0	0.9	6.9
Closest ophthalmologist was:				
Only ophthalmologist at office who accepted Medicare	56.4	48.0	63.9	60.2
Only ophthalmologist at office who accepted Medicare and was the closest ophthalmologist for >50,000 individuals	33.3	25.2	40.4	39.0
Difference between the ETT to the 2nd closest ophthalmologist and the closest ophthalmologist				
>0 and ≤15 min	89.2	98.4	80.6	85.4
>15 and ≤30 min	5.2	1.6	5.6	9.1
>30 and ≤45 min	2.7	0	6.2	2.9
>45 and ≤60 min	2.2	0	5.6	2.0
>60 min	0.7	0	2.0	0.6
ETT to the closest optometrist				
≤15 min	71.2	98.2	84.5	27.2
>15 and ≤30 min	21.6	1.8	11.4	54.5
>30 and ≤45 min	5.8	0	3.3	14.9
>45 and ≤60 min	1.1	0	0.7	2.7
>60 min	0.3	0	0.1	0.6
Difference between the ETT to the closest ophthalmologist and the closest optometrist				
≤0 min	16.1	18.5	17.3	12.0
>0 and ≤15 min	62.8	76.7	57.4	48.1
>15 and ≤30 min	14.4	2.8	16.2	27.1
>30 and ≤45 min	5.4	0	7.7	10.0
>45 and ≤60 min	1.1	0	1.1	2.4
>60 min	0.2	0	0.3	0.4

The 2010 U.S. Decennial Census was the source of block group-level population data, and the 2016 Medicare Provider Utilization and Payment Data was the source of eye care provider office location. Individuals were assigned ETTs corresponding to the times from the centroid of their block group of residence to eye care providers. *The term *Medicare population* is used to refer to the population 65 years or older. The Medicare population in Kentucky in 2010 was 578,227 individuals. †The Medicare population in Kentucky in 2010 comprised 228,840 individuals living in urban areas, 160,993 individuals living in urban clusters, and 183,394 individuals living in rural areas. ETT = estimated travel time.

In rural areas, nearly 40% of patients had a single ophthalmologist who would have to provide care for more than 50,000 patients in that area, otherwise they would be forced to travel elsewhere.

In contrast, the estimated travel time to the closest optometrist was less than 30 minutes (one way) for 81.7% of the rural population (42% to the closest ophthalmologist). This article is also not an isolated incident; as previously noted, there are many counties in Washington where there are no ophthalmologists and only

optometrists. Dr. Gibson also authored another article that was published in 2015 which analyzed the distribution of optometrists vs ophthalmologists across the country. She noted at the time that there were only 5.7 ophthalmologists for every 100,000 county residents based on 2011 data, compared to 14.3 optometrists per 100,000 county residents. This article also shows maps which are similar to the ones we provided above indicating the scarcity of ophthalmologists in rural populations, while the number of rural optometrists was better across the state. (Keyword References: Gibson 2). To contrast our points, there was an article published by Dr. Cecilia Lee, et al. that was published in response to Dr. Gibson's original 2015 article. This article, published in 2016, stated that the majority of the Medicare population is within a 30 minute drive time of an ophthalmologist, and 15 mins to the nearest optometrist. While this article states the majority of the population is close to both providers, it utilizes state average drive times in both rural and urban areas, , thus leaving the underserved rural population travel time grossly misrepresented. In their results section, the authors admit there are several limitations to the conclusion they come to and do admit that their data does not provide the entire picture; even if an ophthalmologist practices less than an hour away, there is no guarantee that they accept Medicare (Keyword Reference: Evaluating Access To Eye Care). As a result of Dr. Lee's article, Dr. Gibson addressed these issues in her 2020 article to better illustrate that there is a higher demand for eye care in the rural communities, optometrists are closer, and the issue of Medica acceptance by the closest ophthalmologist (Keyword Reference: Gibson 1).

Additionally, the US Department of Health and Human Services published a briefing entitled "Reforming America's Healthcare System Through Choice and Competition." This briefing was created at the acting President's request to discuss barriers to access of care. They suggested after their thorough review that restrictive scope of practice laws are one of the factors that lead to increased cost of care and that providers such as nurse practitioners, physician assistants, pharmacists, and optometrists can all already provide many of the services provided by MDs or DOs effectively (page 33 of the briefing). Provided below is the permanent link for this briefing (PDF available upon request).

<https://www.hhs.gov/sites/default/files/Reforming-Americas-Healthcare-System-Through-Choice-and-Competition.pdf>

As mentioned in the Avalon study, optometrists help to save the healthcare system millions of dollars annually when providing patients care. It is difficult to quantify the value of a patient's time when forced to travel several hours to seek care for a simple procedure. While optometrists will save patients and the healthcare system money

through providing these services, we cannot discount the other savings that occur in addition to the billed services.

(4) The benefit to the public if regulation is granted: See above

(a) The extent to which the incidence of specific problems present in the unregulated health profession can reasonably be expected to be reduced by regulation;

Not applicable - The profession is already regulated by the board of optometry

(b) Whether the public can identify qualified practitioners;

The public will be able to identify advanced procedure certified providers based on their level of licensure until the date when all optometrists are required to meet the requirement (as designated by the board of optometry). This is the same as the current system of public identification

The board of optometry will institute a method to designate which optometrists have been granted their surgical procedure privileges. Whether they utilize a designation at the end of their licensure number or issue a specific certificate to be displayed prominently in the optometrists clinic, or via some other method that the board designates this would help the public to be aware of who is qualified.

(c) The extent to which the public can be confident that qualified practitioners are competent:

(i) Whether the proposed regulatory entity would be a board composed of members of the profession and public members, or a state agency, or both, and, if appropriate, their respective responsibilities in administering the system of registration, certification, or licensure, including the composition of the board and the number of public members, if any; the powers and duties of the board or state agency regarding examinations and for cause revocation, suspension, and nonrenewal of registrations, certificates, or licenses; the promulgation of rules and canons of ethics; the conduct of inspections; the receipt of complaints and disciplinary action taken against practitioners; and how fees would be levied and collected to cover the expenses of administering and operating the regulatory system;

As the board of optometry already exists, this is not applicable

(ii) If there is a grandfather clause, whether such practitioners will be required to meet the prerequisite qualifications established by the regulatory entity at a later date;

The bill language provided does address this that the board would need to designate a date in which all grandfathered providers would need to meet the certification requirements or cease practicing in Washington state.

(iii) The nature of the standards proposed for registration, certification, or licensure as compared with the standards of other jurisdictions;

This language has also been addressed in the current board language, as well as the proposed bill language. Any optometrist wishing to provide further procedures must take an approved course or examination in order to be granted privileges by the board of optometry. The certification must be submitted to them prior to beginning to practice these procedures.

(iv) Whether the regulatory entity would be authorized to enter into reciprocity agreements with other jurisdictions;

The bill language suggests this would be acceptable as long as other states have a similar level of practice and the optometrist was licensed at the highest level in that state. This would be up to the board of optometry to make the decision in the rule making WACs, but also might need to be done on a case by case basis.

(v) The nature and duration of any training including, but not limited to, whether the training includes a substantial amount of supervised field experience; whether training programs exist in this state; if there will be an experience requirement; whether the experience must be acquired under a registered, certificated, or licensed practitioner; whether there are alternative routes of entry or methods of meeting the prerequisite qualifications; whether all applicants will be required to pass an examination; and, if an examination is required, by whom it will be developed and how the costs of development will be met; and

The proposed bill language does address that the required courses would be provided by optometry schools or national organizations who are able to provide continuing education to optometrists and as long as the course is approved by the board of optometry.

The language also allows that new graduating optometrists must be able to pass a board examination that covers the procedures in question to allow them to begin practicing to the highest level upon completion of all parts of their boards exam and state licensure, presuming the state board of optometry would consider it to be acceptable.

(vi) What additional training programs are anticipated to be necessary to assure training accessible statewide; the anticipated time required to establish the additional training programs; the types of institutions capable of providing the training; a description of how training programs will meet the needs of the expected workforce, including reentry workers, minorities, placebound students, and others;

Currently the courses offered are provided by the Oklahoma optometry school where the doctors who teach it come to Washington (or another nearby state) or optometrists taking the course travel to Oklahoma to take the course. The financial cost is also the responsibility of the optometrist, per the language suggested in the bill.

Pacific University College of Optometry (PUCO) does offer a postgraduate course that covers all the advanced procedures requested with the exception of laser procedures. When Oregon's proposed bill passes into law and laser procedures are allowed in the state, PUCO intends to offer a supplemental course for the laser procedures. This would allow optometrists in Washington to travel to Oregon to take both courses and submit for their surgical privileges, presuming the courses were approved by the state board of optometry.

All optometry schools teach these procedures in their curriculum. Below this in sections 3 and 4 the education within the schools is summarized for the committee's review as well as documentation from several programs.

**(d) Assurance of the public that practitioners have maintained their competence:
(i) Whether the registration, certification, or licensure will carry an expiration date; and**

Current law requires 50 hours of continuing education every two years for optometrists in Washington and licenses expire yearly. As referenced in subsection (v) above and based on the proposed WAC's, which we have included below, we have suggested that the board would require all optometrists to have taken and passed an approved course that would prove competency prior to being granted surgical privileges.

(ii) Whether renewal will be based only upon payment of a fee, or whether renewal will involve reexamination, peer review, or other enforcement;

Currently the board has decided that renewal of licensure is based upon payment of fee.

3. What is the minimum level of education and training necessary to perform the new skill or service based on objective criteria?

The current minimum training offered at optometry schools is more than adequate for these procedures for current students who will be graduating to practice in states that already have expanded scope of practice. While this is acceptable for current and future optometry students, the minimum training should be established for currently practicing optometrists.

Because of this, the optometry school in Oklahoma has established a program for post graduate education. There are also several other programs that are in development, as well as testing for current and future optometry students to prove competency listed below.

Post-Graduate Education

As with any medical profession, new standards of care and procedures are updated overtime. For this reason, there are courses that are dedicated to keeping medical professionals up to date once they have left school and been in practice. These are often with post-graduate seminars taken at conferences as well as continuing education courses.

According to WAC 246-851, in Washington state optometrists must complete 50 hours continuing education every 2 years to maintain their licensure in the state. The majority of the hours obtained must be specific to optometry, but some hours may be obtained in general medical education as well.

In states with expanded scope already, optometrists who did not receive training regarding advanced procedures during their schooling or require a strong review of their education to apply for procedure privileges must attend the approved course from Northeastern State University Oklahoma, College of Optometry's (NSU-OCO) advanced procedure course. This course includes 32 hours of approved continuing education for optometrists to review and practice the procedures in a didactic review and realistic wet-lab environment.

A copy of one of the recent programs offered and a more in depth description of the course is attached for full review, but for reference the in-depth courses include:

- Review of associated anatomy and physiology

- Review of necessary anesthesia administration (topical and injectable)
- Review of sterile techniques
- Review of ocular diseases treated with advanced procedures
- Review of the specific procedures techniques
- Review of indications, contraindications, and complications
- Practicing the advanced procedure techniques in several hour sessions

The estimated breakdown of the 32 hours of education is estimated as:

- 8 Hours of Practice
- 3 Hours of Grand Rounds case review
- 21 Hours of medical knowledge necessary to perform procedures

In addition to the course offered by NSU-OCO, the National Board Examiners of Optometry (NBEO) offers an additional board certification course as of 2018 called Laser and Surgical Procedures Examination (LSPE). This course covers all the advanced in office surgical procedures that are currently requested and allowed in several states through a written and practical examination.

NBEO's board certification for new optometrists is most closely compared to the National Board of Osteopathic Medical Examiners (NBOME). While NBEO, NBOME, and USMLE all utilize written examinations to test applicant's knowledge, only the NBEO and NBOME have practical test components. NBEO Part 3 and LSPE have standardized patients for applicants to show their proficiency in examination and techniques. NBOME also offers the Comprehensive Osteopathic Licensure Examination 3 (COMLEX 3) which requires in person examination with standardized patients. The USMLE does not require a standardized physical board examination to prove competency of physical examination skills.

Reference Keywords: LSPE Outline, OK Grad Course, PUCO Post Grad Course

4. Explain how the proposal ensures practitioners can safely perform the new skill orservice (refer to RCW 18.120.030(1) and (4).

Optometrists are required to graduate from an accredited school of optometry and pass all sections of boards, apply for licensure and become credentialed in the specific state they wish to practice. The proposal does not change these requirements that an optometrist must graduate from optometry school and go through the required credentialing process, but does expand on the required training for optometrists who have already graduated and been in practice for a number of years to allow them to update their training as well. The following section further explains the education requirements for optometrists.

Optometric Education

Optometry students enter school after completing their undergraduate studies, with many focusing on biology, chemistry, or physics degrees. To attend optometry school, the prerequisite courses to apply are identical to medical and dental school.

The following courses are the standard requirements for pre-optometry students:

- Human Anatomy and Physiology (One year)
- General Chemistry (One year)
- Organic Chemistry (One year)
- Biochemistry (One semester)
- Physics (One year)
- Microbiology (One semester)
- Calculus 1
- Statistics
- Psychology (One course)

The standard for optometry students is to take the Optometry Admission Test (OAT) which is similar to the Medical College Admissions Test (MCAT) or the Dental Admission Test (DAT) all of which tests the knowledge based on the undergraduate coursework listed above. In addition to obtaining letters of recommendation and shadowing a doctor of optometry or ophthalmologist in their practice.

Once admitted, optometry students take a wide variety of courses during their time in school. The courses taken are not just learning how to prescribe glasses and contact lenses, in fact this is a much smaller portion of the schooling than most suspect. The majority of optometry school education is focused on ocular anatomy and physiology, neuroanatomy and physiology, systemic disease, ocular disease, and pharmacology. Based on Pacific University College of Optometry's program, the first two years are mainly classroom and lab based where students begin their education before they engage with patient care in the school clinics during their third year. The third year is split between classes and time spent in the clinic providing direct patient care under their attending doctors. The fourth year of schooling is entirely spent in patient care, rotating through multiple clinics around the country to round out their education.

Based on Pacific University College of Optometry's program layout for students, out of the 145.5 credit hours over the first three years of school only 41.5 credit hours are specifically in reference to the assessment and prescription of glasses and contact lenses. This means that 72% of courses are more focused on anatomy and physiology, neurology, systemic and ocular diseases, pharmacology, and the procedures that are important to the day to day care of patients within optometry.

First year optometry students begin their education with basic science courses containing microbiology, histology, and biochemistry review as it specifically pertains to ocular and neurologic anatomy and physiology while also taking separate courses for the anatomy and physiology of these two systems. Students also begin taking their first pharmacology course during their first semester and continue with general pharmacology for four dedicated

pharmacology courses. These courses are focused initially on the mechanisms of action, desired effects, side effects, dosages, drug interactions, and other aspects of general medical pharmacology and are generally not related to ocular pharmacology until the final dedicated pharmacology course.

Upon completion of their first semester, students begin their training in ocular and systemic diseases with additional integrated practical pharmacology education. The systemic disease courses include several treatment protocols for patients that doctors of optometry will care for on a daily basis within practice, such as diabetes, high blood pressure, high cholesterol, and many other common and uncommon conditions. This additional systemic disease and pharmacology education is crucial to understanding the relationship between the eye and the rest of the body during disease state.

Between systemic and ocular disease lectures and labs, optometry students gain significant amounts of experience regarding prescribing oral and topical medications, performing in-office surgical procedures, and regular diagnostic procedures before they leave for externships.

After completion of the first three years of didactic and clinical training, optometry students begin their externships. Students specifically rotate through four externships with specific educational goals in mind.

These four externships include:

1. Primary Eye Care
2. Ocular Disease
3. Specialty Externship
4. Specialty Externship

These externship rotations encompass a wide variety of different practice modalities, including military hospitals, veterans hospitals, private optometry clinics, surgery centers (such as refractive surgery or cataract surgery centers), and many subspecialty practices including pediatrics, specialty contact lenses, low vision, vision therapy, etc.

Students may choose their rotations to round out their education in a specific specialty that they are interested in pursuing and learning more first hand with their attending doctors, including both optometrists and ophthalmologists.

Boards Examinations

During the third year of optometry school, students begin to prepare for their first part of their boards examination administered by the National Board Examiners of Optometry (NBEO). Part 1 is an Applied Basic Science examination covering ocular anatomy and physiology, systemic and ocular pharmacology, systemic and ocular disease, optics, contact lenses, binocular vision, histology, biochemistry, microbiology, and several other topics. The test consists of 350 total

questions taken over the course of two days (for reference medical school's USMLE Step 1 examination is 280 questions).

Upon passing Part 1, students are eligible to take Part 2 during their fourth year of school. Part 2 encompasses Patient Assessment and Management. This test consists of another 175 questions on full cases and mini-cases including differential diagnosis, treatment protocols, ordering and interpreting ocular and systemic imaging, and referral protocol when necessary.

The final examination is Part 3 which tests clinical skills in action. Students are tested with a standardized examination with live test patients at the NBEO's testing facility in North Carolina. Students go through four main stations where they are tested on case history, patient education, binocular vision assessment, tonometry, gonioscopy, contact lens assessment, biomicroscopy of the anterior and posterior segments of the eye, binocular indirect ophthalmoscopy, and several other skills required to practice. Prior to August 1, 2018, the NBEO's part 3 examination also included intravenous injection skills as part of their examination. After August 1, 2018, it is a separate examination that can be taken at the same time.

Upon completion of all three examinations, graduation from optometry school, and submitting all the necessary pieces to apply, an optometrist may apply for a Washington state license and begin practicing once they are approved and secure malpractice insurance.

Residency training is currently optional for optometry students, similar to how it is optional for dental students. Residencies consist of a year long training under attending optometrists and ophthalmologists. One of the more common residency providers is the Veterans Administration, where residents will see patients with an emphasis on ocular disease diagnosis and management.

Based on the National Matching Services report and the ADA's demographics report, the percentage of new dentists who apply and are matched to a residency is about 35%. According to the American Optometric Association (AOA), the average rate of residency for new graduate optometrists currently resides at 20-23% over the last 5 years, but is expected to continue to rise as more residency locations open and more states expand their scope of practice.

Reference Keywords: AOA Education Overview, AOA Education Fact Sheet, Western Course, ICO Laser Course, Pacific Curriculum

5. Explain how the current education and training for the health profession adequately prepares practitioners to perform the new skill or service (refer to RCW 18.120.030(4)). Address the nature and duration of the education, training, and continuing education, including Washington curricula and accredited/approved out-of-state programs. Be specific on course content and credits/length applicable to the proposal

As described in detail under section 4, optometrists already receive a significant amount of training during their time in school that would adequately prepare them for many of these procedures. While we do not have an accredited program in Washington state, our closest optometry school is located at Pacific University in Forest Grove, Oregon. The information summarized below is taken from their course catalogue as well as several syllabi (attached, but redacted for sensitive personal information).

Ocular Advanced Procedures

In regards to the specific course content and length of training, this is summarized below more in depth than simply stating optometrists receive 25+ credit hours of ocular pathophysiology. However, this is summarized in a brief table below.

Profession	Graduate School Length	Residency Length	Ocular Disease Courses
Optometry	4	1 year (optional)	25.75+
Physician Assistant	2	None	0
Doctor of Nursing Practice	2-3	1 year (optional)	0

EyeLid Lesion Removal and Suturing

Optometry students receive significant training as to when advanced procedures are necessary and beneficial, how to perform the procedures, and then gain hands-on experience practicing in wet lab situations. Their training also includes what complications may arise from procedures performed and how to prevent their occurrence, treat them if they do occur, and when to refer patients to a specialist if further treatment is necessary.

For example, at Pacific University College of Optometry, during students' first ocular disease course an estimated 9 lecture hours are spent on eyelid disease, 3 lecture hours on eyelid lesions, and another 9 lecture hours on conjunctival lesions and diseases.

In lab sessions, students will spend time practicing insertion of punctal plugs, dilation and irrigation of the nasolacrimal system, epilation of eyelashes, culturing infectious samples, as well as several suturing and non-suturing procedures.

These sutureless procedures include the use of hyfrecation, electrocautery, liquid nitrogen applications, with non-suturing methods of wound closure such as steristrips or dermabond. Students will also practice the removal of lesions with suturing procedures for more complex lesion removals.

Between lecture and hands-on experience, by the end of the second semester of optometry school, students will be proficient in these procedures with 21 hours of lecture and 8 hours of hands-on practice in lab settings.

Injections

During the course of systemic and ocular disease lectures and labs, students are taught when injections are beneficial for ocular diseases, how to perform the injection, proper dosages, sterile technique and injection safety protocols for intramuscular, intravenous, subcutaneous, subconjunctival, and intralesional. Students are also trained on the emergency procedure of injecting epinephrine in the event of anaphylactic shock, which is currently allowed under the current scope of practice law for optometry in Washington.

A common example of when a steroid injection would be beneficial for a patient is in the case of a chalazion (commonly referred to as a sty). Injection as a treatment option is often utilized after failure of alternative, non-invasive options have failed. While surgical excision can be performed, this is more invasive than an injection and is often the last method utilized after injection has failed.

While intramuscular, intravenous, and subcutaneous injections are less common in optometric practice, the ability to perform them is still crucial in the event of emergency. In the event of a worldwide disease outbreak where rapid vaccination efforts are necessary, optometrists are trained and able to provide this treatment to patients safely in the event of a shortage of providers and the need for rapid, massive vaccination efforts.

Laser Procedures (Selective Laser Trabeculoplasty, Laser Peripheral Iridotomy, YAG Capsulotomy)

Optometry students receive significant training in the understanding of optics, light, and lasers during their first year of optometry school with a year of general optics training. From there, students will learn when lasers are useful during their time in ocular pathophysiology courses including the use of SLT, LPI, and SLT procedures.

Optometry students are also taught when the use of other types of laser procedures are indicated, but these procedures are taught in regards to how they are meant to affect the eye

and the disease the procedure is utilized for to provide patients with better understanding of their condition. These procedures (for example retinopexy, panretinal photocoagulation, LASIK) are excluded from current and future optometric scope of practice.

The education regarding laser procedures varies to a certain extent based on the location of the school where the course is taught. At Pacific University in Oregon, laser procedures are taught in didactic courses on when and how to perform them, followed by a wet lab where students are able to perform them on model eyes. This is because Oregon does not currently allow laser procedures to be performed by optometrists on live patients. Similarly, Illinois College of Optometry (ICO) provides extensive didactic course education with wet lab after.

However, in Oklahoma and Kentucky, the procedures are taught in didactic lectures, then physically in hands on wet labs, followed by the opportunity to perform these with real patients in the school's clinics under the supervision of their attending physicians. Many of the interns are able to perform double digit procedures well before they have graduated from their program.

Reference Keywords: Pacific Curriculum, PUCO Syllabi, ICO Laser Course, AOA Education Overview, AOA Education Fact Sheet

As an example of how optometry education is already adequate for these procedures, it's important to evaluate other professions who can legally already perform many of these procedures: nurse practitioners and physician's assistants.

Other Professions Education

Physician Assistants (PA's):

Physician Assistant's enter PA school with between 2-4 years of undergraduate studies. Entrance requirements are somewhat inconsistent between schools, so each one can have different requirements. Some allow for entrance after just 1-2 years of undergraduate studies as long as the proper prerequisites have been completed.

These prerequisites typically include:

- Human Anatomy and Physiology (One year)
- General Chemistry (One year)
- Organic or Biochemistry (One Semester)
- Microbiology (One semester)
- Statistics
- Psychology or Sociology (One course)
- Optional: Some schools require entrance testing such as the GRE or accept the MCAT in its stead. This is not uniform between all programs.
- Equivalent full time hours between 6-12 months of unspecified healthcare experience

Their programs last between 18-24 months and encompass a wide variety of topics in order to cover all major diseases and some less common conditions, along with the pharmacology and technical skills required for their profession. The second year consists of rotations through clinical settings with hands on patient care.

Pacific University's Physician Assistant program consists of 67 semester credit hours of didactic and lab training before students enter their clinical rotation with more full time patient care. University of Washington's Physician Assistant program consists of 78 quarter credit hours (equivalent to 52 semester credit hours) of didactic and lab training before students enter their second year clinical rotations.

The scope of practice in the state of Washington (RCW 18.71A.030) for a Physician's assistant falls into what could be construed as "as taught" level of scope. PA's are allowed to perform any procedure as long as the attending physician feels that they are qualified to perform the procedure and it is within the physician's scope of practice with the exceptions of dental, chiropractic, podiatry, or prescribing glasses, contact lenses, or vision therapy exercises (RCW 18.71A.060).

Nurse Practitioners:

It should be noted that nurse practitioners have some variability between the different levels of education when comparing a Doctor of Nursing Practice (DNP) or a Masters of Nursing (MSN). Currently most nurse practitioner programs in Washington state have shifted to DNP programs rather than the MSN degrees. Gonzaga is the only program in Washington state that currently maintains both a DNP and MSN program. There are, however, out-of-state online master's and DNP programs in which Washington nurses enroll to become NPs.

Nurse Practitioner training is perhaps the most difficult of all health professions to quantify as their entry into pathology, pharmacology, and technical skills typically begins earlier in undergraduate while working on their nursing degree (either a bachelors in nursing or an associates in nursing). Upon completion of their nursing program, passing their national boards examination, and obtaining their state licensure, nurses may begin practicing as registered nurses.

Upon completion of a bachelors in nursing, they may pursue their MSN to become an advanced registered nurse practitioner (ARNP) or they may enter into a doctorate level program to obtain their DNP. Prerequisite training for entry into MSN or DNP programs is not necessarily consistent across all schools at this time. Many require experience practicing as a registered nurse prior to admission to nurse practitioner programs.

Similar to other health professions, much of the didactic training in pathophysiology also includes integrated pharmacology, including mechanism of action, dosages, drug interactions, and side effects on top of the pharmacology training they have received in their undergraduate education.

In regards to the additional education that DNP's receive, based on the curriculum reports provided through Washington State University and University of Washington's programs, the programs provide on average an additional 21 credit hours of integrated pathophysiology and pharmacology and at least 10 hours of additional skills training and practicals which can be geared more towards a specific specialty. In addition to this, they round out their training with evidence based practice courses, statistical analysis, and research projects in their final year of training alongside their clinical practice.

In Washington, nurse practitioners have a fairly wide scope of practice with the ability to provide most services with the exceptions of dental, podiatric, chiropractic, and several types of vision care. Nurse practitioners may provide routine vision screenings, though are not able to provide comprehensive vision exams, vision therapy services, glasses prescriptions, and contact lens prescriptions. Their scope may be able to be considered to be "as taught" with board autonomy deciding which areas are within their scope of practice (RCW 17.79.250;17.79.260). Their current scope of practice indicates that they are only barred from performing major surgery.

In summation, it might be simpler to put the total contact hours into perspective regarding ocular education, as well as showing who is currently allowed to perform many of these procedures that optometrists are seeking rights to perform.

Profession	Total Didactic and Lab Hours Focused on Ocular Disease	Direct patient care hours for ocular disease before graduation
Optometry	400-450	2200-3000
Physician Assistant	No more than 20 hours	No more than 20 hours
Doctor of Nursing Practice	No more than 20 hours	No more than 20 hours

Profession	Significant Ocular Disease and Ocular Surgical Training	Allowed to Perform In Office Ocular Surgery
Optometry	X	
Physicians Assistant		X
Nurse Practitioners		X

Ocular Disease Training

Optometrists and ophthalmologists are the leaders in management and treatment of ocular disease. Ocular training for medical doctors provided during medical school is very limited to a few lectures at the most. As evidenced in an article written by ophthalmologist Peter McDonnell,

many medical schools do not require an ophthalmology rotation for medical students. This means unless a physician is an ophthalmologist, their ocular training is severely limited. While many other health professions have some base knowledge provided to them during their training, none come close to the levels provided during optometry school/residency or ophthalmology residency. (Reference: Ophthalmology?! Who needs to learn that?).

For example, physician's assistants and nurse practitioners both learn how to diagnose and treat basic eye problems in a primary care and urgent care setting. These conditions include bacterial and viral conjunctivitis, blepharitis, hordeolum and chalazion (commonly referred to as styas), etc. These conditions are taught during other courses that are covering other systemic diseases such as general adult primary care for NPs or dermatology, ear-nose-throat, rheumatology, etc. for PAs. The bulk of the course is not spent teaching ocular pathophysiology and treatment, as this is not a specialty that NPs and PAs treat commonly.

Based on correspondence with Washington State University and Pacific Lutheran's nurse practitioner program faculty, their students do specifically receive training in basic eye care screening techniques, diagnosis of common ocular conditions, and treatment options. They also provide training on when to refer patients to an optometrist or ophthalmologist to co-manage patients with systemic conditions that have ocular complications such as diabetes.

While PA and NP ocular education provides a fair amount of base knowledge about a few common ocular conditions, neither PAs nor NPs receive any significant training regarding the use of a slit lamp biomicroscope and performing a comprehensive dilated eye examination. These are tools that are crucial to providing adequate comprehensive eye care and can take months of dedicated training to gain a solid competency in their use.

Their education does not include the diagnosis, treatment, and management of all types of glaucoma, cataracts, and retinal disease the way that optometrists and ophthalmologists are educated. In a recent article from Review of Ophthalmology, Dr. Kershner, an ophthalmologist, is quoted as saying "[Eye Care is] not like most medical practices where you can hire a nurse practitioner or physician assistant. They don't know or understand the terminology the way we do. The only one who understands the eye as well as we do is the optometrist..." (Reference: The Ophthalmic Staffing Shortage; Review of Ophthalmology; Published 7 October 2019).

While nurse practitioners and physician assistants fill a crucial gap in providing patients with high quality systemic disease care, their training does not include the diagnosis, treatment, and technical skills required for these specific advanced ocular procedures. However, the current scope of practice of both of these professions does allow for PAs and NPs to perform these procedures without having learned them during their time in school as long as proper conditions are met and the board allows for it.

A PA may perform the procedure as long as their attending physician has submitted documentation to the state board indicating that they have taught the PA to provide the service adequately. This means that they have received non-standardized training for a procedure and

do not have to follow the minimum required education the way that an ophthalmologist or an optometrist would.

Reference Keyword: Pacific PA Curriculum, UW PA Program, UW DNP program

Current Ophthalmology Residency Standards

While groups opposing this legislation may claim that the training in optometry school is inadequate compared to an ophthalmology residency, the fact is that this is not true based on the numbers published by ACGME. Provided below is a brief summation of ACGME's requirements for ophthalmology residents:

The current minimum required procedures for the in office ocular surgeries that we are requesting can be found from the Accreditation Council for Graduate Medical Education (ACGME) in the documents provided and in the table below.

Procedure	Minimum Required
YAG Capsulotomy	5
Laser Trabeculoplasty (SLT)	5
Laser Iridotomy (LPI)	4
Chalazia Excision	3

The ACGME minimum requirements placed far more emphasis towards the surgical procedures that ophthalmologists are desperately needed for which an optometrist cannot do, with stronger emphasis towards cataract surgery (86 minimum), retinal procedures (30 minimum), and oculoplastic (blepharoplasty, ptosis repair, enucleation, etc) procedures (minimum 28).

While many ophthalmology residencies will state that residents perform far more than the minimum required procedures, there are some facilities where the residents just barely have enough procedures to qualify and some where they don't even meet the minimum qualifications.

According to ACGME's 2019 report for ophthalmology residents, the average number of each procedure exceeded the minimum requirements. However, some programs reported the minimum procedures performed or assisted on were below the ACGME minimum requirements.

These are illustrated below:

Procedure	Average Reported	Minimum Reported
YAG Capsulotomy	24.1	4
Laser Trabeculoplasty (SLT)	17.1	1
Laser Iridotomy (LPI)	16.2	1
Chalazia Excision	9.7	2

These numbers are not isolated to 2019 only, but have occurred for many years. If the committee would like to confirm this statement, we would recommend requesting the results directly from ACGME, as we are no longer able to obtain those reports.

So while many ophthalmology programs have their residents either assisting or performing more procedures than the minimum requirements, there are some programs that do not. Despite this, the residents are allowed to move on to full practice and are deemed competent enough to perform them without reservations.

While these are the current minimum requirements for ophthalmology residents, some of these procedures were not taught during residency for ophthalmologists who finished residency many years ago. These physicians had to learn the procedures through post-graduate courses that would take place on nights, weekends, or at conferences they attended to gain their competency and proficiency.

Anytime a new procedure is developed, most physicians are not performing them right away. Depending on the complexity of the procedure, it can take time for them to gain competence in this procedure working with a colleague who can teach them to do it. An ophthalmologist is not required to return back to medical school or repeat their residency anytime a new technique is developed, indicating procedures can clearly be learned outside of medical school and residency.

While it would be ideal for them to be taught by a colleague, this is not always possible. In many instances, new procedures are taught or guided by representatives from supply companies. For example, when a new microinvasive glaucoma surgery called iStent became available, most ophthalmologists were taught by the company representatives who were not ophthalmologists. Instead, they would watch a video showing the procedure being done by an ophthalmologist and then with the representative in the room, they would help guide them in the implantation of the device.

Reference Keywords: ACGME Requirements, ACGME Case Log 2019

With residency programs not meeting the normal ACGME requirements, it brings up the question of whether the minimum requirements are necessary or excessive. In another article (Keyword: Shortened Training Would Offer Advantages), Dr. McDonnell argues that the reality is that ophthalmology training would benefit from being shortened, as much of their time in medical school is not useful or impactful on their training during ophthalmology residency. He argues that while medical school will teach all the anatomy, physiology, and a good amount of training on the entire body, much of that is not relevant to training and practicing ophthalmology. Even ophthalmologists realize that all aspects of medical school aren't necessarily beneficial to become a good ophthalmologist and shortening the training would be beneficial.

6. Is an increase in education and training necessary? If so, are the approved educational institutions prepared to incorporate the increase?

Currently, all accredited schools of optometry have incorporated advanced procedures in both didactic and clinical settings, so it would be unnecessary to mandate any increase in education. For more recent graduates in which advanced procedure courses are innate in the curriculum, passing a competency exam such as through the NBEO's LSPE exam (referenced in section 3 above) or through taking the approved courses offered from NSU-OCO or other optometry schools or approved organizations would be sufficient.

For current doctors who have only practiced under Washington's limited scope, it is recommended that the practitioner would be required to take the NSU-OCO advanced procedures course or course of similar caliber designated by the board as adequate to demonstrate proficiency. Pacific University College of Optometry, the nearest optometry school located in Forest Grove, Oregon currently offers a course that would provide continuing education similar to the NSU-OCO course covering all advanced procedures with the exception of anterior segment lasers. The state of Oregon also has legislation to expand scope of practice for optometrists to include laser procedures, in which Pacific University will then incorporate all requisite procedures into a single certification.

If a doctor has current experience practicing in another state with a similar level of scope that the bill outlines and has already been certified to perform those procedures by that state's board, then they could apply for procedure privileges immediately. For example, many of our doctors have dual licensure in the nearby states of Alaska, Oregon, and Idaho. If an optometrist holds a license at the highest level in one of those states, then their level of practice could be elevated to that level immediately upon board approval. As Oregon and Idaho do not currently have laser privileges, optometrists wishing to provide laser procedure care in Washington before the board's deadline would be required to take a laser procedures course approved by the board, if they have not taken one already.

For optometrists who received their training prior to advanced procedures being a part of curriculum in optometry school, state and national associations as well as optometry schools

are standing ready to assist with the post-graduate training via conferences and workshops to make sure as many optometrists are able to become certified as soon as possible.

Specific to prescribing oral steroids, further education would not be necessary as this topic is covered in depth during optometry school for the treatment of ocular disease, dosage, side effects, mechanism of action, tapering schedules, and when to coordinate with other providers.

7. How does the proposal ensure that only qualified practitioners are authorized to perform the expanded scope of practice?

The proposed language leaves the requirements to be enforced by the board of optometry. Current and proposed language already outline the requirements to become a licensed optometrist in the state of Washington. The changes in the proposed language would have the board establish the requirements to become certified to perform advanced procedures. It would also allow for the board of optometry to act similarly to other professions, such as medicine, nursing, dentistry, and podiatry. All of these professions make these decisions independent of other boards in regards to certification requirements and disciplinary actions, while also following the uniform disciplinary act under RCW 18.130.

Included below, we have attached suggested rulemaking to implement the bill in the method that is intended. While these are suggestions, the board of optometry will vote and implement requirements at their discretion.

While much of the WAC's below are edited versions of the current WAC's, we have proposed two new WAC's. These would outline the requirements as set by the board for what courses would be allowed for currently practicing optometrists to obtain the proper certification, but then it would outline the ability for current students to be able to obtain their certification through several methods as the level of training within the schools continues to expand as more states increase their scope of practice.

To keep uniform standards of practice, the intention would be to have all practicing optometrists submit for and seek board approval for the procedures requested. This would ensure that every optometrist has equivalent training by the date specified by the board of optometry. This plan is similar to how optometry started increasing their regulations and educational requirements when first given authority to use diagnostic eye drops and then therapeutic eye drops. In the first several years of the law being in effect, there were a number of optometrists who did not have their diagnostic or therapeutic certifications, but the board instituted a date by which all Washington licensed optometrists had to have their certification or they would no longer be able to practice. This kept the profession current and held them to a specified standard. This same process would be recommended to be utilized for ensuring all Washington licensed optometrists would be up to the same standards of education going forward.

8. If there are other factors in RCW 18.120.030 relevant to the proposal, please address them in detail.

As referenced before, below are the suggested WAC edits as well as the new proposed WACs that the committee can utilize to better understand our intentions in how the bill language could be interpreted.

WAC 246-851-250

Minimum equipment requirements.

(1) Licensed optometrists must have direct access on the premises to the following equipment and accessories, all of which must be in working condition:

- (a) Adjustable examining chair;
- (b) Phoropter/refractor;
- (c) Retinoscope;
- (d) Ophthalmoscope;
- (f) Projector and screen; or illuminated test cabinet, or chart for distant vision testing;
- (g) Nearpoint vision testing equipment;
- (h) Lensometer;
- (i) Tonometer;
- (j) Biomicroscope/slit lamp;
- (k) A clinically accepted visual field testing instrument or equipment.

(2) Licensed optometrists who prescribe contact lenses must have direct access on the premises to the following equipment, all of which must be in working condition:

- (a) Diameter gauge;
- (b) Thickness gauge;
- (c) Cobalt or black light instrument;
- (e) Thickness tables;
- (f) Corneal measurement instrument that quantifies corneal curvature.

WAC 246-851-400

Certification required for use of pharmaceutical agents.

(1) Licensed optometrists using pharmaceutical agents for diagnostic and therapeutic purposes in the practice of optometry shall have didactic and clinical instruction in general and ocular pharmacology as applied to optometry from an institution of higher learning, accredited by those agencies recognized by the United States Office of Education or the Council on Post-Secondary Accreditation to qualify for certification by the optometry board to use drugs for diagnostic and therapeutic purposes.

(2) The instruction in ocular therapeutics must cover the following subject area in order to qualify for certification training:

- (a) Ocular pharmacology.
 - (i) Corneal barrier, blood-aqueous, /-retinal barrier.
 - (ii) Routes of drug administration for ocular disease.
 - (iii) Prescription writing and labeling.
 - (iv) Ocular side-effects of systemic drugs.
- (b) Anti-infectives.
 - (i) General principles of anti-infective drugs.
 - (ii) Antibacterial drugs.
 - (iii) Treatment of ocular bacterial infections.
 - (iv) Antiviral drugs.
 - (v) Treatment of ocular viral infections.
 - (vi) Antifungal drugs.
 - (vii) Treatment of ocular fungal infections.
 - (viii) Antiparasitic drugs.
 - (ix) Treatment of parasitic eye disease.
- (c) Anti-inflammatory drugs.
 - (i) Nonsteroidal anti-inflammatory drugs (NSAIDS).
 - (ii) Steroids
 - (ii) General principles of mast-cell stabilizers.
 - (iii) Antihistamines.
 - (iv) Ocular decongestants.
 - (v) Treatment of allergic disease.
 - (vi) Treatment of inflammatory disease.
 - (vii) Cycloplegic drugs.
 - (viii) Treatment of ocular trauma.
 - (ix) Ocular lubricants.
 - (x) Hypertonic agents.
 - (xi) Antiglaucoma drugs.

Each subject area shall be covered in sufficient depth so that the optometrist will be informed about the general principles in the use of each drug category, drug side effects and contraindications, and for each disease covered the subjective symptoms, objective signs, diagnosis and recommended treatment and programs.

WAC 246-851-570

Certification required for use or prescription of drugs administered orally for diagnostic or therapeutic purposes.

(1) Licensed optometrists using pharmaceutical agents for diagnostic and therapeutic purposes in the practice of optometry shall have didactic and clinical instruction in general and ocular pharmacology as applied to optometry and certification from an institution of higher learning, accredited by those agencies recognized by the United States Office of Education or the

Council on Post-Secondary Accreditation to qualify for certification by the optometry board to use drugs for diagnostic and therapeutic purposes.

(2) The didactic instruction must include hours in the following subject area:

- (a) Basic principles of systemic drug therapy;
- (b) Side effects, adverse reactions and drug interactions in systemic therapy;
- (c) Review of oral pharmaceuticals:
 - (i) Prescription writing;
 - (ii) Legal regulations in oral prescription writing;
 - (iii) Systemic antibacterials in primary eye care;
 - (iv) Systemic antivirals in eye care;
 - (v) Systemic antifungal in eye care;
 - (vi) Systemic antihistamines and decongestants and their uses in eye care;
 - (vii) Oral dry eye agents;
 - (viii) Anti-emetics and their use in eye care;
 - (ix) Systemic diuretics and their management of elevated IOP;
 - (x) Systemic epinephrine;
- (d) Review of systemic medication in ocular pain management:
 - (i) Legal regulations with scheduled medication;
 - (ii) Systemic nonsteroidal anti-inflammatory drugs (NSAIDs);
 - (iii) Systemic noncontrolled analgesics;
 - (iv) Systemic controlled substances;
- (e) Review of oral medications used for sedation and anti-anxiety properties in eye care:
 - (i) Controlled anti-anxiety/sedative substances;
 - (ii) Legal ramifications of prescribing anti-anxiety drugs;
- (f) Review of systemic medications used during pregnancy and in pediatric eye care:
 - (i) Legal ramifications in prescribing to this population;
 - (ii) Dosage equivalent with pregnancy and pediatrics;
 - (iii) Medications to avoid with pregnancy and pediatrics;
- (g) Applied systemic pharmacology:
 - (i) Eyelid and adnexal tissue;
 - (ii) Lacrimal system and peri-orbital sinuses;

- (iii) Conjunctival and corneal disorders;
 - (iv) Iris and anterior chamber disorders;
 - (v) Posterior segment disorders;
 - (vi) Optic nerve disease;
 - (vii) Peripheral vascular disease and its relationship with ocular disease;
 - (viii) Atherosclerotic disease;
 - (ix) Other/course review.
- (3) The supervised clinical instruction must include following subject areas:
- (a) Vital signs;
 - (b) Auscultation;
 - (c) Ear, nose and throat;
 - (d) Screening neurological exam.
- (4) Written examination to cover required curriculum.

WAC 246-851-410

Drug formulary.

Pursuant to RCW **18.53.010**(3) the optometry board adopts the following drug formulary of topical and oral drugs for diagnostic and treatment purposes.

- (1) Drugs for diagnostic or therapeutic purposes.
 - (a) Mydriatics.
 - (b) Cycloplegics.
 - (c) Miotics.
 - (d) Anesthetics.
- (2) Drugs for therapeutic purposes only.
 - (a) Anti-infectives.
 - (b) Antihistamines and decongestants.
 - (c) Ocular lubricants.
 - (d) Antiglaucoma and ocular hypotensives.
 - (e) Anti-inflammatories including both topical, oral, and injectable steroids
 - (f) Hyperosmotics.
 - (g) Other topical drugs approved for ocular use by the FDA.
 - (h) Other oral medications to treat disease or defects of the ocular tissue and adnexa

WAC 246-851-490

Examination and licensure.

To qualify for licensure in this state a candidate must:

- (1) Successfully completed Parts I, II, and III of the National Board of Examiners in Optometry (NBEO) examinations; the Part III having been administered and successfully completed after January 1, 1993.
- (2) Applicants who completed the NBEO Part II examination prior to January 1, 1993, must successfully complete the International Association of Examiners in Optometry (IAB) examination in treatment and management of ocular disease.
- (3) Successfully complete a jurisprudence questionnaire.
- (4) Be a graduate of a state accredited high school or equivalent.
- (5) Be a graduate of a school or college of optometry accredited by the Council on Optometric Education of the American Optometric Association and approved by the Washington state board of optometry.
- (6) Be of good moral character.
- (7) Effective January 1, 2025, all applicants who receive their initial (first) license in Washington state must meet all the certification requirements of RCW **18.53.010** for practicing advanced procedures within 24 months of receiving their license
- (8) Effective January 1, 2032, all optometrists licensed in Washington state must be certified under RCW **18.53.010** for practicing advanced procedures.
- (9) If an optometrist has been practicing in a state with similar scope of practice and the optometrist is certified in that state and in good standing, the board may grant full licensure and credentialing to practice without retaking courses. This can be reviewed on a case by case basis by the board.

WAC 246-851-580

Drug list.

Pursuant to RCW **18.53.010**(4), the optometry board adopts the following drug formulary of oral Schedule II hydrocodone combination products, Schedule III through V controlled substances, and legend drugs for diagnostic and therapeutic purposes in the practice of optometry. No licensed optometrist may use, prescribe, dispense, purchase, possess, or administer these drugs except as authorized and to the extent permitted by the board. This section includes the approved oral drug formulary. Optometrists must consult WAC **246-851-590** for specific guidelines on these drugs or drug categories.

- (1) Approved nonscheduled oral drugs include:
 - (a) Antibiotic agents excluding those listed in WAC **246-851-590**(1).
 - (b) Antiviral agents.
 - (c) Antifungal agents listed under WAC **246-851-590**(2).
 - (d) Antihistamine agents.
 - (e) Decongestant agents.
 - (f) Dry eye agents.
 - (g) Anti-emetic agents listed under WAC **246-851-590**(3).
 - (h) Diuretic agents listed under WAC **246-851-590**(4).
 - (i) Nonsteroidal anti-inflammatory agents
 - (j) Analgesics and adjuvant analgesics.

- (k) Steroids
- (2) Approved controlled substances limited to Schedule II hydrocodone combination products and Schedules III, IV, and V.
 - (a) Schedule II hydrocodone combination products.
 - (b) Schedule III controlled substances.
 - (c) Schedule IV controlled substances.
 - (d) Schedule IV anti-anxiety/sedative agents.
 - (e) Schedule V controlled substances.
- (3) Approved injectable substances.
 - (a) Administration of epinephrine by injection for the treatment of anaphylactic shock.
 - (b) Administration of steroids by injection

WAC 246-851-590

Guidelines for the use of oral Schedule II hydrocodone combination products and Schedule III through V controlled substances and legend drugs.

Nothing in these guidelines should be construed to restrict the recommendation of over-the-counter medications, vitamins, or supplements, nor restrict the ordering of any radiologic or laboratory testing necessary to the diagnosis of any eye related disease that is within the scope of practice of optometry.

- (1) All oral forms and dosages of antibiotic agents will be available for use excluding: Vancomycin.
- (2) Antifungal agents used in eye care shall fall into the following categories:
 - (a) All oral forms and dosages of polyene antifungals.
 - (b) All oral forms and dosages of imidazole antifungals.
 - (c) All oral forms and dosages of triazole antifungals.
- (3) Anti-emetic agents used in eye care shall be the following medications:
 - (a) All oral forms and dosages of prochlorperazine.
 - (b) All oral forms and dosages of metoclopramide.
 - (c) All oral forms and dosages of promethazine.
- (4) Diuretic agents used in eye care shall fall into the following categories:
 - (a) All oral forms and dosages of carbonic anhydrase inhibitors.
 - (b) All oral forms and dosages of osmotic diuretics. Osmotic diuretics shall be used only in the case of acute angle closure glaucoma administered in-office, outpatient, and/or ambulatory procedures only.
- (5) All oral forms and dosages of nonsteroidal anti-inflammatory agents will be available
- (6) Benzodiazepines prescribed, as anti-anxiety agents, shall be used for in-office, outpatient, and/or ambulatory procedures. This family of medications will be utilized as one dosage unit per prescription.
- (7) Schedule II controlled substance will only include hydrocodone combination products.
- (8) Schedules III and IV controlled substances will have a maximum quantity count of thirty dosage units per prescription.

(9) Specific dosage for use and appropriate duration of treatment of oral medications listed in WAC 246-851-580(1) will be consistent with Food and Drug Administration on- and off-label indications.

(11) An optometrist may not:

Prescribe, dispense, or administer a controlled substance for more than seven days in treating a particular patient for a single trauma, episode, or condition or for pain associated with or related to the trauma, episode, or condition; or

(12) The prescription or administration of drugs as authorized in this section is specifically limited to those drugs appropriate to treatment of diseases or conditions of the human eye and the adnexa that are within the scope of practice of optometry. The prescription or administration of drugs for any other purpose is not authorized.

(13) Nothing in this chapter may be construed to authorize the use, prescription, dispensing, purchase, possession, or administration of any Schedule I or II controlled substance with the exception of Schedule II hydrocodone combination products.

WAC 246-851-600

Certification required for administration of injection.

(1) To qualify for certification to administer injection for therapeutic purposes, licensed optometrists must provide documentation that he or she:

(a) Has successfully completed the didactic and supervised clinical instruction from an institution of higher learning, accredited by those agencies recognized by the United States Office of Education or the Council on Postsecondary Accreditation to qualify for certification by the optometry board to administer injections; or

(b) Holds a current active license in another state that has licensing standards substantially equivalent to those in Washington state. The licensee's level of licensure must also be substantially equivalent to the licensing standards in Washington state.

(2) The didactic instruction must include the following subject area:

(a) Review of urgencies, emergencies and emergency-use agents;

(b) Ocular urgencies:

(i) Thermal burns-direct and photosensitivity-based ultraviolet burn;

(ii) Electrical injury;

(iii) Cryo-injury and frostbite;

(iv) Insect stings and bites;

(v) Punctures, perforations, and lacerations;

(c) General urgencies and emergencies:

(i) Anaphylaxis;

(ii) Hypoglycemic crisis;

(iii) Narcotic overdose.

(3) The supervised clinical instruction must include the following subject areas:

(a) Instrumentation;

(b) Informed consent;

(c) Preparation (patient and equipment);

(d) All routes of injections.

New WAC Suggestion - Laser Procedures Included in Optometric Scope of Practice

- (1) The following laser procedures have been deemed approved for use by optometrists in the state of Washington upon completion of the required education and certification from the board of optometry.
 - (a) Yttrium aluminum garnet (YAG) capsulotomy
 - (b) Laser peripheral iridotomy
 - (c) Selective laser trabeculoplasty
- (2) For optometrists who have received their optometry license prior to the implementation of this rule, in order to be considered competent to perform any advanced laser procedures, a board approved postgraduate course must be completed and proof submitted to the board of optometry for approval.
 - (a) Post graduate courses are considered acceptable if offered from an institution of higher learning, accredited by those agencies recognized by the United States office of education or the council on postsecondary accreditation to qualify for certification by the optometry board of Washington for laser procedures.
- (3) For new graduate optometrists who received their initial license after implementation of this rule, in order to be considered competent to perform any advanced laser procedures, the procedures must be taught at an accredited school of optometry and they must provide proof of one of the following:
 - (a) Post-graduate certification may be obtained with a passing score on a standardized laser procedure examination provided by a national accrediting body certifying optometrists for practice.
 - (b) Completion of a postgraduate course that is considered acceptable if offered from an institution of higher learning, accredited by those agencies recognized by the United States office of education or the council on postsecondary accreditation to qualify for certification by the optometry board of Washington for laser procedures.
 - (c) Completion of an approved residency program where laser procedures were performed and documented in a case log that is submitted to the board for approval

New WAC Suggestion - Advanced Procedures Included in Optometric Scope of Practice

- (1) The following procedures have been deemed approved for use by optometrists in the state of Washington upon completion of the required education and certification from the board of optometry.
 - (a) Removal of non-malignant eyelid lesions by any means pursuant to RCW 18.53.010

Vermont DOH Review and Rebuttal

Vermont recently went through a similar process of review for scope of practice increase for optometry, which was published in a report in January of 2020. We, along with the AOA, feel that this report was deeply flawed in its analysis and deliberately ignored crucial evidence that was provided to them in favor of anecdotal evidence provided by opposing parties.

In particular, one of the studies that is cited in the review was claiming to show that optometrists bill more frequently for selective laser trabeculoplasty than would be considered average. This then falsely comes to a conclusion that optometrists will bill for the procedure more frequently in order to increase billings or the initial treatment was not effective due to competency. Neither of these situations have any basis in facts.

Attached within our evidence are two documents, one titled “Supporting the Case for Optometric Full Practice Authority” and the other “Trabeculoplasty Surgery Comparison in Oklahoma: Highlighting Inaccuracies and Flawed Data.”

These two documents outline the flaws of the report as well as the major flaws in the study that was published. In the trabeculoplasty study quoted, one of the biggest flaws came from their usage of Medicare billings to assess frequency of services billed only for optometrists. Had this study been unbiased and properly comparative, the authors would have included ophthalmologists medicare billings as well. In fact, one of the authors of the study has one of the highest frequencies billed for trabeculoplasty.

Rather than summarizing these two documents further, we recommend thorough reading through them and consideration to the validity of the report and study that they reference.

Keywords List

- **AOA Education Overview**
- **Western Course Overview**
- **AOA Education Fact Sheet**
- **AOA Expanding Scope Fact Sheet**
- **AOA Vermont Report Response**
- **Pacific Curriculum**
- **PUCO Syllabi**
- **ICO Laser Course**
- **LSPE Outline**
- **OK Post Grad Course**
- **PUCO Post Grad Course**
- **Pacific PA Curriculum**
- **UW PA Program**
- **UW DNP Program**
- **ACGME Requirements**
- **ACGME Case Log 2019**
- **VA Laser Policy**
- **DOH Letters**
- **Ophthalmology?! Who needs to Learn That?**
- **Shortened training would offer advantages**
- **Gibson 1**
- **Gibson 2**
- **Evaluating Access to Eye Care**

[Links to other documents:](#)

[AOA Trabeculoplasty](#)

[AOA Vermont Rebuttal](#)

[Avalon Report – Optometry’s Essential and Expanding Role in Healthcare](#)

[Economic Burden of Vision Final Report](#)

[Scope Maps April 2021](#)

[Surgical Specialty Report](#)

[Washington Access to Eye Care 2020 Fact Sheet](#)

[Washington Advanced Procedures – Medicare](#)

[Washington Medical Underserved Areas-Populations 2020](#)

Key Words: AOA Education Overview

Doctor of Optometry Professional Education: A Review of Training in Ophthalmic Surgery

As with the exponential growth of medical knowledge in today's evolving health care arena, the profession of Optometry continues to incorporate the latest clinical technologies and advances in patient care. Optometric education in 21st century eye health and vision care continues to combine cutting-edge, expanded didactic and clinical curricula. For the U.S. to achieve optimum population health outcomes, this knowledge and expertise must be made adaptable to augmented community wide access. Doctors of optometry require modernization of state practice acts that incorporate today's educational and clinical advances into contemporary scope of practice.

Scope of practice of health care professions are defined by state legislatures. To address questions regarding what today's Doctor of Optometry graduates are learning and how they are trained in preparation to deliver comprehensive eye care, this document provides an overview of today's professional Doctor of Optometry programs.

Definition of Optometry

Doctors of optometry take a leading role in patient care with respect to eye health and vision care. Doctors of optometry examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify, diagnose and coordinate care of related systemic conditions affecting the eye. As primary health care providers, Doctors of optometry have extensive, ongoing training to examine, diagnose, treat and manage ocular disorders, diseases and injuries, and ocular complications and manifestations of systemic diseases. Doctors of optometry are the nation's front-line primary eye care providers; doctors of optometry provide more than two-thirds of primary eye health and vision care in the U.S. Trend analysis of Medicare Physician/Supplier data show an increase of more than 740,000 patients for optometry and a decrease of more than 450,000 patients for ophthalmology, as measured over the last six years. This represents a 12.3% increase in total persons with optometry utilization and a 4.2% decrease in total persons with ophthalmology utilization, consistent with a growth of primary care.¹

About Doctor of Optometry Training and Education

Professional post-baccalaureate education of students pursuing a Doctor of Optometry (O.D.) degree consists of classroom, laboratory, and clinical education, including a progressive clinical experience over four years, similar to students pursuing an allopathic (M.D.) or osteopathic (D.O.) medical degree or Dental Medical Degree (DMD). In the final two years when M.D./D.O. students are doing rotations to determine their specialty selection D.M.D./O.D. students begin a immersive training period of doctorate-level health care professional clinical study focused on their pre-chosen specialty. Optometry students focus on the eye, visual system, and associated systemic disease through classroom learning, laboratory exercises, and direct clinical care and dental students do likewise for oral systems. At the end of the four years optometry and dental students have the option of choosing a residency, whereas medical and osteopathic students must select and fulfill a residency requirement to practice their speciality.

In addition to concentrations on the eye, visual system, and systemic health, optometry students, progress through basic medical sciences in didactic and hands-on learning that includes:

- Histology, genetics, and biochemistry
- Human anatomy and physiology including whole body, head/neck, and eye
- Cell and molecular, biology, biochemistry, immunology, and pathology
- Microbiology, pharmacology, therapeutics, and pathology
- Neuroscience, with a concentration on the visual system
- Cardiovascular, respiratory, musculoskeletal, renal, gastrointestinal, and endocrine system anatomy, physiology and cell biology
- Clinical medicine of systemic diseases and disorders
- Principles of evidence based medicine.

Doctoral education also includes didactic and clinical education unique and specific to doctors of optometry in supporting their clinical care role and comprehensive approach to assessment. The curriculum includes demonstrated competency in the knowledge of:

- Geometric, physical, and ophthalmic optics
- Ocular anatomy, physiology, and biochemistry
- Pharmacology
- Ocular diseases and disorders; anterior, posterior, and other structural diseases and their evaluation, management, and treatment
- Neuroanatomy and neuro-ophthalmic disease
- Ocular manifestations of systemic diseases and disorders and their treatment
- Visual neurophysiology and perception
- Binocular/developmental vision, and pediatrics
- Geriatrics; chronic visual impairment; vision loss
- Contact lenses; including therapeutic, refractive, and diagnostic applications

- Ophthalmic Surgery and ocular disease co-management
- Injections, lasers, and advanced ocular techniques.

Doctor of Optometry Training in the U.S. Department of Veterans Affairs

The U.S. Department of Veterans Affairs (VA) is home to the largest optometric clinical education externship program in the U.S, as an adjunct to the education that takes place in clinics at optometry schools/colleges. Every year there are about 1,400 opportunities for Doctor of Optometry candidates to rotate at VA medical facilities for clinical education and training. Each year over 80 percent of the approximately 1,700 graduates of accredited schools and colleges of optometry have performed public health care services at VA. All residents receive training in primary eye care and with VA's primarily geriatric patient population, the management of ocular disease is a significant portion of the training experience. In April 2020, the Veterans Health Administration (VA) issued Directive 1899 affirming that doctors of optometry and others should practice to the full scope of their licensure and training. In August 2020, VA rescinded Directive 1132, removing a previous ban that had prevented doctors of optometry from providing therapeutic laser eye procedures to veterans. As a result, optometric clinical education is expanding over time to ensure full scope training opportunities and better support the VA Optometry Service as it works to: provide care for about 80% of veterans receiving eye care services annually, perform about 70 percent of the more than 3.4 million select ophthalmic procedures, and provide nearly 99 percent of vision rehabilitation services in low vision clinics and blind rehabilitation centers each year.

Doctor of Optometry Program Admission Requirements

Admission requirements for optometric education remain consistent with U.S. pre-medical school requirements. Pre-optometry students are included in undergraduate pre-medical and health professional advising and counseling programs to ensure successful completion of college requirements and planning for successful candidate matriculation into optometry schools and colleges while achieving their undergraduate bachelor's degree.

To successfully gain admission, required pre-optometry undergraduate didactic and laboratory coursework is extensive and covers a wide variety of advanced health, science, and mathematics courses, including general biology, general chemistry, organic chemistry, and physics. Additionally, optometry programs often require a host of associated coursework some of which is beyond that required for M.D./D.O. applicants:

- Human Anatomy and Physiology
- Biochemistry

- Microbiology
- Genetics
- Calculus
- Psychology
- Biostatistics/statistics
- English
- Social science and other humanities.

Optometry Admission Test (OAT) and Other Standardized Exams

All schools and colleges of optometry accept the OAT. Many schools and colleges also accept the GRE, MCAT, DAT, or PCAT in lieu of the OAT. The OAT is a standardized examination designed to measure general academic ability and comprehension of scientific information. It consists of four subtests: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry), Reading Comprehension, Physics, and Quantitative Reasoning. The OAT is scored on a 200- to 400-point scale in increments of 10. At least one year of college education is required prior to taking the OAT, but most students elect to complete two or more years of college-level coursework prior to taking the exam.

Optometry Schools and Colleges

Optometry schools and colleges function either as private institutions, or as institutions within public universities as a component of a greater health care medical and health sciences educational complex that includes medical, nursing, dental, and other health care professional programs. Ultimately, each accredited doctorate-level professional program must teach all necessary content for their graduates to pass professional national boards and meet state licensure requirements.

Accreditation

All optometry programs must meet extensive accreditation standards. As with other U.S. health care doctoral training programs, no person may be licensed to practice optometry in the United States unless they have graduated from an accredited school/college of optometry.

The Accreditation Council on Optometric Education (ACOE) is the only accrediting body for professional optometric degree (O.D.) programs, optometric residency programs and optometric technician programs in the United States and Canada.

ACOE is recognized as an accrediting body by two external agencies - the [U.S. Department of Education](#) (USDE) and the [Council on Higher Education](#)

[Accreditation \(CHEA\)](#). Through periodic reviews by both USDE and CHEA, the ACOE demonstrates compliance with their respective criteria.

ACOE serves the public and the profession of optometry by establishing, maintaining, and applying standards to ensure the academic quality and continuous improvement of optometric education that reflect the contemporary practice of optometry. The scope of the ACOE encompasses professional optometric degree programs, optometric residency programs, and optometric technician programs. *In addition, schools/colleges are accredited by one of six regional organizations recognized by the [United States Department of Education](#) and the [Council for Higher Education Accreditation](#).*

There are currently 23 U.S. optometry programs and two in Canada accredited by ACOE.

National Boards

All 50 states require successful completion of parts of the National Board of Examiners in Optometry prior to applying for state licensure to practice as a doctor of optometry in the U.S.

The National Board of Examiners in Optometry (N.B.E.O.) is the independent, not for profit testing organization that oversees and administers board testing for doctors of [optometry](#) in the continental [U.S. and Puerto Rico](#). Established in 1951, the **mission of the NBEO is “to serve the public and the profession of optometry by developing, administering, scoring, and reporting results of valid examinations that assess competence.”** Part I (Applied Basic Science) is taken the spring of the third year, Part II (Patient Assessment and Management) is taken in December of the fourth year, and Part III (Clinical Skills) is taken any time during your fourth year.

Special National Examinations

Additional optional examinations, including a laser and surgical procedures examination, have also been developed and administered based on evolving individual state licensure and advancing scope of practice requirements, and include:

- [Treatment and Management of Ocular Disease \(TMOD®\)](#)
- [Advanced Competency in Medical Optometry \(ACMO®\)](#)
- [The Laser and Surgical Procedures Examination \(LSPE™\)](#).

Doctor of Optometry Degree

Upon successful completion of optometry program requirements, candidates graduate from their accredited schools/colleges of optometry having earned and granted the degree, Doctor of Optometry (O.D.). Doctors of optometry are then eligible to apply for and take state licensure examinations. Individual U.S. state boards of optometry, as independent public agencies, determine requirements for licensure to meet state scope of practice guidelines.

Doctors of optometry can choose to participate in additional one-year post-graduate residency training programs following graduation from optometry school/college. This experience offers doctors of optometry focused training in a clinical area of optometric care such as pediatric optometry, primary care, cornea and contact lens, vision rehabilitation, and ocular disease.

The Doctor of Optometry Curriculum in Detail

While the sequence of course work varies from one program to another, some general characteristics are shared by all. In the first and second year of the professional program, course work is concentrated in the basic and biomedical sciences (anatomy, physiology, pathology, biochemistry, pharmacology, and public health, optics, and vision science). These serve as the foundational underpinnings for clinical knowledge and application in the patient care setting. For example, the courses for anatomy and physiology are provided because they provide the required foundations necessary for surgical procedures. Furthermore, the course for physical optics is provided because this course provides the foundational knowledge to understand the properties of lasers. Patient care experience is incorporated with an increasing level of responsibility and increasing student learning expectations, culminating in a 12-month final year comprised entirely of direct patient care in a variety of clinical settings.

Typically, direct patient care experiences begin early in the curriculum. Students begin their clinical experience in pre-clinical skills laboratories with virtual reality simulators and classmates serving as patients in the first year, and then proceed to clinical training with real patients. This training includes obtaining full medical case histories, performing examinations, learning diagnostic and surgical techniques, and discussing treatment options and plans. As the curriculum progresses, students spend part of their time in the classroom and part of their time in the clinic examining, diagnosing and treating patients with acute and chronic eye diseases. The final year is entirely clinical training where clinicians are supervised one-on-one with an attending optometric physician, which includes off-campus clinical externship rotations. Sites for external rotations are available in the United States and abroad. Clinic settings include military facilities, Veteran's Affairs (VA) hospitals, public health service hospitals, community health centers, and various specialty and private practices. The lengths of the external rotations vary from eight to 16 weeks.

While it is not possible to include all curriculum outlines and course descriptions for every school/college of optometry, some sample course descriptions are included. These particularly focus on courses relating to advanced procedures or ophthalmic surgery. Full information on every institution's curriculum and course descriptions are available to the public on the individual schools/colleges' websites. Additional information is available via ASCO website at optometriceducation.org.

Example A: Western University of Health Sciences College of Optometry.
A composite listing of topics from various courses throughout the curriculum relevant to expanded scope of practice.

In the following section, a composite list of relevant topics is summarized. Because relevant content may be introduced in one course in the curriculum, may be reinforced in another course in the curriculum, may reach a higher level in another course in the curriculum, and may be applied in a subsequent course in the curriculum, it may not be readily evident that all of the important content is embedded within our curriculum simply upon review of the course descriptions provided. Here is the composite list of topics that span our curriculum:

- laser physics, hazards, and safety
- biophysics of lasers
- laser application on clinical optometry
- laser tissue interactions;
- laser indications, contraindications, and potential complications
- gonioscopy
- laser therapy for open angle glaucoma
- laser therapy for angle closure glaucoma
- posterior capsulotomy
- common complications: lids, lashes, lacrimal system
- medicolegal aspects of anterior segment procedures
- peripheral iridotomy
- laser trabeculoplasty
- minor surgical procedures
- overview of surgical instruments, asepsis
- surgical anatomy of the eyelids
- emergency surgical procedures
- chalazion management
- local anesthesia: techniques and complications.

OPTM 8120 Principles and Practices of Optometry VI: Laser Eye Procedures and Minor Surgical Eye Care (2.0 credit hours)

This course covers the uses of lasers to perform certain surgical eye procedures, including laser therapies for open angle glaucoma, for angle closure glaucoma, and for posterior capsulotomy. The course will include a review of laser biophysics, laser-tissue interactions, as well as contraindications and complications associated with laser procedures on ocular tissues. This course will also cover surgical preparation and management of lid and adnexal lesions with an emphasis

on benign neoplasms and chalazion. Additional topics include medicolegal aspects of surgical eye care and postoperative wound care. The lab portion of the course will provide hands on experience in suturing techniques and ophthalmic laser operations.

OPTM 8021 Principles and Practice of Optometry V: Special Procedures (2.0 credit hours)

This course will cover the theory and methods of clinical techniques that build upon basic examination skills acquired during the courses Principles and Practice of Optometry I through IV. Clinical techniques including scleral depression, A- and B-scan ultrasonography, punctal occlusion, punctal dilation and irrigation, removal of foreign bodies from the cornea and conjunctiva, and the injection techniques of IM, SubQ and IV will be presented in a hands-on format. The course will include non-glaucoma visual fields and applications of significant optometric thought processing.

OPTM 6175 Ocular Disease: Diagnosis and Treatment of the Posterior Segment (4.0 credit hours)

This course builds upon the framework presented in the Principles and Practice of Optometry curricular track to present advanced concepts in ocular disease management. The anatomical, physiological, histological, and pathological processes of ocular disease will be emphasized. Topics include in-depth discussion of diseases and abnormalities of the vitreous and retina as well as vitreo-retinal pathology associated with systemic diseases.

OPTM 6073 Ocular Disease: Diagnosis and Treatment of Glaucoma (2.5 credit hours)

This course covers the pathophysiology, diagnosis, treatment, and management of patients with all forms of glaucoma, with an emphasis on evidence-based therapeutic interventions. The course includes technique and interpretation of visual fields for glaucoma diagnosis and management. Topical and systemic medical therapies will be emphasized. The course will also discuss current surgical management of various forms of glaucoma.

OPTM 6053 Optical Science: Physical Optics (3.0 credit hours)

This course presents the physics of light, including the wave and particle behavior of light. In particular, the course will include the characteristics of electromagnetic radiation, wave motion, total and partial coherence of light, interference, diffraction (single slit, double slit, gratings, circular apertures), zone plates, polarization, birefringence, anti-reflective lens coatings, lasers, emission and absorption spectra. Examples of applications in vision science and ocular diagnostic instruments will be provided.

OPTM 5133 Systemic Pharmacology (2.0 credit hours)

This course will cover medications commonly prescribed for systemic conditions, their indications and mode of action, as well as their ocular and visual side effects and toxicities. Topics include pharmacodynamics, pharmacokinetic aspects of drug formulations, routes of administration, and dosing & elimination, with an emphasis on drug indications, mechanisms of action, adverse effects, drug interactions, and contraindications. Additionally, a review of the pathophysiology of systemic diseases as it relates to current drug treatment paradigms will reinforce the connection between the medications and their corresponding indications.

OPTM 5130 Ocular Physiology (3.0 credit hours)

This course presents in depth coverage of the physiology of the eye, adnexa and visual systems. Topics include the physiology of the eyelids, lacrimal gland and its apparatus, tear production, cornea and lens, ocular fluid dynamics, vitreous body, retina, choroid and optic nerve. Topics of visual function and nutrition related to development and normal ocular

function will be covered. When possible, relevant comparisons to disease states will be discussed to show the clinical relevance of the physiological concepts. The topics related to visual function includes, visual acuity, color vision, contrast sensitivity function, in health and disease states, accommodation function and decline in accommodation function with aging and presbyopic changes.

OPTM 5041 Anatomy for the Optometrist (4.0 credit hours)

This course covers all aspects of anatomy relevant to the practice of Optometry. Course content covers broad aspects of gross anatomy. Ocular anatomy is covered in detail including adnexa, orbit, orbital content, structure, and functional relationship of various ocular structures and their clinical importance. Through lectures and laboratory exercises students are introduced to the anatomy of the head and neck and neuroanatomy. Particular attention is paid to the cranial nerves, both their normal function and the numerous clinical syndromes that affect them as they pertain to optometric practice.

Sample topical outlines for selected content areas relevant to expanded scope of practice [selected courses only] In the following section, some samples of topical outlines are provided. These outlines go beyond the course descriptions to provide another layer of detail to more fully elaborate on the curricular content. The samples do not represent the entirety of the course content, and merely provide a portion of the content that is particularly relevant to demonstrating the education and training in support of expanded scope of practice.

OPTM 8120 Sample Topics

- Cataract surgery in Review
- IOL calculations and IOL types (premium IOLs)
- Femtosecond Laser-Assisted Cataract Surgery (FLACS)
- Post-op cataract complications
- LASIK in Review
- Post-op LASIK complications
- Innovations in corneal refractive procedures SMILE procedure
- Safety overview for minor surgical procedures: indications, surgical procedures. Instrumentation, anesthesia, asepsis & OSHA, medicolegal aspects, management of anaphylaxis & other complications
- Laser glaucoma procedures
- Gonioscopy review & ALT/SLT procedures
- YAG posterior capsulotomy
- Peripheral Iridectomy (PI)
- YAG cap, PI, ALT laser procedures (3-hr lab with proficiency)
- Minor corneal procedures: FB removal, amniotic membranes
- Corneal FB removal, lid speculum, pressure patch, amniotic membrane (2-hr lab with proficiency)
- Basic lid procedures e.g. chalazion, benign lesions
- Oculoplastic Procedures
- Glaucoma surgeries e.g. MIGS, trabs, tubes Retinal laser procedures e.g. PRP, macular grid Surgical Retinal Procedures

- Suturing and subdermal injections (2-hr lab with proficiency)

OPTM 8021 Sample Topics

- Injections
- Reclined BIO
- Scleral Depression BIO 3-Mirror Fundus Ocular Foreign Bodies Punctal Plugs
- Dilation & Irrigation
- Cataract Surgical Procedures
- Anterior Segment OCT Refractive Surgeries
- Fundus Auto Fluorescence Sample Assessments
- Demonstrate ability to perform the complete process of injections for IM
- Demonstrate ability to perform the complete process of injections for IV
- Perform complete process of specialty testing suite including Interpretation and Report
- Integrate specialty fundus exam techniques (scleral depression BIO and 3-Mirror fundus lens) suitably into ocular health evaluation
- Examine angles with four mirror lens
- Discuss the processes and procedures of ocular cataract surgeries
- Discuss the processes and procedures of corneal refractive surgeries
- Demonstrate ability to perform Anterior Segment OCT
- Examine the retina using FAF
- Perform the sequence of managing corneal foreign bodies
- Complete process of ultrasonography
- Safely implement punctal health procedures of dilation/irrigation and plugs

OPTM 6053 Sample Topics

- Laser Theory and Clinical Laser Applications
- Spontaneous emission
- Stimulated emission
- Three-level ruby laser
- Brewster windows
- Laser types
- Helium Neon laser
- Pulsed laser
- Mode locking
- Q-switching
- Lasers in eye care
- Laser tissue interaction
- Photocoagulation
- Photoablation
- Photodisruption

OPTM 6073 Sample Topics

- Surgical management
- Laser options
- Types of surgeries
- MIGS

- Consideration in selection of procedures
- Transitioning from medical to surgical options
- Future developments
- Anaphylaxis and other office emergencies
- Post-operative wound care

Example B: The Ohio State University School of Optometry

At The Ohio State University College of Optometry, in addition to basic systemic anatomy, physiology, pathology, and pharmacology coursework, our students also extensively study the structure, function, and pathology of the eye and orbit. This coursework is not taken by any medical student. Relevant highlights of our curriculum include (course outlines enclosed):

1. A detailed course in ocular anatomy with both didactic and hands-on laboratory inspection and dissection of the globe, histological examination of all ocular tissue, and examination of all nervous and vascular supply to the orbit. This course covers a complete tissue study of every layer and tissue of the lids, conjunctiva, and globe in addition to the anatomy of the orbit. This course comprises 50 hours of didactic lecture and 30 hours of hands-on laboratory work.
2. A detailed course in the physiology of the eye and orbit. This course covers all fluid dynamics of the globe, detail on all immunological and inflammatory mechanisms of ocular trauma, and a discussion of blood flow, lymphatic drainage, neural control, etc. This course comprises 50 hours of didactic coursework.
3. An extensive course in the optical structures of the eye discussing in detail the exact thicknesses, curvatures, changes of these structures over lifetime, measurements of these structures using instrumentation and interpretation of these images. This course is comprised 50 hours of didactic lecture and 30 hours of laboratory hands-on work.
4. A 28-hour course in the understanding of lasers and ionizing radiation and its interaction with human tissue. A 50-hour course in the clinical use of optical instruments such as slit lamp biomicroscopes, funduscopy lenses, etc. with extensive training and practice in the precise use of these instruments and practical examinations ensuring that every student is proficient in the precise visualization and clinical interpretation of the health/pathology of each layer of the eye.
5. An extensive clinical rotation in which our students conduct complete vision examinations on patients under the direct supervision of licensed attending optometrists. These examinations typically include complete slit lamp biomicroscopic examinations of the eye and adnexa of each patient, thereby ensuring excellent skills in these procedures, e.g., examination and clinical interpretation of ocular tissues and treatment and management of inflammation and infection of any part of the visual system. At Ohio State each student currently completes approximately 1700 full eye examinations before graduation.
6. A 30-hour course in direct training (didactic and hands-on laboratory) in the area of lasers, injections, and advanced procedures that has been approved by all states with advanced optometric scope as meeting the needed didactic and hand on procedures for licensure in

those states.

7. A 17-week (40 hours per week) rotation in their fourth year in an ophthalmology office or surgical co-management site where students work directly with ophthalmologists in pre- and post-surgical care, thereby learning the diagnosis and treatment of complications of ophthalmic surgery, surgical candidate selection and observation of surgical procedures.

Example C: University of Alabama at Birmingham School of Optometry

The fundamental curricular contents required for advanced procedures, including ophthalmic laser surgical procedures, injections, and minor surgical procedures, are woven into the UAB School of Optometry curriculum from the 1st year of school and into the 4th, and include systemic and ocular anatomy, physiology, microbiology, pathology, biochemistry, pharmacology, management for conditions in eye care – with over 1000 hours of didactic and laboratory contact time for each student not including clinical encounters through clinical/patient care. In the first and second year of the program, optometry students take the same systemic curriculum as the dental students and medical students (Fundamentals in Health Sciences, Neuroscience, Gross Anatomy, Cardiovascular, Respiratory, Gastrointestinal, Musculoskeletal/Skin, Hematology, Endocrine, and Renal Systems) which was the design of the medical optometry curriculum from its inception in 1969.

2019-20	CONTACT HOURS
FUNDAMENTALS I	92
CLINICAL OPTICS	96
OCULAR ANATOMY	64
PHYSIOLOGY	64
BIOCHEM	24
FUNDAMENTALS II	92
SYSTEMS	290
OCULAR MICRO	16
VISUAL OPTICS	96
CEVS III (SLE, BIO, GONIO)	152
PHARM	64
ANT SEG	96
POST SEG	56
GLAUCOMA	24
NEURO	32
CLINICAL MANAGEMENT	48
TOTAL RELATED	1306
INJECTIONS MSP	48

LASERS	16.5
TOTAL RELATED	64.5

In order to ensure that students are able to apply fundamental concepts clinically, and perform surgical procedures, there are two required, stand-alone courses for injections/minor surgical procedures and ophthalmic lasers (OPT 326 and OPT 323), and have been since 2008 and 2012 respectively. These two courses account for an additional 46 contact hours. OPT 326 and OPT 323 were designed based on the broadest scope of optometric practice and utilize standardized high fidelity model-based practices to ensure safety and essential skills. The courses do not simply teach technical skills, but cover anatomy, pharmacology, clinical application, indications, contraindications and management of potential complications. Furthermore, faculty for the OPT326 and OPT 323 courses are only those who are certified in the surgical procedures.

Example D: Northeastern State University Oklahoma College of Optometry Select Course Descriptions – NSU Courses with Surgical and Laser Correlates

5103 General Pharmacology

General principles of drug action and specific systemic treatment. Mechanisms of action and therapeutic guidelines for: autonomic drugs, anti-infective agents including those used for prophylaxis pre- and post-operatively, anti-inflammatory agents, agents used in the treatment of allergy, major drugs acting on the CNS, cardiovascular, kidney, and endocrine systems, agents used for local or infiltrative anesthesia and analgesia relevant to office-based procedures, antiseptic agents and common over-the-counter drugs. Adverse side effects and drug interaction of commonly prescribed pharmaceuticals.

4126 Geometric and Physical Optics

Imaging of light: ray tracing through optical systems; aberrations and optical systems design. Physics of light: sources, spectra, scatter, polarization, refraction, reflection, absorption, interference, diffraction. Theory behind diagnostic and therapeutic ophthalmic lasers. Lecture and laboratory.

4271 Interpersonal Communications

Interpersonal and interprofessional relationships. Creating and enhancing a professional image; communicating with patients; interpreting patient complaints and concerns; enhancement of patient understanding and compliance; interviewing and history taking techniques; referrals; surgical co-management; dealing with difficult patients.

5203 Ocular Pharmacology

Principles of ocular pharmacology and medical treatment, clinical administration of oral, topical, and injectable drugs and utilization of diagnostic agents in the clinical/surgical care of the eye and adnexa. Principles and specific management and treatment of ocular disease, trauma, anterior segment surgery, and laser treatment/surgery by systemic, local, and topical therapy, including antisepsis. Clinician responsibility in the treatment and management of ocular and systemic complications of pharmaceutical use.

4133 Clinical Immunology and Microbiology

A study of the cellular and biochemical aspects of the human immune system and the immune response to infectious disease. Abnormal immune responses will be discussed. Lectures will also cover microbial aspects of infectious diseases (including postoperative infections) caused by bacteria, viruses, fungi and parasites, with emphasis on pathogenic mechanisms, host-pathogen interaction and antimicrobial therapy.

7101 Systemic Therapy in Ocular Disease and Trauma

Basic systemic therapy in ocular disease. Clinical indications, dosage, drug interactions, and common complications of enteral and parenteral medications utilized in ocular disease. Management of surgical post-operative complications with systemic medications.

7132 Differential Diagnosis of Ocular Disease and Trauma

A review of ocular disease, including eyelid lesions, and trauma with emphasis on clinical presentation, adjunctive testing, differential diagnosis as well as treatment with oral agents, topical agents, office-based surgical procedures and therapeutic lasers.

6223 Strabismus and Amblyopia

Basic principles of strabismus and amblyopia. This will include the symptoms, signs, diagnosis, test administration, test data analysis and therapy with lenses/prisms, vision therapy, and surgical options including procedures, referral criteria and outcomes. Lecture and laboratory.

5183 Optometric Clinical Methods III

This course emphasizes instrumentation and procedures for the detection, diagnosis, and management of pathological conditions. Includes introduction to office-based surgical procedures. Credit will not be awarded for Optometry 5183 until the pre-clinical examination has been completed successfully. Lecture and laboratory.

4213 The Human Nervous System

Structure and function of the central, peripheral, and autonomic nervous systems including anatomic correlates to periocular sensory anesthesia. Particular emphasis is placed on the anatomy and physiology of the visual system as it applies to the processing of visual information. Lecture and laboratory.

6081 Optometric Case Studies I

Case presentation and a discussion of selected topics in optometric clinical care including optometric surgical and laser procedures by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

6251 Optometric Case Studies II

Case presentation and a discussion of selected topics including optometric surgical and laser procedures in optometric clinical care by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

7081 Optometric Case Studies III

Case presentation and a discussion of selected topics in optometric clinical care including optometric surgical and laser procedures by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

7171 Optometric Case Studies IV

Case presentations and discussions of selected topics in optometric clinical care including optometric surgical and laser procedures by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

5273 Ocular Disease I:

Cataracts, Corneal, and External Ocular Disease Epidemiology, pathophysiology, differential diagnosis, management, and treatment of cataract, corneal and external ocular diseases, including disorders of the crystalline lens, eyelids, lacrimal system, conjunctiva, cornea, sclera and episclera. Includes cataract pre-operative and post-operative care as well as indications for treatment of posterior capsular haze with the Nd:YAG laser. Also includes instruction of office-based surgical procedures for the treatment and relief of ocular abnormalities.

5291 Clinical Practice I

Performance of clinical procedures and observation with case discussion. Optometric examinations conducted under the supervision of clinical faculty

within clinical and hospital settings. Includes observing and assisting faculty, residents and upper-class students with office-based minor surgical procedures, including anterior segment laser procedures.

6093 Clinical Practice II

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office based surgical procedures, including anterior segment laser procedures.

6195 Clinical Practice III

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment, and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office based surgical procedures, including anterior segment laser procedures.

6295 Clinical Practice IV

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office-based surgical procedures, including anterior segment laser procedures.

7095 Clinical Practice V

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office-based surgical procedures, biopsy and anterior segment laser procedures.

7196 Clinical Practice VI

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment, and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office-based surgical procedures, biopsy and anterior segment laser procedures.

7293 Clinical Practice VII

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment, and management of vision conditions and other

health problems in on- and off-campus clinics. Optometric examinations conducted under the supervision of clinical and adjunct faculty within clinical, private practice and hospital settings. Includes performance of office-based surgical procedures, biopsy and anterior segment laser procedures.

6231 Optometric Clinical Methods IV

Course topics covered include instrumentation and technical skills necessary for surgical procedures performed in the primary eye care setting. Includes OSHA regulations pertaining to blood borne pathogens. Included techniques are: asepsis, iv injections, fluorescein angiography, management of anaphylaxis, wound management, basic suturing, and in-office minor surgical procedures. The course discusses the indications for, alternatives to, and risk/benefits of all techniques, as well as the management of complications. The course includes lecture and hands on participation.

4264 Ocular Anatomy and Physiology

Gross and microscopic anatomy of the orbit and its contents including the globe, muscles, bone structure, blood and nerve supplies; embryology, histology, anatomy and physiology of the eye including the chemical composition, metabolic activities; physiological functions of the various tissues of the eye and related structures including sensory and motor innervation of the face and biomechanics of the eyelid as relevant to office-based eyelid surgical procedures. Lecture and laboratory.

7042 Office–Based Surgery

The role of office-based surgical practice within the comprehensive scope of current optometric practice. Application of evidence-based medicine and basic science human anatomy to office- based surgical patient selection, planning, instrumentation, procedures, anesthesia, and pre- and post-operative care.

7031 Ophthalmic Applications of Lasers

Laser biophysics, hazards, safety precautions, indications and contraindications for specific procedures, performance of the procedures, and follow-up care including management of complications are reviewed.

Example E: University of Pikeville, Kentucky College of Optometry

OPT 715 Advanced Topics in Ocular Disease Management

This course is a continuation of OPT 628. It includes discussion of advanced procedures and recent discoveries pertaining to the detection, diagnosis and management of posterior segment disorders.

OPT 716 Glaucoma Diagnosis & Management

This course is a comprehensive presentation of primary and secondary glaucomas, including etiology, mechanisms, prevalence and classification. The course emphasizes diagnostic testing including the use of advanced technologies, imaging procedures, photographic techniques and management options including medical, surgical and laser procedures.

OPT 717 Inter-Professional Clinical Case Analysis & Management

Clinical cases involving multi-disciplinary involvement will be presented. Participation will include discussion by physicians, nurses, pharmacists, social workers, public health personnel, and other professional personnel as well as optometrists to exemplify and provide proper sequential and/or parallel management and arrive at an integrated approach in solving the patient's issues.

OPT 722 Epidemiology and Research Methodology Epidemiology

Discusses the factors that concern the frequency of occurrence of certain eye diseases or conditions among a defined population, particularly rural areas of Appalachia and other rural areas in America, and their effect on the health and well-being of their patients. It discusses screening, standards of care and reviews major epidemiological eye studies together with those determinants that contribute to ocular diseases and conditions in aging and poverty. Other topics include those factors that contribute to or worsen the effect of visual impairment such as pharmacological factors or cognitive impairment in the aged population or psychological factors in the young. There is also a detailed analysis of health care policy. Research Methodology covers development of a research question, experimental design, specific aims and statistical analysis, writing of the research proposal, grant applications, regulatory requirements related to human subject and animal research, CITI and other mandatory training for carrying out research and clinical trials, presentation of papers and posters and publication in refereed journals.

OPT 723 Clinical Internship IV

The student continues supervised clinical patient care with emphasis on the intern delivering care in the role of the provider. As in Clinical Internship III, care is supervised by KYCO clinical faculty and will take place mainly in the KYCO primary care clinics within the College and at one or more KYCO network clinics. Case conferences and Grand Rounds experiences will be assigned. Emphasis is upon correct interpretation and management of refractive and disease cases that have moderate complexity.

OPT 725 Neuro-Ophthalmic Disease, Neurological Disorders & Acquired Brain Injury

This course provides an in-depth discussion of the diagnosis of and management strategies for various neurological disorders that can affect vision and visual perception. Other systemic conditions such as some of vascular or cardiac etiologies or space-occupying lesions of the brain may also contribute to visual abnormalities or loss. Testing and neurological evaluation is discussed in depth and is accompanied by various radiological and other technologies that help the diagnostic process. The diagnostic strategies for the confirmation of acquired brain injuries are also covered in detail.

OPT 726 Clinical Medicine & Systemic Disease: Management & Co-Management

This course covers the major systemic diseases that have ocular and visual implications and reviews their etiology as discussed in pathology, the patient's signs and symptoms and other clinical assessments in order to not only reach a definitive diagnosis but also develop effective management plans. Since many systemic diseases have ocular correlates or implications, management often takes the form of co-management. The course will emphasize certain diseases such as diabetes, cardiovascular disorders, infectious and other conditions prevalent in the general and Appalachian populations.

OPT 727 Ophthalmic Surgery I: Laser Procedures

This course provides instruction and laboratory experience in advanced ocular therapeutic laser procedures. Topics will include a review of laser physics, tissue interaction, laser hazards and safety, and laser treatment protocol. As part of this course, students will perform simulated laser treatments as well as receive instruction for providing pre and post-operative patient care in preparation for the clinical application of these procedures.

OPT 728 Optometry Review I

This course will review basic concepts focusing on the content presented in past and ongoing courses coordinated with the matrix outlined by the National Board of Optometry and the Accreditation Committee on Optometric Education. Targeted topics include principles of optics, general and ocular pharmacology and pharmacogenetics, and systemic and ocular disease. The goal of the course is to help participants prepare for their national board and state licensure exams, driving the course content.

OPT 731 Pre & Post-Operative Management of Ophthalmic Surgery Patients

This course presents the evaluation and management, including surgical decision-making in the care of the pre-operative candidate patient for ophthalmic surgery. All pre-surgical testing, counselling and preparation of the patient is presented as are the post-operative procedures, medications, and device management.

OPT 732 Advances in Optometry & Ocular Imaging

This seminar course is intended for presentations on contemporary and future innovations in the practice of optometry from the development of new technologies and instrumentation, to better management strategies, research in pharmacogenetics, detection of markers predictive of disease, pharmaceutical discoveries and better optical solutions to current refractive disorders. A wide array of advanced corneal and refractive imaging systems devices will also be introduced.

OPT 733 Clinical Internship V

Continuing supervised clinical patients care with emphasis upon the intern delivering care in the role of the provider. Care will be supervised by KYCO clinical faculty and will take place mainly in the KYCO primary eye care clinics within the College and at one or more KYCO network clinics. Case conferences and grand round experiences will be assigned. Emphasis is upon correct interpretation and management of refractive and disease cases that have high complexity.

OPT 735 Ophthalmic Surgery II: Injections & Periocular Surgery

This course provides an introduction to minor periocular surgical procedures including informed consent, OSHA guidelines and asepsis, sterile techniques, lesion removal, and post-operative wound care. Various techniques, including radiofrequency surgery will be discussed. Injection topics include indications and techniques for periocular injections, venipuncture, local anesthesia, and emergency procedures for anaphylaxis.

OPT 811, 812, 813, 821, 822, 823, 831, 832, & 833 Clinical Externships

The fourth year rotations occur within the KYCO clinical network and include direct supervised patients care in the Primary Eye Care clinics with rotations to appropriate clinical facilities for direct and observed supervised clinical experience in specialty eye diseases, contact lenses, pediatrics, low vision, ophthalmic dispensing services as well as observational participation in other medical specialty clinics. Clinical management by interns during the fourth year is expected to reflect an ability to evaluate and manage a complex case load including surgical care.

Recent scope expansions

All states have updated their optometric practice acts over the years to some extent, e.g. prescriptive authority and foreign body removal. Other states permit some if not all the latest procedures being taught in optometry programs today.

Scope of Optometric Practice in 2020

The scope of optometric practice in the U.S. continues to evolve. State practice acts define what is included in care delivered by doctors of optometry. Some states have kept pace with expanding health care and clinical technologies and have updated individual practice acts to reflect the evolving health care landscape. Emerging clinical procedures- often referred to in statutes as ‘advanced procedures’ - and new therapeutic treatment options are currently allowed in some, but not all, states throughout the country.

Several states currently have optometric practice acts which include in their scope the ability to perform ophthalmic surgery such as but not limited to: injections of diagnostic and therapeutic pharmaceutical agents; drainage and/or removal of eyelid chalazia, cysts, abscesses, bullae and seroma; excision and biopsy of cutaneous lesions; repair of eyelid lacerations, removal of foreign bodies of the cornea and conjunctiva; probing/irrigation of the lacrimal drainage structures; the use of ultraviolet, visible, and infrared radiation for treatment of specific ocular conditions; and the use of radiofrequency and thermal cautery.

The term “ophthalmic surgery” is recommended as a description of skills doctors of optometry should possess in order to meet the needs of the patient population adequately. These procedures may be routinely performed in the typical office of a doctor of optometry, as surgical procedures and the management of their possible complications fall well within the established optometric curriculum, assessment tools, and documentation of the Association of Schools and Colleges of Optometry institutions.

The document below was developed to establish general guidelines for all optometry schools/colleges to reflect the current state of ophthalmic surgery in 2020. For states that already permit these advanced procedures, optometry schools/colleges had to submit legal affidavits stating that their curriculums covered training on these procedures. Every school/college in the U.S. has submitted legal affidavits to those state licensure boards testifying that they do teach and educate their graduates to perform these procedures.

Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Ophthalmic Surgery

The framework draws substantially from the Accreditation Council for Graduate Medical Education (**ACGME**) core competencies, the previously mentioned ASCO 2011 “Attributes” Report, the ASCO Functional Standards for Optometric Education referenced during the admissions process at all schools and colleges of optometry, Accreditation Council on Optometric Education (**ACOE**) standards for the professional optometric degree, Northeastern State University Oklahoma College of Optometry (**NSUOCO**) Surgical Anatomy and Introduction to Office-based Surgery (OPT 7042) Course, and coursework of Southern College of Optometry, and the Illinois College of Optometry.

The framework does not specify an exact number of credit hours, contact hours, observations or performed procedures. Educational research over the past two decades has advanced our knowledge of learning and techniques best suited to facilitate learning. The strategies and methods recommended today are not limited to the strategies of the past. Thanks to the emergence of new technology-based educational tools, we can now offer today’s learner a more valuable experience based on interaction and experimentation.⁹ Studies have demonstrated that authentic learning activities support the acquisition of knowledge that cultivates the kinds of skills that are lasting and more portable.¹³

The three pillars for the core competencies for entry-level ophthalmic surgery include: **1) Professional Values and Ethics; 2) Knowledge; and 3) Skill**. Each core competency is accompanied by a list of suggested objectives which provide examples of activities to measure knowledge, skill, and outcomes. **The framework is a starting point and is not meant as a prescriptive list of activities to restrict, limit, or regulate.** In fact, the project team looks forward to broad engagement and discussion with stakeholders to facilitate implementation.

The “skills” competencies expand upon the entry-level student learning outcomes in the 2011 ASCO Attributes Report, which include: “...the ability to prescribe or use ophthalmic materials, contact lenses, vision therapy, low vision devices, pharmaceuticals, and certain surgical procedures, to treat and otherwise manage common vision disorders and disease,⁴ “and specific procedures utilizing injections, biopsy, excision, curettage, irrigation, ultraviolet radiation, radiofrequency and thermal cautery, to treat and manage vision disorders and disease.

A. Professional Values and Ethics

A.1. Expected to provide patient care that is compassionate, appropriate, and effective for the promotion of health and the treatment of health problems.

A.1.1 Be respectful and responsive to individual patients’ preferences and needs, and ensure their values guide all clinical decisions¹

- A.1.2 Be mindful and apply varying dimensions of compassion including attentiveness, active listening, helping, and understanding²
- A.2. Expected to demonstrate the ability to investigate and critically evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on perpetual self-evaluation and life-long learning.^{3,4}
 - A.2.1 Identify strengths, deficiencies, and limits in one's knowledge and expertise
 - A.2.2 Systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement
 - A.2.3 Incorporate formative evaluation feedback into daily practice
 - A.2.4 Employ evidence-based practice and participate in learning and research activities to the extent possible⁷
 - A.2.5 Working knowledge of applicable Clinical Practice Guidelines (AOA) and Preferred Practice Patterns (AAOphthalmology)
 - A.2.6 Set learning and improvement goals
- A.3. Demonstrate a commitment to fulfilling professional responsibilities and an adherence to ethical principles.
 - A.3.1 Responsiveness to patients needs that supersede self-interest
 - A.3.2 Compassion, integrity, and respect for others
 - A.3.3 Demonstrate commitment to continuity of surgical care
 - A.3.4 Accountability to patients, society and the optometric profession
 - A.3.5 Refer to and make visible the Optometric Oath as a resource guiding clinical practice philosophy
 - A.3.6 Adherence to patient privacy and protection policies
- A.4. Participate in identifying system errors and implementing potential systems solutions, including participation in disease and clinical registries and government reporting programs as appropriate.
 - A.4.1 Apply quality improvement to identify hazards in patient care with the objective to improve outcomes⁷
 - A.4.2 Participate in a qualified clinical data registry, like AOA MORE
 - A.4.3 Participate in prescription monitoring programs (PMP)
 - A.4.4 Awareness of reporting options and requirements to state, regional, or national authorities
 - A.4.5 Maintenance of procedure logs in various practice settings
 - A.4.6 Report adverse outcomes in ophthalmic surgery as part of quality assurance

B. Knowledge

- B.1. Expected to demonstrate knowledge and application of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences to patient care.
 - B.1.1 Must demonstrate competence in their knowledge of basic and clinical sciences specific to optometry and ophthalmic surgery
 - B.1.2 Evidence-based medicine
 - B.1.3 Outcomes-based registries
- B.2. Able to implement appropriate infection control, cleaning, and sterilization protocols, as well as biohazardous waste disposal procedures.
 - B.2.1 Aseptic technique
 - B.2.2 Awareness, implementation, and documentation of applicable OSHA requirements
 - B.2.3 Personal protective equipment/barriers for patient and provider

- B.3. Expected to demonstrate an understanding of Applied Basic Sciences.
 - B.3.1 Integration and clinical application of anatomy, physiology, hemostasis, histopathology, and pathophysiology. Describe actions, mechanisms, and applications of relevant pharmacological and anesthetic effects on organ systems and adverse reactions
 - B.3.2 Familiarity with the principles of energy-tissue interactions including laser, visible ultraviolet and infrared light, electrocautery and radiofrequency sources

- B.4. Demonstrate knowledge of intra and postoperative complications and how to manage them.
 - B.4.1 Hemorrhaging
 - B.4.2 Infection
 - B.4.3 Intraocular hypertension
 - B.4.4 Inflammation
 - B.4.5 Anesthesia and anesthesia-related adverse events
 - B.4.6 Adverse pharmaceutical reactions including anaphylaxis
 - B.4.7 Wound healing complications
 - B.4.8 Other potential complications, relevant to the procedure

- B.5. Expected to understand ophthalmic surgical instrumentation, including its purpose, design, intended use, and related equipment and supplies.
 - B.5.1 Equipment for injection
 - B.5.2 Wound closure
 - B.5.3 Surgical instrumentation
 - B.5.4 Ophthalmic lasers
 - B.5.5 Radiosurgical technology
 - B.5.6 Personal protective equipment for providers and patients
 - B.5.7 Sterilization of surgical equipment
 - B.5.8 Asepsis and sterile field creation
 - B.5.9 Ancillary equipment and supplies

- B.6. Working knowledge of the laws and regulations relating to ophthalmic surgery.
 - B.6.1 Occupational Safety and Health Administration (OSHA)
 - B.6.2 State scopes of practice
 - B.6.3 Centers for Medicare and Medicaid Services (CMS)
 - B.6.4 Appropriate coding and billing practices
 - B.6.5 Accreditation and credentialing – e.g., Accreditation Council on Optometric Education (ACOE), American Board of Optometry (ABO), [Joint Commission](#) (surgery centers, and hospitals)
 - B.6.6 Stark and anti-kickback statutes
- B.7. Demonstrates an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.¹⁴
 - B.7.1 Work effectively in various health care delivery settings and systems relevant to their clinical discipline
 - B.7.2 Coordinate patient care within the health care system relevant to their clinical discipline
 - B.7.3 Advocate for quality patient care and optimal patient care outcomes
 - B.7.4 Incorporate considerations of cost awareness and risk-benefit analysis inpatient and/or population-based care as appropriate
 - B.7.5 Work in inter-professional teams to enhance patient safety, care and improve quality
 - B.7.6 Participate in identifying system errors and implementing potential systems solutions

C. Skills

- C.1. Ability to obtain an appropriate case history and proper informed consent
- C.2. Be able to properly document an ophthalmic surgical procedure report following the standards set by the JCAHO and AAAHC for sufficient information to:
 - C.2.1 Identify the patient
 - C.2.2 Support the diagnosis
 - C.2.3 Justify the treatment
 - C.2.4 Document the postoperative course and results
 - C.2.5 Promote continuity of care
- C.3. Appropriately evaluate and assess the ophthalmic and general medical indications and contraindications for ophthalmic surgery in order to obtain a valid informed consent, including alternatives, risks, benefits, and limitations or contraindications.
- C.4. Provide acute and long-term post-procedure care for ophthalmic surgery.
 - C.4.1 Management and/or treatment of adverse events
 - C.4.2 Maximizing procedural outcomes and systematic assessment for quality improvement
 - C.4.3 Sequelae of procedure complications
 - C.4.4 Wound healing
 - C.4.5 Medications
 - C.4.6 Necessity for further or ongoing intervention or consultation
- C.5. Manage acute and chronic complications which may be associated with ophthalmic surgery and anesthesia.
 - C.5.1 Supportive training (e.g., CPR, Basic Life Support)
 - C.5.2 Ability to manage early and late stage wound complications
 - C.5.3 Ability to identify and respond to intra and postoperative systemic complications.
 - C.5.4 Ability to utilize resuscitative equipment
- C.6. Expected to demonstrate the psychomotor skills and ASCO Functional Standards necessary to safely and effectively perform procedures.
 - C.6.1 Coordination and control of activity in free space and/or through magnification and illumination (e.g., manual dexterity, eye-hand coordination, and kinesthetic sense)
- C.7. Expected to demonstrate appropriate use, indication, and action of ophthalmic ultraviolet, visible, and infrared radiation LASER procedures
 - C.7.1 Trabeculectomy
 - C.7.2 Post-cataract capsulotomy
 - C.7.3 Peripheral iridotomy
 - C.7.4 C.6.4 Refractive corneal modification for purposes of refractive changes
- C.8. Expected to demonstrate appropriate use, indication, and action of ophthalmic radiofrequency and thermal cautery procedures
 - C.8.1 Procedural hemostasis
 - C.8.2 Lesion removal
- C.9. Expected to demonstrate the psychomotor and cognitive skills necessary to perform nasolacrimal procedures
 - C.9.1 Punctal dilation and irrigation
 - C.9.2 Lacrimal probing

C.9.3 Punctal occlusion

C.9.4 Punctoplasty

C.10. Expected to demonstrate the psychomotor and cognitive skills necessary to perform corneal procedures

C.10.1 Foreign body (FB) removal

C.10.2 Epithelial debridement

C.10.3 Emergent paracentesis

C.10.4 Cornea/Photorefractive Keratectomy

C.10.5 Cornea/Collagen cross-linking

C.10.6 Microstromal puncture

C.11. Expected to demonstrate the psychomotor and cognitive skills necessary to perform conjunctival procedures

C.11.1 FB removal

C.11.2 Lymphatic cyst removal

C.11.3 Granuloma removal

C.11.4 Biopsy

C.12. Expected to demonstrate the psychomotor and cognitive skills necessary to administer local and topical anesthesia effectively

C.12.1 Local anesthesia toxicity and management

C.12.2 Allergic reaction and anaphylaxis

C.12.3 Infiltrative local anesthesia

C.12.4 Regional anesthesia

C.13. Expected to demonstrate the psychomotor and cognitive skills necessary to perform injection techniques effectively

C.13.1 Intradermal

C.13.2 Subcutaneous

C.13.3 Subconjunctival

C.13.4 Intralesional

C.13.5 Intramuscular

C.13.6 Venipuncture

C.13.7 Intraocular

C.14. Expected to demonstrate the psychomotor and cognitive skills necessary to perform procedures on the lids and adnexa effectively

C.14.1 Suture techniques, including suture removal

C.14.2 Lesion excision, scalpel, scissors, dermablade, curette

C.14.3 Lesion incision and curettage

C.14.4 Cutaneous lesion biopsy

C.14.5 Intralesional injection

C.14.6 Lesion radiosurgical destruction

C.14.7 Laceration repair

C.14.8 Everting lid sutures for involutional entropion

C.15. Expected to demonstrate effective, culturally competent, interpersonal communication skills, oral and written, that result in a clear understanding of health information by patients, their families, and health professionals which result in meaningful outcomes for

the patient

- C.15.1 Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- C.15.2 Communicate effectively with physicians, other health professionals, and health related agencies
- C.15.3 Maintain comprehensive, timely, and legible electronic, or paper, health records, where applicable
- C.15.4 Act in a consultative role to other physicians and health professionals
- C.15.5 Work effectively as a member or leader of a health care team or other professional groups

Keywords: Western Course Overview

Western University of Health Sciences College of Optometry.

A composite listing of topics from various courses throughout the curriculum relevant to expanded scope of practice.

In the following section, a composite list of relevant topics is summarized. Because relevant content may be introduced in one course in the curriculum, may be reinforced in another course in the curriculum, may reach a higher level in another course in the curriculum, and may be applied in a subsequent course in the curriculum, it may not be readily evident that all of the important content is embedded within our curriculum simply upon review of the course descriptions provided. Here is the composite list of topics that span our curriculum:

- laser physics, hazards, and safety
- biophysics of lasers
- laser application on clinical optometry
- laser tissue interactions;
- laser indications, contraindications, and potential complications
- gonioscopy
- laser therapy for open angle glaucoma
- laser therapy for angle closure glaucoma
- posterior capsulotomy
- common complications: lids, lashes, lacrimal system
- medicolegal aspects of anterior segment procedures
- peripheral iridotomy
- laser trabeculoplasty
- minor surgical procedures
- overview of surgical instruments, asepsis
- surgical anatomy of the eyelids
- emergency surgical procedures
- chalazion management
- local anesthesia: techniques and complications.

OPTM 8120 Principles and Practices of Optometry VI: Laser Eye Procedures and Minor Surgical Eye Care (2.0 credit hours)

This course covers the uses of lasers to perform certain surgical eye procedures, including laser therapies for open angle glaucoma, for angle closure glaucoma, and for posterior capsulotomy. The course will include a review of laser biophysics, laser-tissue interactions, as well as contraindications and complications associated with laser procedures on ocular tissues. This course will also cover surgical preparation and management of lid and adnexal lesions with an emphasis on benign neoplasms and chalazion. Additional topics include medicolegal aspects of surgical eye care and postoperative wound care. The lab portion of the course will provide hands on experience in suturing techniques and ophthalmic laser operations.

OPTM 8021 Principles and Practice of Optometry V: Special Procedures (2.0 credit hours)

This course will cover the theory and methods of clinical techniques that build upon basic examination skills acquired during the courses Principles and Practice of Optometry I through IV. Clinical techniques including scleral depression, A- and B-scan ultrasonography, punctal occlusion, punctal dilation and irrigation, removal of foreign bodies from the cornea and

conjunctiva, and the injection techniques of IM, SubQ and IV will be presented in a hands-on format. The course will include non-glaucoma visual fields and applications of significant optometric thought processing.

OPTM 6175 Ocular Disease: Diagnosis and Treatment of the Posterior Segment (4.0 credit hours)

This course builds upon the framework presented in the Principles and Practice of Optometry curricular track to present advanced concepts in ocular disease management. The anatomical, physiological, histological, and pathological processes of ocular disease will be emphasized. Topics include in-depth discussion of diseases and abnormalities of the vitreous and retina as well as vitreo-retinal pathology associated with systemic diseases.

OPTM 6073 Ocular Disease: Diagnosis and Treatment of Glaucoma (2.5 credit hours)

This course covers the pathophysiology, diagnosis, treatment, and management of patients with all forms of glaucoma, with an emphasis on evidence-based therapeutic interventions. The course includes technique and interpretation of visual fields for glaucoma diagnosis and management. Topical and systemic medical therapies will be emphasized. The course will also discuss current surgical management of various forms of glaucoma.

OPTM 6053 Optical Science: Physical Optics (3.0 credit hours)

This course presents the physics of light, including the wave and particle behavior of light. In particular, the course will include the characteristics of electromagnetic radiation, wave motion, total and partial coherence of light, interference, diffraction (single slit, double slit, gratings, circular apertures), zone plates, polarization, birefringence, anti-reflective lens coatings, lasers, emission and absorption spectra. Examples of applications in vision science and ocular diagnostic instruments will be provided.

OPTM 5133 Systemic Pharmacology (2.0 credit hours)

This course will cover medications commonly prescribed for systemic conditions, their indications and mode of action, as well as their ocular and visual side effects and toxicities. Topics include pharmacodynamics, pharmacokinetic aspects of drug formulations, routes of administration, and dosing & elimination, with an emphasis on drug indications, mechanisms of action, adverse effects, drug interactions, and contraindications. Additionally, a review of the pathophysiology of systemic diseases as it relates to current drug treatment paradigms will reinforce the connection between the medications and their corresponding indications.

OPTM 5130 Ocular Physiology (3.0 credit hours)

This course presents in depth coverage of the physiology of the eye, adnexa and visual systems. Topics include the physiology of the eyelids, lacrimal gland and its apparatus, tear production, cornea and lens, ocular fluid dynamics, vitreous body, retina, choroid and optic nerve. Topics of visual function and nutrition related to development and normal ocular function will be covered. When possible, relevant comparisons to disease states will be discussed to show the clinical relevance of the physiological concepts. The topics related to visual function includes, visual acuity, color vision, contrast sensitivity function, in health and disease states, accommodation function and decline in accommodation function with aging and presbyopic changes.

OPTM 5041 Anatomy for the Optometrist (4.0 credit hours)

This course covers all aspects of anatomy relevant to the practice of Optometry. Course content covers broad aspects of gross anatomy. Ocular anatomy is covered in detail including adnexa,

orbit, orbital content, structure, and functional relationship of various ocular structures and their clinical importance. Through lectures and laboratory exercises students are introduced to the anatomy of the head and neck and neuroanatomy. Particular attention is paid to the cranial nerves, both their normal function and the numerous clinical syndromes that affect them as they pertain to optometric practice.

Sample topical outlines for selected content areas relevant to expanded scope of practice [selected courses only] In the following section, some samples of topical outlines are provided. These outlines go beyond the course descriptions to provide another layer of detail to more fully elaborate on the curricular content. The samples do not represent the entirety of the course content, and merely provide a portion of the content that is particularly relevant to demonstrating the education and training in support of expanded scope of practice.

OPTM 8120 Sample Topics

- Cataract surgery in Review
- IOL calculations and IOL types (premium IOLs)
- Femtosecond Laser-Assisted Cataract Surgery (FLACS)
- Post-op cataract complications
- LASIK in Review
- Post-op LASIK complications
- Innovations in corneal refractive procedures SMILE procedure
- Safety overview for minor surgical procedures: indications, surgical procedures. Instrumentation, anesthesia, asepsis & OSHA, medicolegal aspects, management of anaphylaxis & other complications
- Laser glaucoma procedures
- Gonioscopy review & ALT/SLT procedures
- YAG posterior capsulotomy
- Peripheral Iridectomy (PI)
- YAG cap, PI, ALT laser procedures (3-hr lab with proficiency)
- Minor corneal procedures: FB removal, amniotic membranes
- Corneal FB removal, lid speculum, pressure patch, amniotic membrane (2-hr lab with proficiency)
- Basic lid procedures e.g. chalazion, benign lesions
- Oculoplastic Procedures
- Glaucoma surgeries e.g. MIGS, trabs, tubes Retinal laser procedures e.g. PRP, macular grid
Surgical Retinal Procedures
- Suturing and subdermal injections (2-hr lab with proficiency)

OPTM 8021 Sample Topics

- Injections
- Reclined BIO
- Scleral Depression BIO 3-Mirror Fundus Ocular Foreign Bodies Punctal Plugs
- Dilation & Irrigation

- Cataract Surgical Procedures
- Anterior Segment OCT Refractive Surgeries
- Fundus Auto Fluorescence Sample Assessments
- Demonstrate ability to perform the complete process of injections for IM
- Demonstrate ability to perform the complete process of injections for IV
- Perform complete process of specialty testing suite including Interpretation and Report
- Integrate specialty fundus exam techniques (scleral depression BIO and 3-Mirror fundus lens) suitably into ocular health evaluation
- Examine angles with four mirror lens
- Discuss the processes and procedures of ocular cataract surgeries
- Discuss the processes and procedures of corneal refractive surgeries
- Demonstrate ability to perform Anterior Segment OCT
- Examine the retina using FAF
- Perform the sequence of managing corneal foreign bodies
- Complete process of ultrasonography
- Safely implement punctal health procedures of dilation/irrigation and plugs

OPTM 6053 Sample Topics

- Laser Theory and Clinical Laser Applications
- Spontaneous emission
- Stimulated emission
- Three-level ruby laser
- Brewster windows
- Laser types
- Helium Neon laser
- Pulsed laser
- Mode locking
- Q-switching
- Lasers in eye care
- Laser tissue interaction
- Photocoagulation
- Photoablation
- Photodisruption

OPTM 6073 Sample Topics

- Surgical management
- Laser options
- Types of surgeries
- MIGS
- Consideration in selection of procedures
- Transitioning from medical to surgical options
- Future developments
- Anaphylaxis and other office emergencies
- Post-operative wound care

Example B: The Ohio State University School of Optometry

At The Ohio State University College of Optometry, in addition to basic systemic anatomy, physiology, pathology, and pharmacology coursework, our students also extensively study the structure, function, and pathology of the eye and orbit. This coursework is not taken by any medical student. Relevant highlights of our curriculum include (course outlines enclosed):

8. A detailed course in ocular anatomy with both didactic and hands-on laboratory inspection and dissection of the globe, histological examination of all ocular tissue, and examination of all nervous and vascular supply to the orbit. This course covers a complete tissue study of every layer and tissue of the lids, conjunctiva, and globe in addition to the anatomy of the orbit. This course comprises 50 hours of didactic lecture and 30 hours of hands-on laboratory work.
9. A detailed course in the physiology of the eye and orbit. This course covers all fluid dynamics of the globe, detail on all immunological and inflammatory mechanisms of ocular trauma, and a discussion of blood flow, lymphatic drainage, neural control, etc. This course comprises 50 hours of didactic coursework.
10. An extensive course in the optical structures of the eye discussing in detail the exact thicknesses, curvatures, changes of these structures over lifetime, measurements of these structures using instrumentation and interpretation of these images. This course is comprised 50 hours of didactic lecture and 30 hours of laboratory hands-on work.
11. A 28-hour course in the understanding of lasers and ionizing radiation and its interaction with human tissue. A 50-hour course in the clinical use of optical instruments such as slit lamp biomicroscopes, funduscopy lenses, etc. with extensive training and practice in the precise use of these instruments and practical examinations ensuring that every student is proficient in the precise visualization and clinical interpretation of the health/pathology of each layer of the eye.
12. An extensive clinical rotation in which our students conduct complete vision examinations on patients under the direct supervision of licensed attending optometrists. These examinations typically include complete slit lamp biomicroscopic examinations of the eye and adnexa of each patient, thereby ensuring excellent skills in these procedures, e.g., examination and clinical interpretation of ocular tissues and treatment and management of inflammation and infection of any part of the visual system. At Ohio State each student currently completes approximately 1700 full eye examinations before graduation.
13. A 30-hour course in direct training (didactic and hands-on laboratory) in the area of lasers, injections, and advanced procedures that has been approved by all states with advanced optometric scope as meeting the needed didactic and hand on procedures for licensure in those states.
14. A 17-week (40 hours per week) rotation in their fourth year in an ophthalmology office or surgical co-management site where students work directly with ophthalmologists in pre- and post-surgical care, thereby learning the diagnosis and treatment of complications of ophthalmic surgery, surgical candidate selection and observation of surgical procedures.

Example C: University of Alabama at Birmingham School of Optometry

The fundamental curricular contents required for advanced procedures, including ophthalmic laser surgical procedures, injections, and minor surgical procedures, are woven into the UAB School of Optometry curriculum from the 1st year of school and into the 4th, and include systemic and ocular anatomy, physiology, microbiology, pathology, biochemistry, pharmacology, management for conditions in eye care – with over 1000 hours of didactic and laboratory contact time for each student not including clinical encounters through clinical/patient care. In the first and second year of the program, optometry students take the same systemic curriculum as the dental students and medical students (Fundamentals in Health Sciences, Neuroscience, Gross Anatomy, Cardiovascular, Respiratory, Gastrointestinal, Musculoskeletal/Skin, Hematology, Endocrine, and Renal Systems) which was the design of the medical optometry curriculum from its inception in 1969.

2019-20	CONTACT HOURS
FUNDAMENTALS I	92
CLINICAL OPTICS	96
OCULAR ANATOMY	64
PHYSIOLOGY	64
BIOCHEM	24
FUNDAMENTALS II	92
SYSTEMS	56
OCULAR MICRO	16
VISUAL OPTICS	96
CEVS III (SLE, BIO, GONIO)	152
PHARM	64
ANT SEG	96
POST SEG	32
GLAUCOMA	24
NEURO	32
CLINICAL MANAGEMENT	48
TOTAL RELATED	1048
INJECTIONS MSP	48
LASERS	16.5
TOTAL RELATED	64.5

In order to ensure that students are able to apply fundamental concepts clinically, and perform surgical procedures, there are two required, stand-alone courses for injections/minor surgical procedures and ophthalmic lasers (OPT 326 and OPT 323), and have been since 2008 and 2012 respectively. These two courses account⁹²

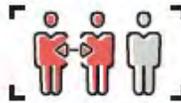
for an additional 46 contact hours. OPT 326 and OPT 323 were designed based on the broadest scope of optometric practice and utilize standardized high fidelity model-based practices to ensure safety and essential skills. The courses do not simply teach technical skills, but cover anatomy, pharmacology, clinical application, indications, contraindications and management of potential complications. Furthermore, faculty for the OPT326 and OPT 323 courses are only those who are certified in the surgical procedures.

DOCTORS OF OPTOMETRY ARE AMERICA'S PRIMARY EYE CARE PROVIDERS

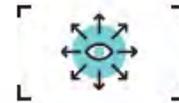
Doctors of optometry deliver an essential component of patients' overall primary health care. During a comprehensive eye exam, doctors of optometry not only determine eye and vision health, but also can identify early warning signs and manifestations of systemic diseases including diabetes, hypertension and cancer.



\$139 billion - the economic burden of eye diseases, vision loss, and eye disorders in the U.S.

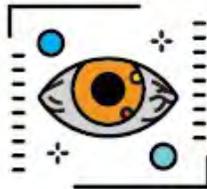


Doctors of optometry provide **more than two-thirds of primary eye health care in America** and more than 99 percent of the U.S. population lives in counties with an eye doctor.



Optometry has greater geographic distribution and is more accessible than other eye care professions

OPTOMETRISTS PROVIDE HIGHLY SPECIALIZED EYE CARE SERVICES, INCLUDING:



- Deliver vision services such as comprehensive eye examinations, treatment of eye conditions such as amblyopia (lazy eye) and strabismus (crossed eyes)
- Diagnose eye conditions such as macular degeneration, glaucoma, diabetic retinopathy, conjunctivitis, and more
- Prescribe medications for specific eye conditions (allowed in most states)
- Prevention of eye disease and eye injury services
- Prescribe and fit eye glasses and contact lenses
- Provide pre-operative and postoperative care for patients before and after eye surgery

EDUCATION AND TRAINING



After undergraduate college training, the **post-graduate, doctoral-level degree program in optometry** is comprised of an additional four years of extensive classroom, laboratory, and clinical training at an accredited optometry school.



This education combines **all phases of functional eye health care and optics with the health sciences** in a unified, specialized program.



Post-graduate clinical residency programs are available for optometrists who wish to specialize in family practice optometry, pediatric optometry, geriatric optometry, vision therapy, contact lenses, hospital-based optometry, primary care optometry, or ocular disease.



In addition to their formal training, **all 50 states and the District of Columbia require doctors of optometry to participate in ongoing continuing education courses** to stay current on the latest standards of care and to be eligible for license renewal.

YEARS 1 & 2 U.S. MEDICAL & OPTOMETRY SCHOOLS

OPTOMETRY

- Optics
- Vision Science
- Binocular Vision
- Ocular Pharmacology
- Color Vision

COMMON CORE OPTOMETRY & MEDICINE

- Human Anatomy (Human Cadaver Dissection)
- Neuro Anatomy & Physiology (Brain Dissection)
- Epidemiology/Biostatistics and Public Health
- Pharmacology (Animal Lab)
- Pathology
- Respiratory Systems
- Histology and Cell Biology
- Dermatology
- Microbiology
- Endocrinology
- Reproductive Systems and Sexually Transmitted Diseases
- Clinical Diagnosis
- Gastroenterology
- Clinical Methods/Interviewing/Physical Examination
- Infectious Disease
- Cardiovascular Systems

MEDICINE

- Death and Dying
- Healthcare Quality Improvement
- Medical Information Management

GENERAL OPTOMETRY SCHOOL CURRICULUM

YEAR 3

- Evidence Based Health Care
- Glaucoma/ Neuro Eye III and IV
- Specialty Rotation (Advanced Eyecare)
- Specialty Rotation (Vision Rehabilitation)
- Specialty Rotation (Pediatrics/ Binocular Vision)
- Specialty Rotation (Cornea/ Contact Lens)
- Patient Care Program (Primary Eyecare) IV, V, VI, and VII
- Community-Based Patient Care (CPS)
- Eyewear Center II
- Contact Lenses II
- Infant/ Child Development and Management
- Clinical Medicine I and II
- Retina I and II
- Binocular Vision Disorders
- General & Ocular Emergencies
- Ocular Disease Seminar
- Strabismus and Amblyopia, I and II
- Injections and Minor Surgical Procedures
- Business of Optometry
- Ophthalmic Lasers
- Practice Management III

YEAR 4

- Externship Rotations (20 CR hrs each):
- Eye Institute Patient Care Rotation
- VA/ Hospital Based Externship Rotation
- Specialty Externship Rotation
- Specialty Externship Rotation

U. S. MEDICAL SCHOOL CURRICULUM

YEAR 3: CORE CLINICAL CLERKSHIPS

- Family & Community Medicine
- Internal Medicine
- Neurology
- Obstetrics, Gynecology & Women's Health
- Pediatrics
- Psychiatry
- Surgery
- 2 additional elective clerkships

YEAR 4: PRE-RESIDENCY

- 4 weeks sub-internship
- 4 weeks ambulatory medicine
- 2 weeks emergency medicine
- 34 weeks electives (students typically do 2-4 week rotations in their specialty area of interest, i.e. ophthalmology, radiology, etc.)
- 2 weeks capstone

EXPANDED OPTOMETRIC FULL PRACTICE AUTHORITY ENSURING GREATER ACCESS TO HIGH-QUALITY EYE HEALTH AND VISION CARE

52MM
SINCE 2000

NATIONALLY, THE U.S. POPULATION IN 2020 WILL HAVE GROWN BY AN ESTIMATED 52 MILLION SINCE 2000.
WHILE LICENSED OPHTHALMOLOGISTS HAVE STEADILY DECLINED IN THE SAME PERIOD OF TIME

IN MORE THAN 10,000+ U.S. COMMUNITIES, DOCTORS OF OPTOMETRY
ARE THE ONLY EYE CARE PROVIDERS.

10,000+
U.S. COMMUNITIES

15,711
INCREASE

FROM 2000 TO 2020, THERE HAS BEEN AN INCREASE OF 15,711
DOCTORS OF OPTOMETRY NATIONWIDE.

- No other health care providers are denied the ability to practice what they have been educated to do because there is another provider 60 minutes or 30 miles away who can perform the service.
- No medical doctor is prevented from providing their patients the benefits of new technologies because there is another medical doctor in their town already using the new technology.
- Optometric patients should not be denied the ability to receive the latest health care innovations in their local communities.
- Being forced to travel an hour to see an ophthalmologist is a long way to go when you can get the service in your hometown. Not only is it difficult for many rural and elderly to travel an hour, it is also costly to individuals and Medicaid programs.

PATIENT CARE & SAFETY



- Optometric scope of practice has never been repealed by any state legislature.
- Liability insurance rates for doctors of optometry in states with advanced scope have not increased even though they are based on state specific data.
- No state licensure board where ophthalmic procedures are practiced has ever been notified by the National Practitioner Data Bank of a judgment against one of their licensees regarding ophthalmic procedures.
- Oversight of competency of doctors of optometry is exercised by state-run licensure boards. This is consistent with the authority of other doctoral level licensure boards. Like optometry, the other health boards are made up of members of the profession and the public.
- No current licensee will be "grandfathered" in to certification to perform the ophthalmic procedures.
- The credibility of the profession of optometry, proven by the safe delivery of new services each time the law has been updated, can assure legislators that optometrists will act responsibly in exercising these new privileges as they have done in the past. Nationally, doctors of optometry have a successful track record in treating the eye health care needs of their patients, efficiently, effectively and safely.

(continued)



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ADVANCED EDUCATION & TRAINING



- Doctors of optometry are doctoral level independent health care practitioners educated on the human body with specific emphasis on the eye, vision and ophthalmic manifestations of systemic conditions.
- Doctors of optometry are held to the same standard of care as medical doctors. They are educated to recognize eye conditions and evaluate the need for treatment.
- Optometric care is still limited to the eye and its appendages.
- This will not broaden the scope of what conditions doctors of optometry currently manage and/or treat but will enable them to utilize the latest technologies to bring their patients the best possible care.
- Doctors of optometry have been performing pre- and post-operative of eye surgical patients under Medicare protocols for decades.
- All optometric colleges submitted legal affidavits demonstrating their curriculums currently cover the teaching of ophthalmic procedures and their graduates are trained to perform these therapies.
- The National Board of Examiners of Optometry includes a didactic and clinical test on Advanced Procedures and Lasers.
- To perform these ophthalmic procedures, state licensed doctors of optometry must meet specific educational requirements.
- Ophthalmologists perform surgeries today that they did not learn in their formal training. They attend CME to learn new technologies just as doctors of optometry do.
- Once licensed, medical doctors never have to document any kind of specific training to the medical licensure boards in order to perform surgeries that they did not learn in their medical school or residencies.

THE CASE FOR FULL PRACTICE AUTHORITY



- All health care providers are obligated to keep up with the latest knowledge in their fields. No health care provider should be limited to practicing at the standard of medical knowledge at the time when they finished their training.
- Optometric scope of practice is updated in every state over the years as new knowledge is incorporated optometric education.
- No state has ever repealed an expansion of optometric scope.
- Medical doctors have opposed every attempt to modernize the practice of optometry in the last century.



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Keywords: AOA Vermont Report Response

Supporting the Case for Optometric Full Practice Authority

In January 2020, the Vermont Secretary of State and Office of Professional Regulation (OPR) published a Study of Optometric Advanced Procedures. The study was to “*evaluate the safety and public health needs of enlarging the scope of practice of optometrists to include advanced procedures.*” The OPR was to “*evaluate, among other considerations, approaches to advanced procedures in jurisdictions outside Vermont, patient need for access to additional practitioners, effects on patient access to care, effects on patient safety, costs to the health care system, and the existing education and training for optometrists, including the degree to which it addresses training in advanced procedures*” and to “*inquire into the specific clinical training for both optometrists and ophthalmologists for specific procedures.*”

OPR’s assertions in the *Study of Optometric Advanced Procedures* document claim to be based on in-depth factual gathering, but unfortunately the data cited and claims made are misrepresented, incomplete in thoroughness and only stand to support the historical bias put forth by self-interested groups like Ophthalmology.

First, OPR’s inaccuracy makes damaging assumptions about the training and education of Doctors of Optometry, based heavily upon anecdotal evidence from limited sources, provided by individuals who have historically and publicly opposed efforts like scope expansion and more importantly, have little to no first-hand knowledge of the educational qualifications afforded optometrists. OPR also did not take into consideration affidavits from optometry schools demonstrating education in these areas or the fact that existing optometric licensees would be required to demonstrate competency.

Despite the disregard for publicly available materials on optometric education and limited outreach by OPR to optometric colleges and universities to obtain this information, all twenty-three colleges and universities recently delivered over 500 pages of information to again, provide evidence to the level of training Doctors of Optometry receive in these accredited institutions.

Secondly, patient and public safety concerns have historically and continually been alleviated by the stellar record optometrists have demonstrated for decades. This record of top-level patient care can be seen by the lack of malpractice claims filed against optometrists, directly attributed to the ophthalmic procedures in question. This long-standing record of outstanding patient care can also be seen in the low rates for malpractice insurance Doctors of Optometry have been enjoying for twenty plus years.

Despite these publicly verifiable records of patient safety, OPR’s assessment of patient safety dismisses this information outright and again cites anecdotal evidence to support their ultimate position. According to the Vermont document from OPR “*Despite these anecdotes, the ophthalmologists could not point to any outcomes data showing an increased risks of patient harm due to expanded optometric*

scope of practice.” Also, the one liability insurer OPR consulted, Ophthalmic Mutual Insurance Company (OMIC), did not report that rates for states with updated laws were higher or that they had increased claims.

Finally, on access and patient demand, OPR was provided multiple sources to support Optometry’s position. A report published just last year by *Avalon Health Economics* showed the overall financial benefit to the health care system when Doctors of Optometry are practicing to the levels taught, ultimately providing competition in the health care marketplace. OPR was also sent the U.S. Health and Human Services (HHS) report, which fully supports the position that Doctors of Optometry should be practicing at the highest levels taught and less than that is an unnecessary barrier in the healthcare marketplace. OPR was also sent a thoughtful and measured response to the *JAMA* study on geographical access in a state, highlighting the flaws in the sources utilized, as well as providing updated licensee data from both the AMA and AOA licensee databases.

Unfortunately, OPR chose to dismiss much of the information from third party sources supporting access in the marketplace and again chose to use anecdotal evidence, which had already been cogently countered, to support their final and flawed assumption.

Despite the litany of information available and directly provided, the OPR chose to rely on flawed data and information, incorrectly recommending against expanding optometric scope of practice to include the proposed advanced procedures. *“OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures”*.

The following document responds to the OPR report which was based on inaccuracies, anecdotal testimonies, and misinformation.

The Need for Updating Optometric Scope of Practice

Recently Doctors of Optometry in states across the nation have introduced legislation to change the scope of practice. Some states have adopted this new scope while others are considering it. Why do optometrists feel this is necessary?

GROWTH OF KNOWLEDGE

FACT: All health care professionals are challenged with keeping up with the latest developments in their fields.

“Medical knowledge has been expanding exponentially. Whereas the doubling time was an estimated 50 years back in 1950, it accelerated to 7 years in 1980, 3.5 years in 2010, and a projected 73 days by 2020”, according to a 2011 study in Transactions of the American Clinical and Climatological Association.

Certainly, optometry schools, as well as medical, dental, nursing, and other health care programs, are constantly updating their curriculums to teach students the latest health care information. However, in a short time after finishing their training, the education health care professionals receive in formal education can be outdated. All health providers must be life-long learners to provide their patients with the best possible care. Antiquated “regulatory” obstacles to “accredited” professional education and training serve to disadvantage professions like optometry and promulgate and benefit the “professional” medical monopoly which has existed for so long. They serve to stifle growth and innovation and advantage the political medical establishment by allowing them to control markets and maintain referral networks for their exclusive benefit.

Physicians including ophthalmologists utilize many surgical techniques now that did not exist when they finished their formal training. When SLT was approved in 2001, what did ophthalmologists do – go back to medical school, do another residency? No, at best, they attended CME courses to learn to utilize the new technology, and often they receive this training from the surgical representative who sells the equipment.

This is how all medical professionals learn new skills and keep current.

After four years of doctoral level study of the human body and the eye, Doctors of Optometry have the intelligence, ability and foundational skills upon which to build and learn and utilize the newest medical applications and innovations just as all health care providers do.

For current medical or optometric practitioners learning new technology is based on the foundation of formal education, clinical practice experience and continuing medical education. For example, the lasers optometrists use, are used in conjunction with slit lamps, which is equipment ODs use on every patient every day. This is a basic skill developed from the first semester of optometry school, refined and verifiably perfected by the time the optometric physician begins practice. It is not the same as taking a lay person with no knowledge of the eye or ophthalmic equipment and training them to do the procedure. Optometrists understand the clinical aspects of examining and treating the eye. They do it in everyday practice.

Doctors of Optometry are independent doctoral level practitioners just like dentists, podiatrists, chiropractors, and medical doctors. All of these providers attend four years of professional school after college to study their specialties which may include post-doctoral residencies, etc.

FACT: To update their scope of practice and utilize new technologies after they finish training, medical doctors and dentists are not required to ever go back to the legislature for permission.

No matter what new techniques are developed, MDs and dentists are entitled to incorporate those procedures into their practices without having to prove competency or if their licensure boards approve of the technology. Medical licensing boards do not approve or regulate technology or what a medical/osteopathic physician may or may not do with respect to medical practice. A medical license is a “plenary” license, unrestricted and unregulated with respect to technology or method. The Food and Drug Administration (FDA) regulates the approval of medical devices and drugs for sale or use in the US. Individual hospitals, clinics, and groups may regulate what is done in their facilities via credentialing and privileging, but in their own practices physicians essentially regulate themselves. A critical distinction here between medicine and optometry is that a “medical” license REMOVES ALL OBSTACLES to further education and training in whatever skill, procedure, technique, etc., the medical licensee chooses to undertake at any time in the future.

For example, the newest surgical techniques on the market for glaucoma are Microinvasive Glaucoma Surgery (MIGS). To learn these procedures, MDs attend continuing medical education (CME) courses or are trained by surgery representatives of the manufacturers (not necessarily MDs) with videos and in the operating room. They are not being certified by the medical licensure board, Accreditation Council for Graduate Medical Education (ACGME), or going back to medical school. Should the Vermont legislature mandate proof of competency before allowing these MDs to implant these new devices utilizing these new surgical procedures? Should they have to prove this will save costs or it is needed by Vermont consumers?

So why does optometry keep coming back to state legislatures to change their scope of practice? Historically, when the medical licensure laws were first passed, there were no restrictions on what physicians could do. Physicians have always been able to utilize any new treatment modality, new drug treatment, or new surgical technique without changing their practice act. Any MD can treat eyes or use these procedures, not just ophthalmologists.

Dentists also are able to expand their scope of practice without new legislative authority as long as it relates to the mouth, teeth, etc. For example, most recently dentists have incorporated the use of lasers to treat their patients without additional legislative authorization. Upon completion of their training, these providers use CME tools to keep current in their chosen fields.

So why is optometry forced to come back to the legislature time and again to update their scope of practice? Why is a competitive (and often hostile) profession allowed to dictate the terms of optometry’s evolution?

When optometrists were first licensed at the turn of the 20th century, the scope of practice was quite narrow because drugs and modalities used today didn't exist to treat eye and vision problems. The way the practice acts were written, the licensure boards didn't have the authority to determine what new things would be within the scope of practice.

FACT: Medical doctors have opposed any scope of practice expansion for optometry in every state for decades. This includes opposing osteopathy during the first half of the 20th Century.

A specialty within medicine, ophthalmology, has tried to keep a monopoly on all medical care related to eyes. Therefore, whenever, optometry petitioned the legislature for permission to expand practice to reflect education updates, ophthalmology has always opposed their efforts claiming that patients would be harmed.

These battles occurred when contact lenses were first introduced, but optometry prevailed and demonstrated they were highly competent in contact lens prescribing, fitting, etc. Afterward, when diagnostic drugs came on the market to facilitate better examination of the eyes, ophthalmology alleged that patients would go blind or even die if optometrists were allowed to use these drugs. This has not occurred, there has been no documented case in which an optometrist has blinded or killed a patient with these medications anywhere in the country. The same arguments were used to oppose optometrists prescribing drugs for treatment of eye diseases. But again, optometric expansion of scope of practice has proven to safely benefit patients, not harm them. Now ophthalmologists are again trying to keep optometry from being able to provide patients with the newest technologies. Every time optometric education has been updated to reflect new modalities; ophthalmologists have opposed allowing optometrists to use the knowledge they have gained.

The result is that students are restricted from using the education they have received when they return to practice in a state where the optometric practice act has not been updated. Graduates are more likely to go to states where they can use their full training. This particularly hurts those states with provider shortages.

Ophthalmologists make claims of concern for public safety in their efforts to maintain a monopoly on certain practice modalities. To prove their concern is based on controlling the access to this care rather than ensure patient safety, in 2014 in Nebraska, organized medicine and ophthalmology lobbied against optometrist's scope expansion to allow for the prescribing of oral steroids, oral glaucoma, and oral immunosuppressive medications. They did so by claiming optometrists did not have the requisite knowledge of these dangerous medications to keep the public safe. When they were presented with a political compromise which would preserve their monopoly on surgical procedures, they conceded the additional oral medications without the requirement of additional optometric CME. The CME was not necessary to protect the public because optometrists do in fact, have the requisite knowledge, education and training to utilize these medications safely, but it was the contention of organized medicine until it was clear they would lose a political battle.

The same arguments have been used against optometric scope changes for decades. As scope has changed over the years, the proof has been in the successful care Doctors of Optometry have provided their patients. Once the new scope was implemented, all the terrible things predicted by ophthalmology did not occur. If patients had been harmed as ophthalmology alleged would occur, the expanded scope laws would have been quickly repealed.

In December 2018, the U.S. Department of Health and Human Services (HHS) published a report, *Reforming America's Healthcare System Through Choice and Competition*.

This report identified areas where federal and state rules inhibit adequate choice and competition and offered recommendations for improving public policy in these areas.

State licensing and scope-of-practice (SOP) restrictions were examined. HHS concluded, *“when state regulators impose excessive entry barriers and undue restrictions on SOP for particular types of providers, they often are not responding to legitimate consumer protection concerns. There is a risk that healthcare professionals with overlapping skill sets will seek these restrictions; they view SOP restrictions as an easy, state-sanctioned opportunity to insulate themselves from competition.”*

By restricting the entry of competitors, licensure can restrict supply, which can increase the income of incumbents.

“For example, advanced practice registered nurses, physician assistants (PAs), pharmacists, optometrists, and other highly trained professionals can safely and effectively provide some of the same healthcare services as physicians.” P33

“Recommendations: Broaden Scope of Practice”

“States should consider changes to their scope-of-practice statutes to allow all healthcare providers to practice to the top of their license, utilizing their full skill set.”

FACT: All providers currently licensed must learn new technologies to update their skills whether they are ODs or MDs.

Medical knowledge doubles every few months. Unless a healthcare profession is allowed to utilize this knowledge to improve itself for the benefit of its patients, it will quickly become irrelevant.

SAFETY

FACT: To date, no optometric practice expansion has ever been repealed in a state legislature.

The credibility of the profession has given legislators confidence in further expanding optometric practice when requested. Optometrists have never asked for changes they were not capable of safely using.

Optometrists dedicate their lives to saving their patients vision. They are not going to do something they are not trained and able to perform safely.

Optometry has the exact same independent, objective oversight mechanisms to assure the competency of entry-level providers and look to minimize risk to the public, namely state-appointed licensing boards, national criterion-referenced competency examinations run by independent boards which utilize acknowledged best-industry practices in terms of psychometrics and exam development and deployment, and the same medico-legal oversight to which every licensed professional answers. No state has ever repealed any type of optometric scope expansion. If optometry had the dangerous outcomes predicted by ophthalmology, the expanded scope would have been repealed. If optometric

patients were going blind and even dying when optometrists cared for them as ophthalmologists warned, there would have been an outcry from the public to stop optometrists from harming the public. Certainly, ophthalmologists would have easily convinced legislators to repeal the expansions. In the Vermont report and other testimonies by ophthalmologists the alleged problems with optometric practice are anecdotal. Undoubtedly, many optometrists could testify to examining patients who have seen ophthalmologists whose medical and surgical care for patients with glaucoma, dry eye, cataracts, macular degeneration, diabetic eye diseases were mismanaged or lead to bad outcomes. Would it mean no ophthalmologists should be allowed to perform those services procedures? Anecdotal testimonies reflect the bias of the one opposing the legislation.

FACT: According to the Vermont report “Despite these anecdotes, the ophthalmologists could not point to any outcomes data showing an increased risk of patient harm due to expanded optometric scope of practice.” P 18

Even though no harm was found, the Vermont report refused to acknowledge Doctors of Optometry were doing these procedures safely in other states (specifically Oklahoma, Louisiana, and Kentucky).

FACT: A major factor in the positive outcomes of changes in optometric scope of practice is the state boards do not grandfather existing licensees to become certified to practice the new scope without required additional training and proof of competency.

This is a far more stringent oversight than practiced in medicine or dentistry.

When prescriptive authority was gained by the states, existing licensees had to provide proof of pharmacology courses and training equivalent to that of new graduates in order to be certified to treat patients with drugs. A new section was added to the National Board of Examiners in Optometry (NBEO) test that covered all of those areas. Now the NBEO has established another section that tests for use of lasers and advanced procedures (ref: The NBEO Laser & Surgical Procedures Examination which consists of two parts: Ophthalmic Laser Procedures and Office-based Surgical Procedures. With each part further sub-divided into a written and a practical component).

FACT: Neither new licensees or existing licensees are permitted to perform these new procedures without first documenting specified training and competency.

States who passed advanced procedures and those who are now requesting to add certain new procedures to their scope of practice (including Vermont) are requiring their licensees to meet certain educational criteria in order to obtain this new certification.

If a Doctor of Optometry chooses to specialize in an area like contact lenses or children's vision where these modalities are not needed, they do not have to meet the additional standards, but they are not allowed to perform the ophthalmic procedures without additional training.

This is in contrast to medicine where the medical licensure boards never require licensees to have additional courses or testing to provide a new procedure. Hospitals or board certification may require such, but not the state boards or the legislatures.

The Vermont report first argued ODs should not be allowed to perform these procedures because if there was a problem, they are not in a hospital or with other providers. But later they report only two out of 28 Vermont ophthalmologists perform these ophthalmic procedures in a hospital setting. Anecdotal testimony of biased practitioners is not the standard to judge the safety of these procedures performed by ODS.

MALPRACTICE EXPERIENCE

FACT: The objective means to validate the safety of optometric practice can be measured by the malpractice outcomes and rates.

FACT: Actual liability insurance rates for optometrists practicing in states with expanded scope of practice are no higher than those in other states and a fraction of the rates of any other doctoral level health care professional.

The Vermont report denies low malpractice rates indicate expanding the optometric scope of practice is safe for the public. The Vermont report alleges optometric rates are low because they are nationwide and therefore not reflective of experience in the states with expanded scope.

FACT: Untrue statement. - *“Any malpractice cases from these states would not yet be factored into the premium calculation.”*

This is untrue. Doctors of Optometry in Oklahoma have been performing these procedures since 1998, (22 years). Kentucky ODs have been performing these procedures since 2011 (9 years). Any liability insurer would have certainly factored in malpractice claims into their rates by 2020.

Every state experience is reviewed and factored into setting rates for each state.

Lockton is the largest insurer of optometric liability insurance in the country. In a letter dated, January 30, 2020, Oliver Sowards, Assistant Vice President, Lockton Affinity, LLC, writes: *“Thank you for your inquiry regarding Malpractice Insurance rates for Doctors of Optometry. As one of the largest insurers of Doctors of Optometry, we insure thousands of optometrists. The Malpractice Insurance rates currently being charged to Doctors of Optometry reflect the scope of practice in the respective*

state along with historical frequency and severity experience loss data for optometrists across the country. Malpractice Insurance rates are subject to change based on updates to the scope of practice or material change in the historical loss data for the state in question.”

For 2020, these are the current Lockton rates for the states who have updated their laws. This is for coverage of \$1 million/\$3 million limits.

FACT: Malpractice rates for 2020 from Lockton, the largest insurer of optometrists in US, are very low.

- • Oklahoma \$451 per year
- • Kentucky \$451 per year
- • Louisiana \$957* Rates for all health professional are higher due to ease of filing a lawsuit.
- • Alaska \$451 per year
- • Arkansas \$451 per year

Insurers are in the business of making money. A liability company would not set low rates if they were losing money on malpractice cases. Optometrists in Oklahoma have 22 years of experience and in Kentucky nine years of experience. Insurers would certainly have increased rates for those two states if they were paying out liability claims.

These are incredibly low liability rates even compared to those of other professionals like attorneys and CPAs.

In the Vermont report, the only information on malpractice claims is from the Ophthalmic Mutual Insurance Company (OMIC), an ophthalmology company. The data provided by OMIC is reflective of only 800 optometrists. That is only 1.6 % of the optometrists in the US. Lockton insurers thousands of optometrists.

FACT: OMIC did not report rates for states with updated laws were higher or they had increased claims.

EXPERIENCE IN STATES WITH PROCEDURES IN QUESTION

FACT: State healthcare licensure boards are notified by the National Practitioner Data Bank (NPDB) when there is a judgement against one of their licensees. This informs the licensure boards so they can follow up with remedial or disciplinary action if necessary.

FACT: The state boards where the ophthalmic procedures are practiced have not received any notifications from the NPDB on judgements against their licensees regarding the ophthalmic procedures in question.

The state boards have not received complaints regarding their doctors use of ophthalmic procedures. For example, in a letter dated January 9, 2020 from Dr. James Sandefur, Secretary, Louisiana State Board of Optometric Examiners, he stated:

“In response to your request I can report that Louisiana Act 398 of the 2014 Louisiana legislature expanded the scope of practice of Optometry allowing Doctors of Optometry who qualified, with additional training, to perform advanced ophthalmic surgery procedures, including laser procedures.

In promulgating the rules to administer the act, the Louisiana State Board of Optometry Examiners (Board) included a provision that all Doctors of Optometry who perform laser procedures were required, as a provision of renewal of their license to practice Optometry, to keep a log of the number of laser procedures performed, and any adverse outcomes noted, and report that to the Board.

Of the 489 Doctors of Optometry practicing in Louisiana, 289 have become certified to perform the procedures to date.

The data from the years 2015-2018 show that Louisiana Doctors of Optometry have performed 11,545 laser procedures with zero negative outcomes reported. In addition, there have been no complaints to the Board regarding Doctors of Optometry performing these procedures from patients or other doctors, and the Board is not aware of any malpractice suits filed regarding this.

It is clear to the Board that the law has been of great benefit to the citizens of Louisiana, allowing greater access to these procedures, especially in the rural areas of the state.”

Further communication from the Louisiana State Board of Optometry Examiners (LSBOE) confirmed the following as it relates malpractice information from the National Practitioner Data Bank (NPDB):

“The LSBOE participates with the National Practitioner Data Bank/Health Care Integrity and Protection Data Bank (NPDB/HIPDB) in sharing data regarding Doctors of Optometry and any disciplinary actions committed or reported.

The LSBOE has received no communications from the NPDB/HIPDB regarding any malpractice suits, licensure suspensions/revocations or other adverse actions regarding Louisiana Doctors of Optometry performing these advanced ophthalmic procedures including laser procedures”

In contrast, the Vermont report did not investigate complaints or malpractice cases filed against ophthalmologists.

EDUCATION

Fact: Medical schools are not the only educational institutions that can educate students to provide quality, safe, and current health care to patients. Dentists, podiatrists, psychologists, nurse practitioners and physician assistants learn their skills outside of medical schools.

Many medical and surgical residencies are run by hospitals, clinics, and physician groups which are independent of and function outside of formal “academia”.

FACT: Repeatedly throughout the Vermont report, the OPR mistakenly asserts there is no evidence optometrists are trained in these procedures or managing any complications. This assertion fails to take into consideration the training today's optometry students receive.

Many of the “complications” which would be included here are not necessarily unique to laser or surgical care. They are the exact same conditions which manifest with many other diseases and conditions which optometric physicians already treat daily and have for decades.

Just like all other health professional schools, optometry colleges revise their curriculums over time to incorporate the most current knowledge and technologies for their students. Once students finish their training, they want to go practice where they can fully utilize their skills. This has necessitated updates in state practice acts to modernize them to match current education.

Doctors of Optometry are the nation's largest eye care profession, serving patients in nearly 6,500 communities across the country, where in more than 3,500 of these communities, they are the only eye doctors. Of the 14 counties in Vermont, optometrists are the only providers in two counties. Doctors of Optometry are trained to examine, diagnose, treat and manage disorders that affect the eye or vision.

Optometry school consists of four years of post-graduate, doctoral-level study concentrating on the eye, vision, and associated systemic diseases. In addition to profession-specific courses, optometrists are required to take systemic health courses which focus on a patient's overall medical condition as it relates to the eyes.

Prior to admittance into optometry school, optometrists typically complete four years of undergraduate study, culminating in a bachelor's degree. Required undergraduate coursework for pre-optometry students is extensive and covers a wide variety of advanced health, science, and mathematics courses.

Optometry students concentrate specifically on the structure, function and disorders of the eye for four additional years during their graduate education to earn their doctoral degree.

While concentrating on the eye and visual system, optometrists also study general health in courses such as human anatomy and physiology, immunology, microbiology, systemic pathology, biochemistry and pharmacology.

In addition to their formal, doctoral-level training, all optometrists participate in ongoing CME to stay current on the latest standards of care and to maintain their licenses to practice. Optometry is one of the only doctoral-level health care professions to require CME in every state for license renewal. Upon completion of optometry school, candidates graduate from their accredited college of optometry and hold the Doctor of Optometry (OD) degree.

Some optometrists participate in residency programs following optometry school. This experience offers Doctors of Optometry who are training in an optometric sub-specialty such as pediatric optometry, family practice, cornea & contact lens, refractive surgery, low vision care, or geriatrics.

In the Vermont report, the ophthalmologists “*were unaware of any standardized, comprehensive curriculum from U.S. Schools of optometry.*” This is not surprising since they are private practitioners with no experience in optometric education. Just because they did not know about optometry school curricula, doesn’t mean it doesn’t exist.

FACT: No new licensees can obtain certification unless their schools have documented to state licensure boards the curriculum covers these procedures.

The Kentucky Board of Optometric Examiners and the Louisiana State Board of Optometric Examiners have notarized affidavits from all 23 optometry schools in the U.S. attesting that their curriculums teach all the didactic courses and clinical courses necessary for their graduates to qualify for a Kentucky or Louisiana license to perform advanced procedures.

FACT: The National Board of Optometric Examiners tests for use of lasers and advanced procedures.

Upon graduation, students must pass the NBEO as part of the requirements to obtain a state license. One of the sections on the NBEO is testing for lasers and advanced procedures. This requires standardization of education across all the schools and demonstrates students are being taught these things; otherwise how could they be expected to pass this part of the national boards? The NBEO Laser & Surgical Procedures Exam consists of both a “written component,” testing conceptual knowledge, analysis and application, as well as a “practical component” testing technical ability and procedural skill using professional “patients” and high-fidelity models for simulation. Please note national ophthalmology exams have no “practical” component testing. The NBEO examination, was developed over a period of several years by a group of optometric physicians, ophthalmologists, and educators who themselves have decades of experience with all these procedures.

FACT: Optometry students must receive this complete education because when they enter practice they are held to the same standard of care as ophthalmologists. If an OD misses a diagnosis or fails to refer in a timely manner, they are held liable. Therefore, they must be educated through classes and clinics to recognize eye conditions and evaluate the need for treatment.

One of the arguments used by opponents is ODs do not have the same training on the human body medical students receive. In some programs where the optometry school is part of a university health care center and where other types of doctoral students are educated, the anatomy, physiology, etc. courses are actually taught by the same professors as the medical or dental students, and in some cases, they are all in the same classrooms together for a number of courses. Optometry students receive the full spectrum of basic systemic sciences medical, dental, and podiatry students receive with regards to human anatomy, physiology, neuroanatomy, pathology, immunology, microbiology, and pharmacology. Optometry students complete semester long graduate courses in systemic diseases with additional concentrated emphasis on those conditions with ophthalmic correlates. Emphasis on vision and eye issues occurs in 3rd and 4th year clinical courses.

An excellent example of the rigorous education received by students in optometric institutions of higher learning can be found at Ohio State University (OSU). Students at OSU must complete a 17 week in-clinic course, where the procedures questioned by OPR are performed. The culmination of these 17 weeks alone, account for nearly 1,000 hours of hands on experience clinical experience.

Upon graduation, optometry students have an extensive knowledge and understanding of the human body (both structure and function) as a whole. Optometrists are trained to take detailed health histories of their patients including all medications they take, family histories, etc. They are able to order laboratory tests, and work with primary care and specialists in caring for their patients with systemic diseases. Because of their knowledge of systemic conditions that can manifest in the eye, optometrists are often the first providers to discover systemic conditions like diabetes, hypertension or even brain tumors. They then refer the patient to the appropriate provider for follow up care, as would any ethical medical or dental provider.

Optometrists do know how to evaluate conditions of the eye and judge when a patient may need surgical or specialty care. They refer patients to ophthalmologists and others all the time for further treatment or surgery.

FACT: Doctors of Optometry also know how to take care of postoperative situations. Optometrists have been comanaging cataract and other surgeries under Medicare protocols for decades.

Even in states where the optometry laws are not updated, optometrists are currently able to perform preoperative and postoperative care for patients who have these procedures. Certainly, if an optometrist is competent to do surgical follow-up, and manage the complications which may present, they must have an excellent working knowledge of the eye, the surgical procedure, and related systemic issues.

CONTINUING COMPETENCY

The ophthalmologists who commented for the Vermont report had limited understanding of modern optometry. They allege, “there is no oversight of an optometrist’ competence or whether that competence is maintained.” This is not true. State optometric licensure boards have required CME for decades. CME was first required for MDs in Vermont in 2011. Only 30 hours over a two-year period is required.

Vermont optometric licensees who hold an endorsement permitting use of therapeutic pharmaceutical agents must complete 40 hours of CME, of which 20 hours shall be in the use of therapeutic pharmaceutical agents, including treating possible complications arising from their use, and the treatment of glaucoma. *"Continuing education" means the direct participation of an optometrist in a structured educational format taught by qualified presenters. Continuing education has significant intellectual and practical content directed at maintaining the professional competence of optometrists. Continuing education as used in this Part does not include practice management courses or programs.*

FACT: In all the states with updated optometric practice acts, CME is required for re-licensure.

In Kentucky for example, ODs who are certified to use lasers must have additional hours of Board approved continuing education specifically relating to the advanced procedures for license renewal.

FACT: Continued competency is also a part of Board Certification.

The American Board of Optometry (ABO) oversees board certification for Optometrists. The ABO is accredited by the National Commission for Certifying Agencies (NCCA) and recognized by CMS. Once a licensee meets all the post graduate requirements to become Board Certified, there is a Maintenance of Certification requirement similar to medicine.

PRIMARY EYE CARE

The Vermont report argues these ophthalmic procedures are not part of Primary Eye Care and therefore should not be performed by optometrists. No law limits optometric scope to just Primary Eye Care.

FACT: There is no universally accepted definition of Primary Eye Care.

The American Academy of Ophthalmology's official definition of surgery published by the AAO Hoskins Center for Quality Eye Care in 2014 states, "*Primary eye care services include: Performing surgery when necessary*".

In some state laws, primary care is defined only as family practice, nurses and physician assistants. Is Primary Eye Care anything that can be performed in the office?

Obviously, the definition of primary eye care varies. The issue is not whether these procedures are defined as primary eye care, but whether optometrists have the training to perform them safely. Family Practitioner's (MD or DO), with no particular training or expertise in ophthalmic procedures, are permitted to perform essentially all of the same procedures ophthalmologists are constantly seeking to block optometrists from including in their modern practice acts. Pfenninger & Fowler's "*Procedures for Primary Care*," 4th ed., which is often referred to as the "Bible" of Family Medicine and listed as one the 100 most-influential texts in medicine in recent years includes numerous chapters on ophthalmic procedures. A Doctor of Optometry is eminently more qualified by virtue of an expanded knowledge-base and practical experience to render these services within their communities.

ACCESS

FACT: Optometrists are the only eye care providers within two Vermont counties, providing access to eye care for 7,997 urban residents and 47,705 rural residents.

FACT: No other health care providers are denied the ability to practice what they have been trained to do because there is another type of provider 30 miles or 60 minutes away who could perform the service. No medical doctor is prevented from providing their patients the benefits of new technologies because there is another medical doctor in their town already using the new technologies on their patients.

Patients should have the right to choose their provider if they are qualified whether they are in an urban or rural area.

Allowing patients to choose to receive services locally could save the Medicaid program transportation money. Many Medicaid recipients lack readily available transportation. A 30-mile trip might be impossible for them to arrange.

Costs savings would also accrue to patients who save time and money in time off work, travel time and costs, and second exams. If a patient chooses to have their local optometrists perform the service, the optometrist should be allowed to do so. The patient can still always choose to go to an ophthalmologist.

The two ophthalmologists who testified in Vermont downplayed the number of potential procedures to be performed by Vermont optometrists based on the number of procedures referred to them by 13 optometrists out of 128 Vermont optometrists. There is no reason to believe the 13 ODs referred exclusively to them and did not refer other surgeries to other ophthalmologists. Again, anecdotal testimony by two ophthalmologists opposing the legislation was widely credited in the Vermont report.

Vermont alleges ODs won't do enough procedures to maintain competency. Are medical doctors prohibited from doing cataract surgeries if they don't meet a numerical threshold? No. No other profession is judged on the number of procedures they perform.

FACT: Optometrists are conservative practitioners. Older practitioners may not choose to become certified, especially if there is someone else in their practice or local area who is certified.

Only a fraction of medical physicians choose to provide surgical services to their patients even though ALL of them may legally do so. There are no obstacles for medical physicians to seek out training programs and develop the skills they choose to pursue. Yet optometrists are restricted by outdated laws from employing the full measure of their education and developing their abilities to their fullest.

But for new graduates and those who wish to get the additional training, why should they be denied the ability to provide their patients these services?

FACT: Regarding utilization – there is a limited potential patient population who would be eligible for these ophthalmic procedures. Whether the procedure is performed by an MD or OD the costs would be the same.

FACT: There are many more optometrists than ophthalmologists. Nationally, the number of full time equivalent OMDs DECLINED by 1% from 2000 to 2020. The number of Optometrists INCREASED by 48% in that same time period. During this same time period the population of the U.S, grew by an estimated 55 million. With little to no growth in the numbers of ophthalmologists, optometrists are positioned to meet the needs of these additional citizens.

SUMMARY

In summation, relevant and readily available information on why Doctors of Optometry should be recognized to practice at the highest levels of education exist and are outlined in the above document. The American Optometric Association encourages OPR to quickly amend their public document to accurately reflect the information available and reverse the flawed document and ultimate outcome.

Keywords: AOA Trabeculoplasty Comparison

Trabeculoplasty Surgery Comparison in Oklahoma: Highlighting Inaccuracies and Flawed Data

(Original study was presented March 3, 2016-March 6, 2016 at the American Glaucoma Society Annual Meeting)

Original Study Stated Purpose:

“Oklahoma is one of the few states where optometrists have surgical privileges to perform laser procedures on the eye. Optometrists in other US states are actively lobbying to obtain permission to obtain privileges to perform these procedures. The purpose of this study is to compare Medicare claims data regarding laser trabeculoplasty (LTP) surgeries performed by ophthalmologists to those performed by optometrists to determine whether differences exist among procedures performed by the two provider groups.”

Inaccuracies and Flawed Data:

- **The study was undertaken in an attempt to justify and perpetuate a national anticompetitive monopoly by ophthalmologists, who perform more than 99 percent of these procedures in the United States.** The authors acknowledge the purpose of the study arises because optometrists are seeking to compete with ophthalmologists to provide this service. The authors conclude self-servingly that policymakers should refrain from allowing optometrists to compete with ophthalmologists.

- **According to a media report of a presentation by one of the study authors, they did not prove there is any difference in quality of care provided by optometrists and ophthalmologists.** The study focused on follow-up visits billed by the eye surgeons, but does not determine whether the rate of follow-up care reflects higher or lower quality, nor does it compare the functional outcome or patient satisfaction with the care. The study also fails to account for other procedures that ophthalmologists might have done in place of a repeat trabeculoplasty.

- **The sample size of the survey is too small for a valid comparison.** During a period of 6 years, the study found the procedure was provided 274 times in Medicare by optometrists, an average of 45 per year. According to AOA’s research, only 5 optometrists in Oklahoma performed this procedure as many as 10 times in a year for Medicare patients. The study is invalid because it fails to compare optometrists with ophthalmologists who have performed the service at a similar rate, and after a comparable amount of time in practice.

- **The study failed to account for difference in patients.** Valid medical studies adjust the results based on patient populations. Patients can present with widely varying health and medical histories, as well as different demographics. The study does not account whatsoever for such patient or systemic variations.

- **The study focuses on “sessions” without acknowledging that ophthalmologists successfully changed the description of the service to no longer mention “sessions.”** The change in coding descriptor was approved by the AMA after the study period. The study might be biased by different coding practices of ophthalmologists and optometrists. In any event, analysis using the old code descriptor no longer has much relevance.
- **The study author who presented the paper is biased.** Dr. Joshua D. Stein disclosed that he receives funding support from the American Academy of Ophthalmology, an advocacy organization that seeks to limit competition for ophthalmologists. With such inherent and inescapable bias, the authors were predisposed to the study’s conclusion regardless of the evidence.

By the Numbers:

- As noted in the table below, these were the only doctors of optometry across the country who were paid for the code 65855 at least 10 times in 2013 in Medicare. It’s important to note that Dr. Williams of Oklahoma is the only optometrists who provided more than 2 procedures per patient.

Table: Optometrists Reimbursed in 2013 for 65855 NPI	Last Name	First Name	State	Provider Type	# of Services	# of Beneficiaries	Services/ Bene
1831173988	PEPLINSKI	LEE	KY	Opt	62	49	1.27
1902802895	WILLIAMS	BRIAN	OK	Opt	62	19	3.26
1932102894	HENRY	LARRY	OK	Opt	14	11	1.27
1952304586	SOLORZANO	JORGE	OK	Opt	25	16	1.56
1962405928	ELLEN	JASON	OK	Opt	61	39	1.56
1992729909	MASSEN GALE	CURT	OK	Opt	25	14	1.79

In comparison to the optometrists above, below are the numbers of all doctors across the country who billed 65885 for at least 10 Medicare patients and more than 3 services per beneficiary.

- Along with Dr. Williams, there are 13 ophthalmologists who report to have continued treatments for the same patient. Along with Dr. Weir in Oklahoma who authored this study, repeat rates are substantially higher than Dr. Williams among the ophthalmologists.

Table: Physicians Reimbursed for 65855 in 2013 with a Services/Beneficiary ratio of 3±

NPI	Last Name	First	Provider Type	# of Services	# of Beneficiaries	Services/ Bene
1295799849	CROLEY	JAMES	OPHTH	50	15	3.33

1407916927	CAPLAN	DANIEL	OPHTH	54	15	3.60
1508924580	FARGNOLI	DONALD	OPHTH	150	50	3.00
1548207426	FERREIRA	CLAUDIO	OPHTH	47	12	3.92
1548283930	ORIZU	IFEANYI	OPHTH	420	128	3.28
1578513024	GINSBERG	BARRETT	OPHTH	43	12	3.58
1710956925	KRASINSKY	WALTER	OPHTH	49	15	3.27
1730181561	SHAFFER	SHAUN	OPHTH	50	15	3.33
1801968011	PELTAN	HAROLD	OPHTH	440	117	3.76
1821273137	BAHRI	SEAN	OPHTH	303	92	3.29
1831294651	THORBURN	DAVID	OPHTH	492	137	3.59
1841200037	WEIR	KURT	OPHTH	71	19	3.74
1851386395	NEWSOM	THOMAS	OPHTH	51	17	3.00
1902802895	WILLIAMS	BRIAN	Opt	62	19	3.26

Keywords: Pacific Curriculum

January 30, 2020

S. Lauren Hibbert
Office of Professional Regulation
89 Main Street, 3rd Floor
Montpelier, VT 05620-3402

Re: OPR Study of Optometric Advanced Procedures

Dear Director Hibbert,

In addition to the information being provided by other programs, I would like to provide you with information regarding the curriculum at Pacific University College of Optometry. Our curriculum is accredited by the Accreditation Council on Optometric Education and provides a Doctor of Optometry (O.D.) degree upon successful completion of all course requirements. In order to successfully pass a course, our students must achieve a minimum course score of 75%.

We have taught advanced procedures, including injections (IM and IV), suturing, chalazion removal and more, for over 15 years. While “advanced procedures” is a common vernacular relative to legislative changes, we recognize that these are skills that our students need to be qualified to complete. This is why there are parts of our curriculum dedicated to these areas (ex. Opt 638 Systemic Disease and Meds III with Lab, and Opt 733 Ocular Disease IV with Lab). In addition there are other parts of our curriculum that help support these courses (ex. Opt 531 and Opt 532 – our ocular anatomy courses; our Pharmacology track – Opt 540, 541, and 640).

To aid in the evaluation of our curriculum, I have included our curriculum overviews for our Classes of 2021, 2022, and 2023. While these are pretty set, they are always subject to change with faculty approval. You will see that the first two years are foundational and then we integrate more clinical opportunities in third and fourth year. Our students will spend over 1900 hours in clinic for their last two years. Many of them will also be at co-management sites with ophthalmology or at sites where they may have to work alongside other medical professions. This will often help expand their understanding of these advanced procedures.

PACIFIC UNIVERSITY COLLEGE OF OPTOMETRY
DOCTOR OF OPTOMETRY PROGRAM
2017-2018 Curriculum: Class of 2021

First Professional Year 17-18												
Fall Semester 2017						Spring Semester 2018						
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	
500	Basic Science for Optometry with Lab	2.5	502	Geometric and Physical Optics II with Lab	3.0	502	Geometric and Physical Optics II with Lab	3.0	502	Geometric and Physical Optics II with Lab	3.0	
501	Geometric and Physical Optics I with Lab	3.0	503	Physiological Optics with Lab	4.0	503	Physiological Optics with Lab	4.0	503	Physiological Optics with Lab	4.0	
516	Patient Care I	0.5	517	Patient Care I	0.5	517	Patient Care I	0.5	517	Patient Care I	0.5	
530	Biomed Ethics I	0.25	532	Anatomy of the Visual System with Lab	3.0	532	Anatomy of the Visual System with Lab	3.0	532	Anatomy of the Visual System with Lab	3.0	
531	Ocular Anatomy, Physiology and Biochemistry with Lab	3.5	533	Ocular Disease I with Lab	3.0	533	Ocular Disease I with Lab	3.0	533	Ocular Disease I with Lab	3.0	
535	Functional Neuroanatomy and Neurobiology	3.0	537	Systemic Disease and Meds I	3.0	537	Systemic Disease and Meds I	3.0	537	Systemic Disease and Meds I	3.0	
540	Essentials of Medical Pharmacology I	1.0	541	Essentials of Medical Pharmacology II	1.0	541	Essentials of Medical Pharmacology II	1.0	541	Essentials of Medical Pharmacology II	1.0	
546	Clinical Procedures I with Lab	2.5	547	Clinical Procedures II with Lab	2.5	547	Clinical Procedures II with Lab	2.5	547	Clinical Procedures II with Lab	2.5	
562	Behavioral Optometric Science with Lab	4.0	560	Evidence-Based Optometry	1.0	560	Evidence-Based Optometry	1.0	560	Evidence-Based Optometry	1.0	
568	Practice Management I	1.0										
	Total Semester Credits	21.25		Total Semester Credits	21.0		Total Semester Credits	21.0		Total Semester Credits	21.0	
Total First Year Credits											42.25	
Second Professional Year 18-19												
Fall Semester 2018						Spring 2019						
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	
601	Ophthalmic Optics	3.0	603	Clinical Preparation Seminar	0.5	603	Clinical Preparation Seminar	0.5	603	Clinical Preparation Seminar	0.5	
616	Theory and Methods of Refraction	3.0	610	Clinical Proficiency Exam	0.5	610	Clinical Proficiency Exam	0.5	610	Clinical Proficiency Exam	0.5	
620	Patient Care III	0.5	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0	
631	Ocular Disease II with Lab	3.0	617	Optometric Case Analysis	4.0	617	Optometric Case Analysis	4.0	617	Optometric Case Analysis	4.0	
637	Systemic Disease and Meds II	3.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0	
640	Essentials of Medical Pharmacology III	1.0	621	Patient Care IV	0.5	621	Patient Care IV	0.5	621	Patient Care IV	0.5	
646	Clinical Procedures III w/ Lab	2.0	630	Biomed Ethics II	0.25	630	Biomed Ethics II	0.25	630	Biomed Ethics II	0.25	
647	Ophthalmic Dispensing Procedures with Lab	2.0	633	Ocular Disease III with Lab	4.0	633	Ocular Disease III with Lab	4.0	633	Ocular Disease III with Lab	4.0	
662	Visual Perception	4.0	638	Systemic Disease and Meds III with Lab	2.0	638	Systemic Disease and Meds III with Lab	2.0	638	Systemic Disease and Meds III with Lab	2.0	
668	Practice Management II	1.0	649	Clinical Procedures IV with Lab	3.00	649	Clinical Procedures IV with Lab	3.00	649	Clinical Procedures IV with Lab	3.00	
	Total Semester Credits	22.50		Total Semester Credits	21.75		Total Semester Credits	21.75		Total Semester Credits	21.75	
Total Second Year Credits											44.25	
Third Professional Year 19-20												
Summer Semester 2019			Fall Semester 2019			Spring 2020						
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	
703	Patient Care Seminar I	0.5	704	Patient Care Seminar I	0.50	708	Patient Care Seminar I	0.5	708	Patient Care Seminar I	0.5	
710	Biomed Ethics III	0.25	718	Advanced Optometric Care Analysis	2.0	723	Patient Care VII	1.5	723	Patient Care VII	1.5	
711	Ocular Motility I	1.50	722	Patient Care IV	1.5	7xx	Specialty Patient Care**	1.5	7xx	Specialty Patient Care**	1.5	
714	Pediatric and Developmental Optometry with Lab	3.0	725	Assessment and Mgt of Strabismus and Amblyopia with Lab	4.0	730	Biomed Ethics IV	0.25	730	Biomed Ethics IV	0.25	
715	Patient Care V	1.5	7xx	Specialty Patient Care**	1.5	736	Clinical Rounds		736	Clinical Rounds		
7xx	Specialty Patient Care**	1.5	728	Low Vision	2.0	737	Advanced Pediatric Optometry	1.0	737	Advanced Pediatric Optometry	1.0	
716	Specialty Contact Lenses with Lab	3.5	735	Applied Ocular Therapeutics	1.0	749	Refractive Surgery	1.5	749	Refractive Surgery	1.5	
733	Ocular Disease IV with Lab	3.0	736	Clinical Rounds	0.5	759	Geriatric Optometry	1.0	759	Geriatric Optometry	1.0	
768	Practice Management III	1.0	743	Neuro Rehabilitation	2.0	761	Public Health Optometry	2.0	761	Public Health Optometry	2.0	
			762	Communication in Optometric Practice with Lab	1.5	763	Environmental, Occupational and Recreational Vision	2.0	763	Environmental, Occupational and Recreational Vision	2.0	
						769	Practice Management	1.0	769	Practice Management	1.0	
						755	Special Topics: Laser Procedures for Eye Care	0.25	755	Special Topics: Laser Procedures for Eye Care	0.25	
	Electives*			Electives*			Electives*			Electives*		
	Total Semester Credits	15.75		Total Semester Credits	16.50		Total Semester Credits	12.50		Total Semester Credits	12.50	
Total Third Year Credits											47.75	
* Students are required to complete at least 3 hours of electives prior to graduation.												
** Students will rotate through each Specialty Patient Care (Opt 770, 771 and 772) during third year.												
# Students are required to take one semester of 736, either Fall and Spring												
Fourth Professional Year 20-21 <u>Preceptorships</u>												
Session 1: May '20-August '21			Session 2: August '20-November '20			Session 3: November '20-February '21			Session 4: February '21-May '21			
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	
806	Patient Care VIII	11.0	807	Patient Care IX	11.0	808	Patient Care X	11.0	809	Patient Care XI	11.0	
827	Web-based Clinical Rounds*	0.50	827	Web-based Clinical Rounds*	-	827	Web-based Clinical Rounds*	-	827	Web-based Clinical Rounds*	-	
Total Fourth Year Credits											44.5	
Total Credits in the Doctor of Optometry Program												178.75

**DOCTOR OF OPTOMETRY PROGRAM
2018-2019 Curriculum: Class of 2022**

First Professional Year 18-19											
Fall Semester 2018						Spring Semester 2019					
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
500	Basic Science for Optometry with Lab	2.5	502	Geometric and Physical Optics II with Lab	3.0	503	Physiological Optics with Lab	4.0	516	Patient Care I	0.5
501	Geometric and Physical Optics I with Lab	3.0	517	Patient Care I	0.5	532	Anatomy of the Visual System with Lab	3.0	531	Ocular Anatomy, Physiology and Biochemistry with Lab	3.5
516	Patient Care I	0.5	533	Ocular Disease I with Lab	3.0	535	Systemic Disease I	3.0	540	Essentials of Medical Pharmacology I	1.0
530	Biomed Ethics I	0.25	541	Essentials of Medical Pharmacology II	1.0	546	Clinical Procedures II with Lab	2.5	562	Behavioral Optometric Science with Lab	4.0
531	Ocular Anatomy, Physiology and Biochemistry with Lab	3.5	547	Clinical Procedures I with Lab	2.5	568	Practice Management I	1.0	CHP515	Interprofessional Competence: Theory & Practice Elective*	1.0
535	Functional Neuroanatomy and Neurobiology	3.0	560	Evidence-Based Optometry	1.0						
540	Essentials of Medical Pharmacology I	1.0	555	Special Topic: Art Training to Improve Clinical Observation Skills Elective*	1.0						
546	Clinical Procedures I with Lab	2.5									
562	Behavioral Optometric Science with Lab	4.0									
568	Practice Management I	1.0									
CHP515	Interprofessional Competence: Theory & Practice Elective*	1.0									
Total Semester Credits		21.25	Total Semester Credits		21.0	Total Semester Credits		42.25			
Total First Year Credits 42.25											
Second Professional Year 19-20											
Fall Semester 2019						Spring 2020					
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
601	Ophthalmic Optics	3.0	603	Clinical Preparation Seminar	0.5	610	Clinical Proficiency Exam	0.5	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0
620	Patient Care III	0.5	617	Optometric Case Analysis	4.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0	621	Patient Care IV	0.5
631	Ocular Disease II with Lab	3.0	630	Biomed Ethics II	0.25	633	Ocular Disease III with Lab	4.0	638	Systemic Disease III with Lab	2.0
637	Systemic Disease II	3.0	649	Clinical Procedures IV with Lab	3.00						
640	Essentials of Medical Pharmacology III	1.0									
645	Refraction: Procedures III with Lab	4.0									
647	Ophthalmic Dispensing Procedures with Lab	2.0									
662	Visual Perception	4.0									
668	Practice Management II	1.0									
Total Semester Credits		21.50	Total Semester Credits		21.75	Total Semester Credits		43.25			
Total Second Year Credits 43.25											
Third Professional Year 20-21											
Summer Semester 2020				Fall Semester 2020				Spring 2021			
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
701	Ocular Motility	2.0	704	Patient Care Seminar I	0.50	708	Patient Care Seminar I	0.5	730	Biomed Ethics IV	0.25
703	Patient Care Seminar I	0.5	718	Advanced Optometric Care Analysis	2.0	723	Patient Care VII	1.5	736	Clinical Rounds	1.0
710	Biomed Ethics III	0.25	722	Patient Care IV	1.5	7xx	Specialty Patient Care**	1.5	737	Advanced Pediatric Optometry	1.0
714	Pediatric and Developmental Optometry with Lab	3.5	725	Assessment and Mgt of Strabismus and Amblyopia with Lab	4.0	763	Environmental, Occupational and Recreational Vision	2.0	749	Refractive Surgery	1.5
715	Patient Care V	1.5	7xx	Specialty Patient Care**	1.5	759	Geriatric Optometry	1.0	761	Public Health Optometry	2.0
7xx	Specialty Patient Care**	1.5	728	Low Vision	2.0	768	Practice Management Electives*	1.0			
716	Specialty Contact Lenses with Lab	3.5	735	Applied Ocular Therapeutics	1.0						
733	Ocular Disease IV with Lab	3.0	736	Clinical Rounds	0.5						
768	Practice Management III	1.0	743	Neuro Rehabilitation	2.0						
			762	Communication in Optometric Practice with Lab	1.5						
	Electives*			Electives*							
Total Semester Credits		16.75	Total Semester Credits		16.50	Total Semester Credits		12.25			
Total Third Year Credits 48.50											
Fourth Professional Year 21-22 Preceptorships											
Session 1: May '21-August '21			Session 2: August '21-November '21			Session 3: November '21-February '22			Session 4: February '22-May '22		
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
806	Patient Care VIII	11.0	807	Patient Care IX	11.0	808	Patient Care X	11.0	809	Patient Care XI	11.0
827	Web-based Clinical Rounds*	0.50	827	Web-based Clinical Rounds*	-	827	Web-based Clinical Rounds*	-	827	Web-based Clinical Rounds*	-
* Students are assigned to one session of Opt 827 during their fourth year			Total Fourth Year Credits		44.5	Total Credits in the Doctor of Optometry Program		178.50			

First Professional Year 19-20											
Fall Semester 2019						Spring Semester 2020					
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
500	Basic Science for Optometry with Lab	2.5	502	Geometric and Physical Optics II with Lab	3.0	502	Geometric and Physical Optics II with Lab	3.0	502	Geometric and Physical Optics II with Lab	3.0
501	Geometric and Physical Optics I with Lab	3.0	503	Physiological Optics with Lab	4.0	503	Physiological Optics with Lab	4.0	503	Physiological Optics with Lab	4.0
516	Patient Care I	0.5	517	Patient Care I	0.5	517	Patient Care I	0.5	517	Patient Care I	0.5
530	Biomed Ethics I	0.25	532	Anatomy of the Visual System with Lab	3.0	532	Anatomy of the Visual System with Lab	3.0	532	Anatomy of the Visual System with Lab	3.0
531	Ocular Anatomy, Physiology and Biochemistry with Lab	3.5	533	Ocular Disease I with Lab	3.0	533	Ocular Disease I with Lab	3.0	533	Ocular Disease I with Lab	3.0
535	Functional Neuroanatomy and Neurobiology	3.0	537	Systemic Disease I	3.0	537	Systemic Disease I	3.0	537	Systemic Disease I	3.0
540	Essentials of Medical Pharmacology I	1.0	541	Essentials of Medical Pharmacology II	1.0	541	Essentials of Medical Pharmacology II	1.0	541	Essentials of Medical Pharmacology II	1.0
546	Clinical Procedures I with Lab	2.5	547	Clinical Procedures II with Lab	2.5	547	Clinical Procedures II with Lab	2.5	547	Clinical Procedures II with Lab	2.5
562	Behavioral Optometric Science with Lab	4.0	560	Evidence-Based Optometry	1.0	560	Evidence-Based Optometry	1.0	560	Evidence-Based Optometry	1.0
568	Practice Management I	1.0									
	Total Semester Credits	21.25		Total Semester Credits	21.0		Total Semester Credits	21.0		Total Semester Credits	21.0
Total First Year Credits											42.25
Second Professional Year 20-21											
Fall Semester 2020						Spring 2021					
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
601	Ophthalmic Optics	3.0	603	Clinical Preparation Seminar	0.5	603	Clinical Preparation Seminar	0.5	603	Clinical Preparation Seminar	0.5
620	Patient Care III	0.5	610	Clinical Proficiency Exam	0.5	610	Clinical Proficiency Exam	0.5	610	Clinical Proficiency Exam	0.5
631	Ocular Disease II with Lab	3.0	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0	615	Vision Therapy for Binocular and Oculomotor Dysfunction with Lab	4.0
637	Systemic Disease II	3.0	617	Optometric Case Analysis	4.0	617	Optometric Case Analysis	4.0	617	Optometric Case Analysis	4.0
640	Essentials of Medical Pharmacology III	1.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0	618	Spherical Rigid and Soft Contact Lenses with Lab	3.0
645	Refraction: Procedures III with Lab	4.0	621	Patient Care IV	0.5	621	Patient Care IV	0.5	621	Patient Care IV	0.5
647	Ophthalmic Dispensing Procedures with Lab	2.0	630	Biomed Ethics II	0.25	630	Biomed Ethics II	0.25	630	Biomed Ethics II	0.25
662	Visual Perception	4.0	633	Ocular Disease III with Lab	4.0	633	Ocular Disease III with Lab	4.0	633	Ocular Disease III with Lab	4.0
668	Practice Management II	1.0	638	Systemic Disease III with Lab	2.0	638	Systemic Disease III with Lab	2.0	638	Systemic Disease III with Lab	2.0
			649	Clinical Procedures IV with Lab	3.00	649	Clinical Procedures IV with Lab	3.00	649	Clinical Procedures IV with Lab	3.00
	Total Semester Credits	21.50		Total Semester Credits	21.75		Total Semester Credits	21.75		Total Semester Credits	21.75
Total Second Year Credits											43.25
Third Professional Year 21-22											
Summer Semester 2021			Fall Semester 2021			Spring 2022					
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
701	Ocular Motility	2.0	704	Patient Care Seminar I	0.50	708	Patient Care Seminar I	0.5	708	Patient Care Seminar I	0.5
703	Patient Care Seminar I	0.5	718	Advanced Optometric Care Analysis	2.0	723	Patient Care VII	1.5	723	Patient Care VII	1.5
710	Biomed Ethics III	0.25	722	Patient Care IV	1.5	7xx	Specialty Patient Care**	1.5	7xx	Specialty Patient Care**	1.5
714	Pediatric and Developmental Optometry with Lab	3.5	725	Assessment and Mgt of Strabismus and Amblyopia with Lab	4.0	763	Environmental, Occupational and Recreational Vision	2.0	763	Environmental, Occupational and Recreational Vision	2.0
715	Patient Care V	1.5	7xx	Specialty Patient Care**	1.5	730	Biomed Ethics IV	0.25	730	Biomed Ethics IV	0.25
7xx	Specialty Patient Care**	1.5	728	Low Vision	2.0	736	Clinical Rounds		736	Clinical Rounds	
716	Specialty Contact Lenses with Lab	3.5	735	Applied Ocular Therapeutics	1.0	737	Advanced Pediatric Optometry	1.0	737	Advanced Pediatric Optometry	1.0
733	Ocular Disease IV with Lab	3.0	736	Clinical Rounds	0.5	749	Refractive Surgery	1.5	749	Refractive Surgery	1.5
768	Practice Management III	1.0	743	Neuro Rehabilitation	2.0	759	Geriatric Optometry	1.0	759	Geriatric Optometry	1.0
			762	Communication in Optometric Practice with Lab	1.5	761	Public Health Optometry	2.0	761	Public Health Optometry	2.0
	Electives*			Electives*		768	Practice Management Electives*	1.0	768	Practice Management Electives*	1.0
	Total Semester Credits	16.75		Total Semester Credits	16.50		Total Semester Credits	12.25		Total Semester Credits	12.25
Total Third Year Credits											48.50
* Students are required to complete at least 3 hours of electives prior to graduation.											
** Students will rotate through each Specialty Patient Care (Opt 770, 771 and 772) during third year.											
# Students are required to take one semester of 736, either Fall and Spring											
Fourth Professional Year 22-23 Preceptorships											
Session 1: May '22-August '22			Session 2: August '22-November '22			Session 3: November '22-February '23			Session 4: February '23-May '23		
OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits	OPT #	Course Name	Credits
806	Patient Care VIII	11.0	807	Patient Care IX	11.0	808	Patient Care X	11.0	809	Patient Care XI	11.0
827	Web-based Clinical Rounds*	0.50	827	Web-based Clinical Rounds*	-	827	Web-based Clinical Rounds*	-	827	Web-based Clinical Rounds*	-
Total Fourth Year Credits											44.5
Total Credits in the Doctor of Optometry Program											178.50

While we have taught laser procedures, we have recently invested in more in-depth education with the acquisition of a Duet laser and incorporated similar education that is taught at other programs with laser requirements within their state. This extra content was placed in an elective in 2018-19 and has since been moved to our core curriculum.

In order to help provide some further insight into parts of our curriculum (not comprehensive), I have included the course descriptions and calendars for the most recent offerings of various tracks. You can find these as appendices:

Appendix I – Ocular Anatomy Courses

Appendix II – Ocular Disease Courses

Appendix III – Systemic Disease Courses

I hope that you will find that we are teaching to a level that is beyond the scope for Optometric Physicians in Oregon and one that matches those in states with additional advanced procedures. We pride ourselves in the level of education we deliver and it has helped our students who are now across North America and Internationally.

Please do not hesitate to reach out to me directly with any questions related to the issues cited within this letter or otherwise affecting Pacific University College of Optometry. I can be reached at hornfc@pacificu.edu or 503-352-3133.

Sincerely,

Fraser C. Horn, OD, FAAO
Interim Dean
Pacific University College of Optometry
hornfc@pacificu.edu
503-352-3133

Appendix I - Ocular Anatomy Track

Optometry 531 Ocular Anatomy, Physiology, and Biochemistry with Lab - Fall 2019

Course Credit Hours: 3.5

Course Description:

The gross anatomy, fine structure, histology, physiology of the globe and adnexa are presented as well as ocular biochemistry. Laboratory topics are coordinated with the lecture material.

General objectives:

1. To relate the basic concepts of biochemistry to the physiology and photochemistry of ocular structures.
2. To present a comprehensive study of the anatomy, histology, physiology, and embryology of ocular structures.
3. To present the aspects of interrelationships among ocular tissues and structures at both gross and microscopic levels.
4. To present a basis for understanding the structure and function of the eye in the related areas of ocular pathology and ocular pharmacology.

Week	Lecture Topic	Lab
August 26-30	T: Overview of the Visual System	Cow Eye Dissection
	Th: Introduction to Biochemistry	
Sept. 2-6	T: Eyelid A & P	
	Th: Tear Production and Drainage	
Sept. 9-13	T: Tear Biochemistry	Eyelid Histology
	Th: Cornea and Sclera A & P	
Sept. 16-20	T: Cornea and Sclera A & P	
	Th: Corneal Biochemistry	
Sept. 23-27	T: Uveal A & P	Corneal Histology
	Th: Uveal A & P	
Sept 30-Oct 4	T: Uveal A & P	
	Th: Physiology of IOP	
Oct. 7-11	T: Aqueous Biochemistry	Uveal Histology
	Th: Aqueous Biochemistry	
Oct. 14-18	T: Retinal A & P	
	Th: Retinal A & P	
Oct. 21-25	T: Exam #1	
	Th: AAO Break	
Oct 28-Nov 1	T: Retinal A & P	
	Th: Retinal A & P	
Nov. 4-8	T: Retinal Photochemistry	Retinal Histology
	Th: Retinal Photochemistry	
Nov. 11-15	T: Retinal Photochemistry	
	Th: Lens A & P	
Nov. 18-22	T: Lens Biochemistry	Lens Histology
	Th: Exam #2	
Nov. 25-29	T: Lens A & P	
	Th: Thanksgiving	
Dec. 2-6	T: Lens Biochemistry	
	Th: Vitreous A & P	
Mon Dec. 16	FINAL EXAM 8:30-10:30am	

Optometry 532 Anatomy of the Visual System with Laboratory - Spring 2020

Course Credit Hours: 3.0

Course Description:

Ocular circulation and sensory, motor, and autonomic innervation of the visual system; visual pathways and visual field defects, pupillary innervation and pupil defects. Laboratory topics are coordinated with the lecture material.

General objectives:

1. To present the connective tissue aspects of the orbit as they relate to visual function.
2. To present a comprehensive study of the extraocular muscles and their actions.
3. To present the circulatory system as it relates to the eye and associated structures including cranial circulation.
4. To present sensory, motor, and autonomic innervation of the eye and related structures toward a greater understanding of neurological disorders manifested by ocular symptoms.
5. To present a comprehensive study of the visual pathway and explore the cause-effect relationships seen in visual field defects.
6. To present the complexities of the pupillary pathway and the cause of clinical pupil abnormalities.

Optometry 532 Spring 2020 Schedule

Week	Lecture Topic	Lab
January 6-10	M: Embryology	Ocular Embryology
	TH: Embryology	
January 13-17	M: **Patient Care lecture**	
	TH: No class	
January 20-24	M: MLK Day	
	TH: Bones and CT of Orbit (8:00* and 11:00)	
January 27-31	M: Bones and CT of Orbit	Skull & Orbit
	TH: Visual Pathway	
February 3-7	TUES 9-9:55: Visual Pathway	Visual Pathway
	TH: Visual Fields	
February 10-14	TUES 9-9:55: Visual Fields	
	TH: Exam #1	
February 17-21	M: Extraocular Muscles	Visual Fields
	TH: Extraocular Muscles (8:00 and 11:00)	
February 24-28	M: Extraocular Muscles	EOM Model
	TH: No class	
March 2-6	M: Motor Innervation*	Park Three Step
	TH: Motor Innervation	
March 9-13	M: Sensory Innervation	
	TH: Ocular Circulation	
March 16-20	TUES 9-9:55: Ocular Circulation	
	TH: Exam #2	
March 23-27	M: Spring Break	
	TH: Spring Break	
March 30-April 3	M: Autonomic Innervation	Patient Cases
	TH: Autonomic Innervation	
April 6-10	M: Pupillary Innervation*	Patient Cases
	TH: Pupillary Innervation	
April 13-17	M: Pupillary Innervation	
	TH: Pupillary Innervation	

Appendix II - Ocular Disease Courses

OPTOMETRY 533: OCULAR DISEASE I WITH LAB - SPRING 2020

Course Credits: 3.0

Course description

Epidemiology, symptoms, signs, diagnosis, treatment and management of diseases of the eyelids, conjunctiva, cornea, and lacrimal gland. Laboratory includes techniques for the detection, assessment, and treatment of ocular diseases associated with these structures of the eye.

Optometry 533: Ocular Disease I

SPRING 2020

Date	Topic	Lab Topic and Date
January 9 TH	Introduction to lid disease	Week of Jan 6: CASE HISTORY IN DISEASE (221)
January 10 F	Abnormalities of the muscles of the lids: ptosis, blepharospasm, myokemia	
January 16 TH	Abnormalities of the shape and position of lids: entropion, ectropion, trichiasis; coloboma, epicanthus, dermatochalasis	Week of Jan 13: SLIT LAMP RECORDING AND SCALES (221)
January 17 F	Thyroid eye disease	
January 23 TH	Blepharitis: staphylococcal, seborrheic, and angular	Week of Jan 20: NO LAB
January 24 F	QUIZ (5 minutes) Meibomianitis, rosacea, impetigo, erysipelas	
January 30 TH	External hordeolum, internal hordeolum, chalazion; cyst of Moll (sudoriferous cyst); cyst of Zeiss, sebaceous cyst END OF MATERIAL FOR EXAM 1	Week of Jan 27: LITERATURE USE FOR CLINIC (221)
January 31 F	EXAM 1	
February 6 TH	Lacrimal system diseases: dacryocystitis; canaliculitis; punctal anomalies; dacryoadenitis, Sjogren's syndrome	Week of Feb 3: SLIT LAMP LESION, LID EVERSION (316)
February 7 F	Lumps and bumps of the lids: precursors to cancer, benign skin lesions, viral skin lesions	
February 13 TH	Lumps and bumps of the lids: basal cell carcinoma, squamous cell carcinoma, meibomian carcinoma	
February 14 F	Lumps and bumps of the lids: abnormal cellular growth, pigmented lesions, malignant melanoma	Week of Feb 10: SLIT LAMP RECORDING, CULTURE/ PATCH (316)

February 20 TH	Allergic diseases: contact dermatitis; urticaria/angioedema; atopic dermatitis	
February 21 F	Parasitic lid disease: phthiriasis, pediculosis; demodicosis END OF MATERIAL FOR EXAM 2	Week of Feb 17: SLIT LAMP PROFICIENCY TESTING (316)
February 27 TH	Preseptal cellulitis; orbital cellulitis	
February 28 F	EXAM 2	Week of Feb 24: DRY EYE PROCEDURES, CORNEAL SENSITIVITY (316)
March 5 TH	Autoimmune disease- erythema multiforme, pemphigoid, poliosis, vitiligo	
March 6 F	Introduction to conjunctival diseases/ Conjunctival pigmentary changes; conjunctival anomalies	Week of Mar 2: LID HYGIENE, HEAT THERAPY, EPILATION (316)
March 12 TH	Allergic diseases: allergic conjunctivitis	
March 13 F	Bacterial conjunctivitis; chlamydial conjunctivitis	Week of Mar 9: PUNCTAL PLUGS, JONES, DILATION & IRRIGATION (316)
March 19 TH	Hyperacute/gonococcal conjunctivitis	Week of Mar 16: ADVANCED DRY EYE DIAGNOSTICS (221)
March 20 F	Viral conjunctivitis: Herpes zoster	
March 26 TH	SPRING BREAK	Week of Mar 23: NO LABS
March 27 F	SPRING BREAK	
April 2 TH	Herpes zoster; other viral lid disease	Week of Mar 30: SUTURELESS LID LESION TECHNIQUES (221)
April 3 F	Herpes simplex keratitis/dermatitis	
April 9 TH	TBD	Week of Apr 6: PATIENT MODELS (316)
April 10 F	Dry Eye Disease	
April 16 TH	TBD	Week of Apr 13: LAB FINAL (316)
April 17 F	Imaging/OCT of the anterior segment	
April 28 T 9:00-11:00 a.m.	FINAL EXAM	

OPT 631: OCULAR DISEASES II WITH LAB – Fall 2019

Course Credits: 3.0

Course Description

This course is a continuation of epidemiology, symptoms, signs, diagnosis, treatment and management of diseases and trauma of the cornea, episclera, sclera, anterior uvea, ciliary body and crystalline lens. Introduction to posterior segment diseases with an emphasis on the retina.

**OPT 631: OCULAR DISEASE II WITH LAB
Fall 2019**

Date	Topic	Lab Topic and Date*
Aug 27 T	Introduction; Corneal Disease -degenerations, depositions, ICE	Slit lamp routine Review Illums Procedures Lab
Aug 30 F	Corneal Dystrophies-epithelial basement membrane dystrophy, recurrent corneal erosions, stromal dystrophies	
Sep 3 T	Corneal Dystrophies – Fuchs, Posterior Polymorphous Dystrophy; Other Corneal Conditions – pannus, pterygium, IK, RCE	Intro to Clinical Thinking Classroom
Sep 6 F (10-11AM) *OPT 637 from 8-10AM*	Corneal Disease – filamentary, exposure phlyctenular, Thygeson’s, SLK	
Sep 10 T	Bacterial Keratitis	Exophthalmometry Pupil testing and Parks 3 Step Procedures Lab
Sep 13 F	Bacterial Keratitis	
Sep 17 T	Adenoviral Keratitis, Interstitial Keratitis *END OF MATERIAL FOR EXAM 1*	Writing Prescriptions Classroom
Sep 20 F	EXAM 1	
Sep 24 T	Episcleritis, Scleritis	Anterior Segment OCT CL Research Lab
Sep 27 F	Fungal/Protozoan Keratitis	
Oct 1 T	Lens Anomalies	Pachymetry Potential Acuity Testing Case Review Procedures Lab
Oct 4 F	***No class***	

Oct 8 T	Lens/Cataracts	Latisse/Botox/LAS ERs, Your Opinions/Ethics Take Home Lab
Oct 11 F	Anterior Uveitis	
Oct 15 T	Anterior Uveitis	Patient Models Clinic/ODST
Oct 18 F	Anterior Uveitis	
Oct 22 T	Fabry Disease (11:00-11:55 AM) 12-1 PM VIEWING FABRY PATIENTS	ACADEMY MEETING – NO LABS
Oct 25 F	***Academy Meeting – No Classes***	
Oct 29 T	Anterior Uveitis *END OF MATERIAL FOR EXAM 2*	Foreign Body Removal/ Case Review Procedures Lab
Nov 1 F	EXAM 2	
Nov 5 T	Introduction to Retinal Disease	Patient Models Clinic ODST
Nov 8 F	Cataract Surgery Corneal Surgery (10:00-11:50 AM)	
Nov 12 T	OCT/Imaging Fundamentals (Part 1)	Differential Diagnosis of the Red Eye Classroom
Nov 15 F	***OPT 601***	
Nov 19 T	OCT/Imaging Fundamentals (Part 2)	Final Proficiency
Nov 22 F	***OPT 601***	
Nov 26 T	Inflammatory Retinal Disease (Part 1)	NO LABS (Thanksgiving)
Nov 29 F	****Thanksgiving – No Classes****	
Dec 3 T	Inflammatory Retinal Disease (Part 2)	Final Lab Proficiency Procedures Lab
Dec 6 F	Fluorescein Angiography Class	Fluorescein Angiography Class (whole class lab)
Dec 13 F 8:30-10:30AM	Final Exam	127

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OPTOMETRY 633: OCULAR DISEASE III WITH LAB - SPRING 2020

Course Credits: 3.0

Course Description

Epidemiology, symptoms, signs, diagnosis, treatment and management of diseases of, and trauma to, the choroid, retina, macula, vitreous, optic nerve and visual pathway, including glaucoma and visual field anomalies. Laboratory includes techniques for detection, assessment, and treatment of ocular diseases associated with, and trauma to, these structures of the eye.

**Optometry 633: Ocular Disease III
SPRING 2020**

Date	Topic	Lab Topic and Date
January 7 (2 hr) TU	Intro/Diagnosis of Glaucoma	Week of Jan 6: BIO/High Plus (Procedures Lab)
January 10 (1 hr) F	Treatment of Glaucoma – Part 1 (1 hr)	
January 14 (2 hr) TU	Hereditary, Retinal & Choroidal Disease	Week of Jan 13: BIO/High Plus (Procedures Lab)
January 17 (1 hr) F	Hereditary, Retinal & Choroidal Disease	
January 21 (2 hr) TU	Treatment of Glaucoma – Part 2 (1 hr) Secondary Glaucomas –Part 1 (1hr)	Week of Jan 20: Ultrasound/OCT (Clinic)
January 24 (1 hr) F	Secondary Glaucomas –Part 2 (1hr)	
January 28 (2 hr) TU	Optic Nerve Abnormalities	Week of Jan 27: Ultrasound/OCT (Clinic)
January 31 (1 hr) F	Optic Nerve Abnormalities	
February 4 (2 hr) TU	Optic Nerve Abnormalities END OF EXAM 1 MATERIAL	Week of Feb 3: Optos (Clinic)
February 7 (1 hr) F	AMD	
February 11 (2 hr) TU	AMD	Week of Feb 10: Optos (Clinic)
February 14 (1 hr) F	AMD	
February 18 (2 hr) TU	Retinal Vascular Disease Intro	Week of Feb 17: Open Lab Practice (Procedures Lab)
February 21 (1 hr) F	EXAM 1	

February 25 (2 hr) TU	Retinal Vascular Diseases	Week of Feb 24: Patient models (Clinic)
February 28 (1 hr) F	Endocrine, Systemic & Hematologic Disorders of the Retina – Part 1 (1hr)	
March 3 (2 hr) TU 10:00-10:55AM	Endocrine, Systemic & Hematologic Disorders of the Retina – Part 2 (1hr) Degenerative Diseases of the Posterior Pole – Part 1 (1hr) Degenerative Diseases of the Posterior Pole – Part 2 (1hr)	Week of Mar 2: Patient models (Clinic)
March 6 (1 hr) F	***OPT 638 Midterm Exam***	
March 10 (2 hrs) TU	Diabetic Eye Disease	Week of Mar 9: Macular Integrity Testing (Procedures Lab)
March 13 (1 hr) F	Diabetic Eye Disease END OF MATERIAL FOR EXAM 2	
March 17 (2 hrs) TU	EXAM 2 (1hr) Ocular Tumors (1hr)	Week of Mar 15: Visual Fields independent study
March 20 (1 hr) F	Ocular Tumors	
March 24 – 27	SPRING BREAK	
March 31 (2 hr) TU	Vitreous, Peripheral Retina Basics (1hr) Assessment of Peripheral Retinal Disorders (1hr)	Week of Mar 30: Grand rounds (Classroom)
April 3 (1 hr) F	Assessment of Peripheral Retinal Disorders (1hr)	
April 7 (2 hr) TU	Assessment of Peripheral Retinal Disorders (1hr) Ocular Trauma (1hr)	Week of Apr 6: Final proficiency
April 10 (1 hr) F	***NO CLASS – CSPE***	
April 14 (2 hr) TU	Ocular Trauma	
April 17 (1 hr) F	OCT Review	
April 21 TU 9:00AM-11:00AM	FINAL EXAM	

Optometry 733: Ocular Disease IV - Summer 2019

Course Credits: 3.0

COURSE DESCRIPTION:

Coverage of advanced concepts in glaucoma, diabetes, neuro-ophthalmology and retinal disease including macular abnormalities, retinal detachment and vascular disease. Laboratory includes refinement of techniques for evaluation of the optic nerve and retina such as scleral indentation and 3 mirror fundus evaluations. In addition, methods of evaluation and documentation such as extended ophthalmoscopy, ocular photography and scanning lasers are included.

COURSE OBJECTIVES:

The student will be able to determine appropriate clinical management for each of the following:

- 1) Glaucoma suspect

- 2) Glaucoma patient
- 3) Patient with macular disease
- 4) Patient with neuro-ophthalmologic disease
- 5) Patient with ocular vascular disease
- 6) Patient with peripheral retina changes
- 7) Diabetic patient

Tentative Schedule

Lecture Date	“Lectures”	Lab Week of	Lab
May 7 Tue	Course Introduction Landmark Glaucoma Studies (1hr) Landmark AMD Studies (1hr)	May 6	BIO Enhancement
May 14 Tue	Assessment of the Glaucoma Suspect	May 13	BIO Enhancement
May 21 Tue	Assessment of the Glaucoma Suspect Continued	May 20	Assessment of ONH and Peripheral Retina: High Plus and Gonioscopy Review
May 28 Tue	Neuro-ophthalmology:	May 27	No class or labs (Memorial Day)
Jun 4 Tue	Midterm Examination (Covers material including week of Jun 3 lecture and laboratory)	Jun 3	Assessment of ONH and Peripheral Retina: High Plus and Gonioscopy Review
Jun 11 Tue	Assessment of the Glaucoma Suspect Continued	Jun 10	Mydriatic and Non-Mydriatic Photography / Anterior and Posterior Segment
Jun 18 Tue	Diagnosis and Management of Glaucoma Suspects and Glaucoma Patients	Jun 17	Scanning Laser Interpretation and Cases, PHP / GDX
Jul 25 Tue	Diagnosis and Management of Glaucoma Suspects and Glaucoma Patients Continued	Jun 24	Visual Field Interpretation and Cases
Jul 2 Tue	Management of Glaucoma Suspects and Glaucoma Patients Continued/ Management of Angle Closure Glaucoma	Jul 1	NO LAB
Jul 9 Tue	Diagnosis and Management of Patient with Ocular Vascular Disease	Jul 8	YAG Laser/OCT Imaging
Jul 16 Tue	Retinal Diseases	Jul 15	BIO with Scleral Indentation
Jul 23 Tue	Optic Nerve and Visual Field Cases	Jul 22	BIO with Scleral Indentation
Jul 30 Tue	OCT Angiography/Autofluorescence	Jul 29	Make-up lab if necessary
Aug 8 Thu	Comprehensive Final Exam (8:30-10:30AM)	Aug 5	

Optometry 735 Applied Ocular Therapeutics 2019

Course Credits: 1.0

Course Description

The use of medications in the treatment of ocular disease, including adnexal, anterior segment, and posterior segment disorders. Emphasis is placed on the clinical thinking process for determining the most appropriate management of a particular disease, emphasizing the therapeutic drug or drugs for effective treatment.

Date	Topic
Aug 27	Legal Aspects/Prescription Writing
Sep 3	Dry Eye Treatment
Sep 10	Ocular Allergy Treatment
Sep 17	Bacterial Ocular Infection Treatment
Sep 24	Viral Ocular Infection Treatment
Oct 1	Uveitis Management
Oct 8	MIDTERM EXAM
Oct 15	Glaucoma Treatment
Oct 22	Glaucoma Treatment
Oct 29	***NO CLASS***
Nov 5	Ocular Surgical Co-Management
Nov 12	Eyelid Procedures
Nov 19	Oral Therapeutics
Nov 26	Drugs for Addressing Ocular Pain
Dec 3	Dry Eye Treatment
Dec 13 (FRI) 1:30-3:30 PM	FINAL EXAM (Jefferson 223-224)

Opt. 755: Special Topics: Laser Procedures for Eye Care - Spring 2020 [*This will be integrated within Opt 733*]

COURSE DESCRIPTION:

Evaluating and assessing pre-operative ophthalmic and general medical indications for anterior segment optometric laser procedures, including surgical-based anatomy/physiology, contraindications, risks, and benefits. Managing systemic and ocular complications that may be associated with optometric laser procedures, including anesthesia. Obtaining appropriate informed consent, and providing acute and long-term postoperative care. Classroom instruction and laboratory simulation-based training using various surgical models, with objective structured assessment of technical skills.

COURSE/LAB LEARNING OBJECTIVES:

At the conclusion of this course, students should understand:

- 1) The basics physics, hazards, and safety concerns regarding ophthalmic lasers
- 2) The various laser tissue interactions
- 3) The basic operation of the following lasers: NdYAG and argon
- 4) The following procedures: YAG capsulotomy, peripheral iridotomy/iridoplasty, and laser trabeculoplasties
- 5) The common postoperative complications associated with anterior segment laser procedures
- 6) The utilization of neodymium YAG and argon lasers for miscellaneous procedures

7) To understand the medico-legal responsibilities of anterior segment laser therapies

Week	Topic	Lab
Week 1 Fri Jan 10 (9-11am)	Course Introduction: clinic-legal aspects, scope of practice, informed consent (1 hr) AND Laser physics, hazard and safety, laser tissue interactions (1hr) Groups 2 and 3	SLT Lab Group 1 Dr. Ooley & Dr. Yudcovitch
Week 2 Fri Jan 17 (9-11am)	Course Introduction: clinic-legal aspects, scope of practice, informed consent (1 hr) AND Laser physics, hazard and safety, laser tissue interactions (1hr) Groups 1 and 4	SLT Lab Group 2 Dr. Ooley & Dr. Yudcovitch
Week 3 Fri Jan 24 (9-11am)	YAG: LPI/Capsulotomy/Vitreolysis (1 hr) AND ALT, MLT, SLT (1hr) Groups 1 and 4	SLT Lab Group 3 Dr. Ooley & Dr. Yudcovitch
Week 4 Fri Jan 31 (9-11am)	YAG: LPI/Capsulotomy/Vitreolysis (1 hr) AND ALT, MLT, SLT (1hr) Groups 2 and 3	SLT Lab Group 4 Dr. Ooley & Dr. Yudcovitch
Week 5 Fri Feb 7 (9-11am)	No lecture. Lab make-up time.	Make-up lab if needed All Drs.
Week 6 Fri Feb 14 (9-11am)	FINAL CLASSROOM AND LAB EXAM (9-10:55am)	----

Appendix III - Systemic Disease Track

OPT 638 – Systemic Disease and Pharmacology III

OPT-638 Catalog Course Description:

This course is designed to teach students how to perform those components of the physical exam that will help diagnose the underlying systemic causes of ocular disease. Students are taught and then expected to perform evaluations of the head, neck and throat; cardiovascular; pulmonary; and, neurologic systems in a guided lab. Hands-on instruction in providing intramuscular, intravenous and periocular injections is included as well as biopsy techniques and wound closure with sutures. 2 credits.

COURSE LEARNING OBJECTIVES:

Opt 638 lectures will guide the student to:

1. Learn to choose and properly administer the most appropriate components of the physical examination based upon patient age, ability, and presentation.
2. Understand characteristics of the most commonly used physical examination techniques, and be able to interpret results from each procedure.
3. Know how to communicate with patients while performing the appropriate components of the physical examination to optimize testing/treatment environment.
4. Develop management/referral plans for patients who have abnormal results on components of the physical examination.
5. Understand and identify the roles of allied health care professionals in the treatment of patients with systemic disorders.

Opt 638 labs will guide the student to:

1. Correctly administer, score, and interpret commonly used procedures for assessment and treatment of common systemic disorders.
2. Effectively communicate instructions with patients while performing appropriate aspects of the physical exam.
3. Interpret, summarize, and understandably communicate systemic diagnostic findings and recommendations to the patient.
4. Interpret, summarize, and understandably communicate systemic diagnostic findings and recommendations to non-optometrists via charting.

LECTURE AND LAB SCHEDULE OPT. 638, SPRING 2020

LECTURE DATE	LECTURE TOPIC	<u>WEEK OF LAB</u>	LAB TOPIC	REQUIRED EQUIPMENT WHICH MUST BE BROUGHT TO LAB
01/7/20	Vital signs evaluation	01/06/20	<u>No labs due to no lecture yet</u>	

01/14/20	Screening neurologic evaluation	01/13/20	Vital signs	Stethoscope and sphygmomanometer with cuffs
01/21/20	Cranial nerves	01/20/20	Screening Neurologic	
01/28/20	Ear examination	01/27/20	Cranial nerves	Transilluminator
02/04/20	Head, neck, nose, sinus, and throat exams	02/03/20	Ear	Otoscope and transilluminator
02/11/20	Cardiovascular and peripheral vascular examinations	02/10/20	Head, neck, nose, throat, sinus	
02/18/20	Pulmonary evaluation	02/17/20	Cardio and peripheral vascular	Stethoscope and sphygmomanometer with cuffs
02/25/20	<u>Infectious Disease Control, and in-office glucometry</u>	02/24/20	Pulmonary	Stethoscope
03/03/20	Midterm Exam through in- office glucometry	03/02/20	Glucometry	
03/10/20	Biopsies and wound closure with sutures	03/09/20	Proficiency	Stethoscope, transilluminator, sphygmomanometer with cuffs, Otoscope
03/17/20	<u>Injections (non-ocular: IM, SQ, IV)</u>	03/16/20	Biopsies and suturing	
03/24/20	Spring Break	03/23/20	Spring Break	
03/31/20	Epi-pen administration, Injectable meds for ODs	03/30/20	Injections (IV, IM, SubQ), Epi-pen	
04/07/20	<u>Injections (periocular: SQ lids, subconj., intralesional)</u>	04/06/20	CSPE (no lab)	
04/14/20	No lecture	04/13/20	Periocular injections, IV model	
04/24/20	Final Exam 12:00pm-2:00pm			

Keyword: PUCO Syllabi

Opt. 537:
Systemic Disease I
Spring 2020

INSTRUCTORS:

	Dr. Caroline Ooley	Dr. Hannah Shinoda	Dr. Amiee Ho
E-mail:	ooleyc@pacificu.edu	shinoda@pacificu.edu	amieeho@pacificu.edu
Office:	Jeff 242	Jeff 124	Jeff 126
Office Hours:	Google docs (link is on Moodle)	Email for appointment	Email for appointment

COURSE DESCRIPTION:

This course is the first semester of a two semester course that covers the etiology, pathophysiology, diagnosis, and management (including pharmaceutical) of the major disorders and diseases affecting the body. The course will include discussions on inflammatory disorders, endocrine disorders, renal disease, rheumatologic disorders, oncology, hematology, cardiovascular disease, pulmonary disorders, neurologic disorders, headaches, psychiatric disorders, GI and liver disorders, infectious disorders, urgent care, and domestic violence.

COURSE GOAL:

The student will have an increased ability to provide appropriate and thorough care to patients seeking optometric services by understanding systemic conditions that may influence the patient's ocular status, ability to function, psychological status, and quality of life. In addition, the student will be able to provide more comprehensive care to his or her patients by understanding the pharmacological considerations related to these conditions.

COURSE SCHEDULE:

Tuesday 8:00 – 8:55, Thursday 9:00 – 9:55, Friday 9:00 – 9:55

REQUIRED TEXTBOOKS:

CM9= Clinical Medicine, 9th Edition (2017). Kumar and Clark: Electronic copy available via PU library. Go to <http://pacificu.libguides.com/content.php?pid=120123&sid=1034320> and scroll down to Kumar & Clark's Clinical Medicine (2017).

RECOMMENDED TEXT:

B = Basic pathology, 10th ED. Kumar: Electronic copy available via PU library. Go to <http://pacificu.libguides.com/content.php?pid=120123&sid=1034320> and scroll down to Robbins Basic Pathology (Kumar) (10th Ed., 2018).

P = Lippincott's Illustrated Reviews Pharmacology (6th ed.) On reserve at the library.

TENTATIVE SCHEDULE

*Quiz on this day

Date	Lecture Jefferson 221	Lecturer	Reading (Pages, Chapters or Sections)
Tues. Jan. 7 Thurs. Jan. 9	Course Intro Basic Inflammation/ Cellular Response to Disease	Dr. Ooley	CM9: Chapter 8 B: Chapter 3 P: Chapter 30, 36, 47
Fri. Jan. 10 Tues. Jan. 14 Thurs. Jan. 16* Fri. Jan 17 Tues. Jan. 21 Thurs. Jan. 23 Fri. Jan. 24 Tues. Jan. 28 Thurs. Jan 30* Fri. Jan. 31	Cardiovascular Disease	Dr. Ho	CM9: Chapter 23: Cardiovascular disease: as appropriate B: Chapter 11: Heart: as appropriate
Tues. Feb. 4	Examination # 1 (Inflammation and Cardiology)		
Thurs. Feb. 6 Fri. Feb. 7 Tues. Feb. 11 Thurs. Feb 13* Fri. Feb 14 Tues. Feb 18 Thurs. Feb 20 Fri. Feb 21	Endocrine Disease	Dr. Shinoda	CM9: Chapters 26, 27 B: Chapter 19 P: Chapters 24, 25
Tues. Feb 25 at 8am* and 10:05-11am No class Thurs. Feb. 27 (opt 503 during this time)	Oncology	Dr. Ooley	CM9: Chapter 17 through principles of radiation therapy, common solid tumor treatment through end of chapter 17 B: Chapter 6 P: Chapter 4, 47 (cyclosporine and corticosteroids)

Fri. Feb. 28	Renal Disease	Dr. Shinoda	CM9: Chapter 20 Start of chapter through glomerulonephritis; Hypertension and the kidney through renal hypertension; Renal Calculi and Nephrocalcinosis; Urinary tract infection through renal transplantation; Tumours of the kidney and genitourinary tract through urothelial tumours. B: Chapter 13 P: Chapter 18 and 47
Tues. March 3	Examination #2 (Endocrine, Oncology with a few questions from Inflammation and Cardiovascular Disease)		
Thurs. March 5 Fri. March 6 Tues. March 10 Thurs. March 12 Fri. March 13* Tues. March 17	Renal Disease	Dr. Shinoda	As above
Thurs. March 19 Fri. March 20	Hematology	Dr. Ooley	CM9: Chapter 16, Chapter 17 (hematological malignancies through myeloma) B: Chapter 12 and related topics in Chapter 4 P: Chapter 22, 33
March 23-27	Spring Break		
Tues. March 31 Thurs. April 2*	Hematology	Dr. Ooley	As above
Fri. April 3 Tues. April 7 Thurs. April 9	Rheumatology	Dr. Ooley	CM9: Chapter 18 B: Chapter 5 (Autoimmune diseases), 10 (section on vasculitis), 21 P: Chapter 36
Fri. April 10	Examination # 3 (Renal and Hematology with a few review questions from previous material)		
Tues. April 14 Thurs. April 16* Fri. April 17	Rheumatology	Dr. Ooley	As above
Mon. April 20 12-2pm	Comprehensive Final Exam covering all the material in the course with more emphasis on Rheumatology		

COURSE OBJECTIVES: (SP13.2)

At the completion of the course the student will have a solid foundation and be able to apply the following knowledge to patient care:

1. The student will demonstrate a basic understanding of the etiology, diagnosis and management of inflammation and common hypersensitivity disorders as needed to improve optometric care.
2. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common renal disorders as needed to improve optometric care.
3. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common cardiovascular disorders as needed to improve optometric care.
4. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common oncologic disorders as needed to improve optometric care.
5. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common endocrine disorders as needed to improve optometric care.
6. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common hematologic disorders as needed to improve optometric care.
7. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common rheumatologic disorders as needed to improve optometric care.

COURSE MATERIALS:

Course handouts and additional written or web materials can be found on Moodle. We try to audio tape our lectures and those audio files can be found in our Box in the folder.

All materials, including PowerPoint presentations, taped lectures, etc. prepared and/or delivered in this course are for your individual use only. Photography, audio or video recordings of lectures or presentations may only be made with consent from the presenter. Sharing any course elements, in whole or in part, other than with those currently enrolled in this course is considered a violation of professional ethics, the Code of Academic and Professional Conduct, and may be a violation of copyright laws. Unauthorized sharing of even the most basic material may be regarded as unprofessional behavior. If you have questions or concerns relating to this issue, please contact the faculty member for clarification.

COURSE SPECIFIC TUTOR:

At least one course specific tutor is available for this class. Please take advantage of this resource. Announcements will be made when further information about time and place becomes available.

LAPTOP COMPUTER USE DURING CLASS:

Please be aware that we believe the professional use of laptop computers in the classroom precludes their use in any activity not directly related to the classroom discussion. Please check e-mail, peruse web sites and do computer work for other classes outside of class. Your attention to what is happening in class will be to everyone's benefit. At times you may be asked to close your laptops and are expected to do so promptly. Inappropriate use of laptop computers during class is viewed to be a violation of the Code of Academic and Professional Conduct and may be reported to the appropriate Associate Dean. The professors reserve the right to ask anyone who is using his or her computer inappropriately to leave the classroom. The professors also reserve the right to change their policy about

computer use at any time during the semester if laptops are used for other than classroom activities. Thank you for your cooperation with this issue and for your continued respectful and appropriate use of the technology.

ATTENDANCE and TESTING POLICY:

Attendance at all lectures is expected and role may be taken. There will be quizzes, three examinations, and a final in this course weighted as indicated below. Quizzes will be administered in class throughout the semester. The purpose of the quizzes is to reinforce retention of the material and to encourage continuous studying throughout the semester. The number of quizzes throughout the semester may vary depending on student performance on exams and class participation.

- Quizzes: 5%
- Midterm 1: 20%
- Midterm 2: 20%
- Midterm 3: 20%
- Final exam: 35%

The midterms will contain questions pertaining to material previously tested during the semester. The final will be comprehensive with more emphasis on material not yet tested. Each examination will include a question on the root word document found on Moodle. The exam format will be primarily multiple choice questions as found on NBEO including some which require choosing multiple correct answers. If multiple answers are required, the student must select all answer choices correctly to get full credit. It is possible that the quizzes or tests may include a small number of fill-in or matching questions. Testing will occur over all material presented in lecture, on any handouts, and any required reading assignments. Typically, generic medication names will be used on the examination. If there is something unique about a brand name medication, you may also be expected to know it. Abbreviations used in class may be used on the examination. Interpretation of exam questions is part of the student learning assessment process. We do NOT answer questions during the exam. If you believe a question or answer to be incorrect, please write your concerns on the cover sheet and indicate the question number.

Attendance for the examinations is expected and examinations are only given once, at the scheduled time. It is expected that you will be on time for the test. If you are late for an exam and someone has already left the room for any reason, you will not be allowed to take the test. If you are unable to take a test for any other reason, you must inform Dr. Ooley prior to the beginning of the affected examination. If for any circumstance you miss a midterm, the grade for the missed exam will be determined from the score received on questions in subsequent exams pertaining to the material covered on the missed examination. A course grade that is determined under these special circumstances may not be top adjusted at the end of the course. It is expected that all students will sit for the final examination at the time it is scheduled. Students will be asked to completely clear their workspace during tests. Only items that are clearly identified by the proctor are permitted on the desk. All phones and electronic devices will be turned off and put away out of sight. You will also be expected to remove brimmed caps and hats. When you are thinking while taking a test, please take care to look up at the ceiling and not around the room. The expectation is that you will complete your exam before you leave the room, except for extenuating circumstances. After leaving the exam room the students must not congregate in the hallway outside the classroom. Please respect your classmates' need for a quiet testing environment. Exams will NOT be returned to the student and questions are not released. Exams can be reviewed by appointment with the professor who has the exam. Notation, collection, unauthorized access, and/or distribution of exam questions or parts of questions for any purpose, including providing an advantage (direct or indirect) for subsequent exams will not be tolerated. Any

violations of the above policy will be reported to the Academic and Professional Standards committee and can result in failure of the exam, failure of the class, suspension, or dismissal from the program.

GRADING POLICY:

Grades will be determined on an adjusted top score (ATS) basis. The instructors will never be stricter than the percentages listed below.

- 92 – 100% of the top score = A
- 84 – 91.9% of the top score = B
- 75 – 83.9% of the top score = C
- 67 – 74.9% of the top score = D*
- < 67 % of the top score = F*

*Students who receive a grade of less than a C will require remediation. Students receiving a substandard grade with a total course percent less than 60% of the ATS will be required to retake the course.

The actual raw percentage that you receive will be posted for each exam. No adjusting of the actual scores is done in terms of reporting percentages for any scores. Once the course is complete, the top raw score in the class overall will be considered as the ATS. To determine your grade in the class, divide your actual raw percentage score by the ATS raw percentage. If your score is at least 92% of the ATS, you would receive an A for the course. Here is an example:

If the overall raw ATS for the course was 98.2 % and Joe Example had a raw score of 74.6% overall, Joe Example would divide his score by the ATS: $74.6/98.2 = 75.96\%$. He would then look at the grading chart above. As can be seen from the chart, although Joe Example's raw score is less than 75%, based on the ATS Joe would earn a C in the course because he has a score that falls in the range of 75 – 83.9% of the ATS.

CODE OF ACADEMIC CONDUCT:

As part of a graduate professional program, and in preparation for a lifelong career in optometry, it is expected that students will foster an attitude of self-responsibility, accountability, and self-directed learning. This includes acting with others and oneself in a respectable, ethical, and professional manner. Please make sure you have read and are aware of the Code of Academic Conduct distributed to you by the College of Optometry. We believe in it strongly and will expect you to follow it. We do not release examinations or test questions, so the use of any copies or questions or information related to an exam is a violation of the Code of Academic Conduct. Be aware that cheating of any kind is unprofessional behavior and may result in failure of the course irrespective of scores received. In addition, your action will be reported to the appropriate Associate Dean as described in the APS Policies and Procedures Manual and may result in dismissal from the College of Optometry.

NBEO DISCLAIMER:

This course is intended to assist students in the mastery of knowledge needed of a Doctor of Optometry. While this course should help you prepare for future licensing exams, nothing in this course including the lectures and discussions, coursework, study guides, teaching notes and the like uses, and should not be believed or understood to use, actual confidential exam items from licensing exams. All materials in this course have been prepared in good faith to comply with the highest ethical standards of the profession.

LEARNING SUPPORT SERVICES:

Services and accommodations are available to students covered under the Americans with Disabilities Act. If you require accommodations in this course, you must immediately contact the Office of Accessibility and Accommodation Services at X2171 or e-mail LSS@pacificu.edu. They will meet with you, review the documentation of your disability and discuss the services Pacific offers and any accommodations you require for specific courses. It is extremely important that you begin this process at the beginning of the semester. Please do not wait until the first test or paper.

MANDATORY REPORTING:

In accordance with Oregon's Mandatory Reporting law (ORS 419B.005), as an employee of a Higher Educational Institution, the instructors are obligated to report any abuse of a minor (individual under 18 years of age) which they witness or which may be disclosed to me.

The provisions of this syllabus may be added to, deleted from, or changed if, in the opinion of the instructor, it becomes necessary to do so to achieve course objectives. The student will be notified of any such changes.

Opt. 637: Systemic Disease II

Fall 2020

COURSE DESCRIPTION:

This course is the second semester of a two-semester course that covers the etiology, pathophysiology, diagnosis, and management (including pharmaceutical) of the major disorders and diseases affecting the body.

The entire course will include discussions on inflammatory disorders, endocrine disorders, renal disease, rheumatologic disorders, oncology, hematology, cardiovascular disease, pulmonary disorders, neurologic disorders, headaches, psychiatric disorders, GI and liver disorders, infectious disorders, urgent care, and domestic violence.

COURSE GOAL:

The student will have an increased ability to provide appropriate and thorough care to patients seeking optometric services by understanding systemic conditions that may influence the patient's ocular status, ability to function, psychological status, and quality of life. In addition, the student will be able to provide more comprehensive care to his or her patients by understanding the pharmacological considerations related to these conditions.

COURSE SCHEDULE:

Monday, Tuesday, Thursday. Asynchronous: 1 hour lecture recordings.

COURSE CREDIT HOURS: 3

REQUIRED TEXTBOOKS:

CM = Clinical Medicine, 9th Edition (2017). Kumar and Clark: Electronic copy available via PU library. Go to <http://pacificu.libguides.com/content.php?pid=120123&sid=1034320> and scroll down to Kumar & Clark's Clinical Medicine (2017).

RECOMMENDED TEXT:

B = Basic pathology, 10th ED. Kumar: Electronic copy available via PU library. Go to <http://pacificu.libguides.com/content.php?pid=120123&sid=1034320> and scroll down to Robbins Basic Pathology (Kumar) (10th Ed., 2018).

P = Lippincott's Illustrated Reviews Pharmacology (6th ed.) On reserve at the library.

TENTATIVE SCHEDULE

*Quiz on this day

Date	Lecture Jefferson 224	Lecturer	Reading (Pages, Chapters or Sections)
Mon. Aug 24 Tues. Aug 25 Thurs. Aug. 27 Mon. Aug 31*	Course Introduction GI and Liver	Dr. Shinoda	CM: Chapter 13, 14, 15 as appropriate B: Chapter 15 & 16 as appropriate P: Chapter 31
Tues. Sept 1 Thurs. Sept 3 Mon. Sept 7 (Labor Day no classes) Tues. Sept 8* Thurs. Sept 10 Mon. Sept 14 Tues. Sept 15* Thurs. Sept 17 Mon. Sept 21	Pulmonary Disease: obstructive lung disease, Sleep apnea, restrictive lung disease, pulmonary infections	Dr. Ho	CM: Chapter 24: as appropriate B: Chapter 13 as appropriate
Tues. Sept 22	Chlamydia Gonorrhea Syphilis HIV and AIDs COVID-19	Dr. Shinoda	CM: Chapter 12 STIs and HIV B: Chapter 18 section on STD, Chapter 5 section on AIDs P: Chapter 38-40 (Meds that were discussed in class), Chapter 45: I and V to end of chapter
Thurs. Sept 24	Examination # 1 GI, Liver, Pulmonary Disease (8/24/20 through 9/21/20)		

<p>Mon. Sept 28 Tues. Sept 29 Thurs. Oct 1* Mon. Oct 5 Tues. Oct 6</p>	<p>Infectious disease continued</p>	<p>Dr. Shinoda</p>	<p>As above</p>
<p>Thurs. Oct 8* Mon. Oct 12 Tues. Oct 13</p>	<p>Lyme disease Rubella, Measles Toxoplasmosis/toxocariasis</p>	<p>Dr. Ooley</p>	<p>CM: Chapter 11: sections on Lyme disease, Rubella and Measles B: Chapter 21: Lyme arthritis P: Chapter 39: I and II, Chapter 38: I and III CM: Chapter 11: sections on Toxoplasmosis, toxocariasis P: Chapter 42: I-IIA-C, Chapter 43: I and VI</p>
<p>Thurs. Oct 15* Mon. Oct 19 Tues. Oct 20</p>	<p>Psychiatric Disorders</p>	<p>Dr. Shinoda</p>	<p>CM: chapter 23 as appropriate P: chapters 10, 11, 15 as appropriate</p>
<p>Thurs Oct 22</p>	<p>Examination #2 (Infectious disease, psych (9/22/20 through 10/19/20) with a few questions from GI, liver, and pulmonary)</p>		
<p>Mon. Oct 26 Tues Oct 27 Thurs Oct 29</p>	<p>Headaches</p>	<p>Dr. Ooley</p>	<p>CM: chapter 21 section on headaches P: chapter 36 VII</p>
<p>Mon. Nov 2* Tues. Nov 3 Thurs. Nov 5 Mon. Nov 9* Tues. Nov 10 Thurs. Nov. 12 Mon. Nov 16* Tues. Nov. 17</p>	<p>Neurologic Disorders: Dementia, Parkinson and Huntington disease, epilepsy, head trauma and infection, stroke disorders, multiple sclerosis, myasthenia gravis, Idiopathic intracranial hypertension (8)</p>	<p>Dr. Ooley</p>	<p>CM: chapter 21: Neurology as appropriate B: chapter 23 P: chapter 4,8,12</p>
<p>Thurs. Nov 19</p>	<p>Urgent Care</p>	<p>Dr. Shinoda</p>	<p>None</p>

Fri. Nov 20	Examination #3 (Psych, Headaches, Neuro (10/20/20 through 11/17/20) with a few questions from GI, liver, pulmonary, psych, and infectious disease)		
Mon. Nov 23	No Class		
Tues. Nov. 24	Child Abuse and Domestic Violence	Dr. Ooley	None
End of Course Content			
Final Examination TBD	Comprehensive Final Exam covering all the material in the course.		

COURSE OBJECTIVES:

At the completion of the course the student will have a solid foundation and be able to apply the following knowledge to ensure optimum care for patients seen in optometry practice:

1. The student will demonstrate a basic understanding of the etiology, diagnosis and management of pulmonary disorders likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)
2. The student will demonstrate a basic understanding of the etiology, diagnosis and management of infectious disorders which cause disorders likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)
3. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common neurologic disorders likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)
4. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common headaches likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)
5. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common psychiatric disorders likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)
6. The student will demonstrate a basic understanding of the characteristics and management of patients suffering from domestic violence which are likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)
7. The student will demonstrate a basic understanding of the etiology, diagnosis and management of common GI and liver disorders likely to be encountered in optometric practice. (MGO 1.1, MGO 1.2, MGO 2.1, SP13.5)

COURSE MATERIALS:

Course handouts and additional written or web materials can be found on Moodle. If audio/video recordings are too large for Moodle, we will upload these to our course BOX folder.

All materials, including PowerPoint presentations, taped lectures, etc. prepared and/or delivered in this course are for your individual use only. Photography, audio or video recordings of lectures or presentations may only be made with consent from the presenter. **Sharing any course elements, in whole or in part, other than with those currently enrolled in this course is considered a violation of professional ethics, the Code of Academic and Professional Conduct, and may be a violation of copyright laws.** Unauthorized sharing of even the most basic material may be regarded as unprofessional behavior. If you have questions or concerns relating to this issue, please contact the faculty member for clarification.

COURSE SPECIFIC TUTOR:

At least one course specific tutor is available for this class. Please take advantage of this resource. Announcements will be made when further information about time and place becomes available.

VIEWING and TESTING POLICY:

Viewing all lectures is expected. There will be quizzes, three examinations, and a final in this course weighted as indicated below. Quizzes will be administered online throughout the semester. The window to complete the quiz will be indicated by the instructor that week. You will typically have 2 days to complete the quiz. The purpose of the quizzes is to reinforce retention of the material and to encourage continuous studying throughout the semester. The number of quizzes throughout the semester may vary depending on student performance on exams and class participation.

Quizzes: 15% (from 5%)

Midterm 1: 20%

Midterm 2: 20%

Midterm 3: 20%

Final exam: 25% (from 35%)

The midterms will contain questions pertaining to material previously tested during the semester. The final will be comprehensive covering all material discussed in the course. Each examination will have a question regarding the root word document found on Moodle. The exam format will be primarily multiple choice questions as found on NBEO including some which require choosing multiple correct answers. If multiple answers are required, the student must select all answer choices correctly to get full credit. It is possible that the tests may include a small number of fill-in or matching questions. Testing will occur over all material presented in lecture, on any handouts, and any required reading assignments. Typically, generic medication names will be used on the examination. If there is something unique about a brand name medication, you may also be expected to know it. Abbreviations used in class may be used on the examination. Interpretation of exam questions is part of the student learning assessment process. We do NOT answer questions during the exam. If you believe a question or answer to be incorrect, please write your concerns on the cover sheet and indicate the question by describing its content.

Attendance for the examinations is expected and examinations are only given once, at the scheduled time. It is expected that you will be on time for the test. If you are late for an exam and someone has already left the room for any reason, you will not be allowed to take the test. If you are unable to take a test for any reason, you must inform the instructors prior to the beginning of the affected examination. If for any circumstance you miss a midterm, the grade for the missed exam will be determined from the score received on questions in subsequent exams pertaining to the material covered on the missed examination. A course grade that is determined under these special circumstances may not be top adjusted at the end of the course. It is expected that all students will sit for the final examination at the time it is scheduled. 148

Students will be asked to completely clear their workspace during tests. Only items that are clearly identified by the proctor are permitted on the desk. All phones and electronic devices will be turned off and put away out of sight. You will also be expected to remove brimmed caps and hats. When you are thinking while taking a test, please take care to look up at the ceiling and not around the room. The expectation is that you will complete your exam before you leave the room, except for extenuating circumstances. After leaving the exam room the students must not congregate in the hallway outside the classroom. Please respect your classmates' need for a quiet testing environment. Exams will NOT be returned to the student and questions are not released. Exams can be reviewed by appointment. Notation, collection, unauthorized access, and/or distribution of exam questions or parts of questions for any purpose, including providing an advantage (direct or indirect) for subsequent exams will not be tolerated. Any violations of the above policy will be reported to the Academic and Professional Standards committee and can result in failure of the exam, failure of the class, suspension, or dismissal from the program. We recognize that the final exam for the Fall of 2020 will be given virtually and students are still expected to adhere to the same academic and ethical standards as an in-class exam.

GRADING POLICY:

Grades will be determined on an adjusted top score (ATS) basis. The instructors will never be stricter than the percentages listed below.

92 – 100% of the top score = A

84 – 91.9% of the top score = B

75 – 83.9% of the top score = C

67 – 74.9% of the top score = D*

< 67 % of the top score = F*

*Students who receive a grade of less than a C will require remediation. Students receiving a substandard grade with a total course percent less than 60% of the ATS will be required to retake the course.

Remediation process for a substandard grade is described in the Academic and Professional Standards Committee (APS) manual.

The actual raw percentage that you receive will be posted for each exam. No adjusting of the actual scores is done in terms of reporting percentages for any scores. Once the course is complete, the top raw score in the class overall will be considered as the ATS. To determine your grade in the class, divide your actual raw percentage score by the ATS raw percentage. If your score is at least 92% of the ATS, you would receive an A for the course. Here is an example:

If the overall raw ATS for the course was 98.2 % and Joe Example had a raw score of 74.6% overall, Joe Example would divide his score by the ATS: $74.6/98.2 = 75.96\%$. He would then look at the grading chart above. As can be seen from the chart, although Joe Example's raw score is less than 75%, based on the ATS Joe would earn a C in the course because he has a score that falls in the range of 75 – 83.9% of the ATS.

CLASS RECORDING AND STUDENT PRIVACY PROTECTIONS:

The format of this class *may* involve the recording of “live” lectures, reviews, and discussion sessions that may be posted for subsequent viewing by students and/or course instructors. These recordings are for educational purposes only and will be made available only to students enrolled in the course, those who have direct teaching responsibilities within the course, or administrators who may require access to ensure that the course runs smoothly.

To safeguard protections provided by the Family Educational Rights and Privacy Act (FERPA), any class recordings where an active student participant can be identified will be placed in a password protected location where only enrolled students, course instructors, and any persons with an educational role in the course have access (e.g., Box, Moodle). All efforts will be made to limit access to the recordings through limiting the option to download the recording. No distribution of material is acceptable without the written consent of the student(s) recorded, as this violates student privacy rights. This includes, but is not limited to, the downloading and distribution of material outside of those outlined above. Students likewise should respect their peers' privacy rights and refrain from distributing or making available any part of recorded sessions that records participation by students other than themselves.

POLICY ON UNAUTHORIZED RECORDING OF CLASS OR LABORATORY:

Any unauthorized media capture in any format is a violation of the College's Code of Academic and Professional Conduct and will be handled accordingly. EXAMPLE: From www.pacificu.edu/about-us/offices/student-conduct/student-handbook/student-code-conduct: "...recordings of lectures or presentations may only be made with consent from the presenter."

DISTRIBUTION RIGHTS OF COURSE MATERIALS:

All materials, including verbal presentations, PowerPoint files, study materials, etc., prepared, recorded and/or delivered in this course are for **currently-enrolled students only**. All course materials and presentations are copyrighted. Sharing any course elements, in whole or in part, other than to those currently enrolled in this course is considered a violation of professional ethics, and may easily violate copyright laws. Unauthorized recording, transcribing, or other information-collection method constitutes unprofessional behavior and will be addressed accordingly. Even sharing the most basic material outside of those in the course can qualify as unprofessional behavior. If you have questions or concerns relating to this issue, please contact the faculty member for clarification.

LAPTOP COMPUTER USAGE IN CLASS:

Recognize that all academic and professional conduct issues apply to the use of laptop computers, including the appropriate use of laptops during class time. Inappropriate use of laptops by students during class can interfere with the education of those around them. Therefore, the in-class use of laptops by students to engage in any distracting uses outside of class activities during lecture times is unacceptable and is viewed as a violation of the College's Code of Academic and Professional Conduct and will be reported to the Academic and Professional Standards Committee for adjudication.

Please note that there may be times when the members of the class may be directed to close their laptop computers; when asked to do so, prompt cooperation by all is expected.

Online assessment via a learning management system (e.g., Moodle, ExamSoft) abides by the Policies and Procedures for Online Testing.

ACADEMIC AND PROFESSIONAL CONDUCT:

As part of a graduate professional program, and in preparation for a lifelong career in optometry, it is expected that students will foster an attitude of self-responsibility, accountability, and self-directed learning. This includes acting with others and oneself in a respectable, ethical, and professional manner. Please make sure you have read and are aware of the Code of Academic Conduct distributed to you by the College of Optometry. We believe in it strongly and will expect you to follow it. We do not release examinations or test questions, so the use of any copies or questions or information related to an exam is a violation of the Code of Academic Conduct. Be aware that cheating of any kind is unprofessional behavior and may result in failure of the course irrespective of scores received. In addition, your action will be reported to the appropriate Associate Dean as described in the

Academic and Professional Standards (APS) Committee Policies and Procedures Manual and may result in dismissal from the College of Optometry.

The student is expected to complete this course while observing all college and university policies of attendance, participation and conduct. If a violation of the College's Code of Academic and Professional Conduct occurs in this course, the student will receive a score of zero, "0," for the related assignment, examination or activity. In addition, the violation may result in a failing grade, "F," for the course, which in turn may jeopardize a student's progression to subsequent coursework and/or assignment to patient care activity. Any such violation will be addressed in accordance with the Code. College policy specifies that plagiarism or cheating by any student will result in, at minimum, assignment of a failing grade for the course, and may lead to suspension or dismissal from the College. Suspected plagiarism or cheating will be reported immediately and confidentially to the Associate Dean of Academic Programs, per the process described in the APS Committee Policies and Procedures Manual. Potential sanctions that may be imposed by the APS Committee include Warning, Remediation, Probation, and Dismissal from the College.

OFFICE OF ACCESSIBILITY AND ACCOMMODATION SERVICES:

Services and Accommodations are available to students covered under the Americans with Disabilities Act. If you require accommodations in this course, you must immediately contact The Office of Accessibility and Accommodation Services via phone at 503-352-2171 (x2171 on campus) or email at LSS@pacificu.edu. A representative from the Office will meet with you, review the documentation of your disability, and discuss the services Pacific offers and any accommodations you require for specific courses. It is extremely important that you begin this process at the beginning of the semester. Please do not wait until the first test or assignment as this process takes time to complete.

NBEO DISCLAIMER:

This course is intended to assist students in the mastery of knowledge needed of a Doctor of Optometry. While this course should help you prepare for future licensing exams, nothing in this course including the lectures and discussions, coursework, study guides, teaching notes and the like uses, and should not be believed or understood to use, actual confidential exam items from licensing exams. All materials in this course have been prepared in good faith to comply with the highest ethical standards of the profession. Throughout this course, your instructor(s) may indicate a point of emphasis for later NBEO study and preparatory work. This does not reflect knowledge of actual test items, but is a suggested area of focus based entirely upon the NBEO content outline.

MANDATORY REPORTING:

In accordance with Oregon's Mandatory Reporting law (ORS 419B.005), as an employee of a Higher Educational Institution, the instructors are obligated to report any abuse of a minor (individual under 18 years of age) which they witness or which may be disclosed to me.

The provisions of this syllabus may be added to, deleted from, or changed if, in the opinion of the instructor, it becomes necessary to do so to achieve course objectives. The student will be notified of any such changes.

OPT 540 ESSENTIALS OF MEDICAL PHARMACOLOGY I

COURSE SYLLABUS FALL 2020

CLASS HOURS:	Weds 2:00 – 2:55 pm	Room: Asynchronous online Moodle Course
Instructors:		
Email:		
Office:	Individual Zoom sessions available upon request	
Office Phone		
Office Hours:	Once fully open: Feel free to stop by my office anytime. I am typically in my office Monday through Thursday 8:30 am – 3:00 pm. You can also contact me via email or cellphone for an appointment Due to the COVID-19 situation and personal family health risk categories: I will be physically on campus on a very limited basis. I will however, be available via email, Zoom conference, phone, or text. <u>Please</u> use the above cell number for immediate contact or email for less urgent and we can set up a meeting.	

Course Description: *(as described in the University course catalog)*

This is the first of a three-semester course. The objective of the course is to teach students essential concepts in medical pharmacology including ocular pharmacology. Foundation of pharmacology is the emphasis in the first part of course. Drug absorption, distribution, metabolism and elimination are discussed in addition to mechanisms of drug action. Introduction to autonomic nervous system and its pharmacology is also covered. Selected agents and classes of agents are studied in detail. 1 credit.

Course Objectives: Upon completion of this course students should be able to:

Objective One:

Demonstrate a working knowledge of systemic medication as it applies to the current optometric profession [MGO 1.1, 2.1]

- Learning Goals for Objective One: (SP 13.1, SP13.2, SP13.5)
 - Recognize the generic names and some brand names of systemic medications
 - Know the mechanisms of actions for different classes of drugs
 - Identify common systemic and ocular side effects of select drugs
 - Apply knowledge to appropriately select drugs in the treatment and management of systemic disease

Objective Two:

Demonstrate a working knowledge of ophthalmic medication as it applies to primary eye care [MGO 1.1, 2.1]

- Learning Goals for Objective Two (SP 13.1, SP13.2, SP13.5)
 - Recognize the generic names and brand names of ophthalmic medications
 - Know the mechanisms of actions for different classes of ophthalmic drugs
 - Identify common systemic and ocular side effects of select drugs
 - Apply knowledge to appropriately select drugs in the treatment and management of ocular disease

Schedule:

Note: Schedule may change as needed

Week	Date	Topic
Pharmacology Background & Concepts		
1	26-Aug	Drug discovery / Bringing drugs to market / Drug categories / Drug administration
2	2-Sep	Pharmacokinetics (PK) LIR Chapter 1
3	9-Sep	Pharmacokinetics (PK) LIR Chapter 1
4	16-Sep	Pharmacodynamics (PD) (Online QUIZ I will send additional information) LIR Chapter 2
5	23-Sep	Pharmacodynamics (PD) LIR Chapter 2
Anesthetics		
6	30-Sep	General and local anesthetic LIR Chapter 13
7	7-Oct	General and local anesthetic LIR Chapter 13
Drugs that Affect Autonomic / Peripheral Nervous System		
8	14-Oct	Adrenergic Agonists Drugs LIR Chapter 3 and 6
9	19-Oct	Exam (Date for material cut off will be announced)
10	28-Oct	Adrenergic Antagonist Drugs LIR Chapter 7
11	4-Nov	Cholinergic Agonist Drugs

		LIR Chapter 4
12	11-Nov	Cholinergic Antagonist Drugs LIR Chapter 5
13	18-Nov	Cholinergic Antagonist Drugs LIR Chapter 5
14	25-Nov	Thanksgiving Break
		Anti-infective Drugs
15	4-Dec	On-line finalization of term

Attendance Policy

Attendance is expected, however, in-class attendance will not be taken

Required equipment and materials: None

Required Reference Materials:

Lippincott's Illustrated Reviews: Pharmacology, 7th Edition (REQUIRED)

Richard A. Harvey; Michelle A. Clark; Richard Finkel; Jose A. Rey; Karen Whalen

Recommended Reference Materials:

Clinical Ocular Pharmacology, 5th Edition

Jimmy D. Bartlett, OD, DOS, ScD and Siret D. Jaanus, PhD, LHD (available via PU Library)

Basic & Clinical Pharmacology, 12e

Bertram G. Katzung, Susan B. Masters, Anthony J. Trevor (available via PU Library)

Evaluation and Assessment

- Examinations:
 - There will be one midterm written exam and one written final exam.
 - Format: Multiple Choice, True/False, and/or Short Answers all using ExamSoft
- Quizzes/Assignments:
 - These will be optional and at the discretion of the instructor.
 - They could be distributed throughout the term with or without notice.

- They may consist of:
 - In-class online quizzes and/or assignments,
 - Outside class projects (either individual or team-based learning projects)
- Final grades are determined as a composite of all exams, assignments, and any quiz scores.
- Letter grades in the course will be based on the total points possible.
- Grades are assigned on the following basis:

Grade	Percentage of ATS
A	93.0-100%
A-	92.9% - 92%
B+	91.9% - 91%
B	90.9% - 84%
B-	83.9% - 83%
C+	82.9% - 82%
C	81.9% - 75%
D	70.0% -74%
F	< 69%

- An adjusted top score (ATS) will be used in adjusting the grading scale to account for overall performance by the class.
 - The ATS will be calculated by averaging the top 4 scores in the course, and will be used to adjust the grading scale.
- Remediation process for a substandard grade is described in the APS manual.
 - If a student receives a sub-standard grade, the student’s academic standing will be determined in accordance with the APS manual. This includes, but is not limited to, the remediation policy, Academic Warning/Probation, and a possible Academic Review. Any necessary course remediation plans will be developed after the outcomes of deliberations by the Academic and Professional Standards Committee.

Class Recordings and Student Privacy Protections:

The format of this class may involve the recording of “live” lectures, reviews, and discussion sessions that may be posted for subsequent viewing by students and/or course instructors. These recordings are for educational purposes only and will be made available only to students enrolled in the course, those who have direct teaching responsibilities within the course, or administrators who may require access to ensure that the course runs smoothly.

To safeguard protections provided by the Family Educational Rights and Privacy Act (FERPA), any class recordings where an active student participant can be identified will be placed in a password protected location where only enrolled students, course instructors, and any persons with an educational role in the course have access (e.g., Box, Moodle). All efforts will be made to limit access to the recordings through limiting the option to download the recording. No distribution of material is acceptable without the written consent of the student(s) recorded, as this violates student privacy rights. This includes, but is not limited to, the downloading and distribution of material outside of those outlined above. Students likewise should respect their peers' privacy rights and refrain from distributing or making available any part of recorded sessions that records participation by students other than themselves.

Policy on Unauthorized Recording of Class or Laboratory:

Any unauthorized media capture in any format is a violation of the College's Code of Academic and Professional Conduct and will be handled accordingly. EXAMPLE: From www.pacificu.edu/about-us/offices/student-conduct/student-handbook/student-code-conduct: "...recordings of lectures or presentations may only be made with consent from the presenter."

Distribution Rights of Course Materials:

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Laptop Computer Usage in Class

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Office of Accessibility and Accommodation Services

Services and Accommodations are available to students covered under the Americans with Disabilities Act. If you require accommodations in this course, you must immediately contact The Office of Accessibility and Accommodation Services via phone at 503-352-2171 (x2171 on campus) or email at LSS@pacificu.edu. A representative from the Office will meet with you, review the documentation of your disability, and discuss the services Pacific offers and any accommodations you require for specific courses. It is extremely important that you begin this process at the beginning of the semester. Please do not wait until the first test or assignment as this process takes time to complete.

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Mandatory reporting

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OPT 541 ESSENTIALS OF MEDICAL PHARMACOLOGY II

COURSE SYLLABUS SPRING 2020

Course Description: *(as described in the University course catalog)*

Second semester of a three part course. The objective of the course is to teach students essential concepts in medical pharmacology including ocular pharmacology. Systemic pharmacology is the emphasis of the second part of course. The course will include discussions on the medical pharmacological management of inflammatory disorders, endocrine disorders, renal disease, rheumatologic disorders, oncology, hematology, cardiovascular disease, pulmonary disorders, neurologic disorders, pain management, psychiatric disorders, gastrointestinal disorders, infectious disorders, and dermatological disorders. Selected agents and classes of agents are studied in detail. 1 credit.

Course Objectives: Upon completion of this course students should be able to:

Objective One:

Demonstrate a working knowledge of systemic medication as it applies to the current optometric profession [MGO 1.1, 2.1]

- Learning Goals for Objective One: (SP 13.1, SP13.2, SP13.5)
 - Recognize the generic names and some brand names of systemic medications
 - Know the mechanisms of actions for different classes of drugs
 - Identify common systemic and ocular side effects of select drugs
 - Apply knowledge to appropriately select drugs in the treatment and management of systemic disease

Objective Two:

Demonstrate a working knowledge of ophthalmic medication as it applies to primary eye care [MGO 1.1, 2.1]

- Learning Goals for Objective Two (SP 13.1, SP13.2, SP13.5)
 - Recognize the generic names and brand names of ophthalmic medications
 - Know the mechanisms of actions for different classes of ophthalmic drugs
 - Identify common systemic and ocular side effects of select drugs
 - Apply knowledge to appropriately select drugs in the treatment and management of ocular disease

Syllabus Addendum:

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(<https://pacificu.box.com/s/0js4hte81djqmce8lg099vlc6kv17fb>).

Schedule:

Note: Schedule may change as needed

Week	Date	Topic
Anti-infective Drugs		
1	Jan 8	Antimicrobial Introduction
		LIR Chapter 28
2	Jan 15	Cell Wall Inhibitors: Sulfonamides / Penicillin / Cephalosporin
		LIR Chapter 29
3	Jan 22	Protein Synthesis Inhibitors: Tetracyclines/Macrolides/Aminoglycosides
		LIR Chapter 30
4	Jan 29	Fluoroquinolones / Folic Acid Antagonists
		LIR Chapter 31
Endocrine System		
5	Feb 5	Diabetes Drugs
		LIR Chapter 24
Renal Drugs		
6	Feb 12	Diuretics Drugs
		LIR Chapter 17
Cardiovascular Drugs		
7	Feb 19	Antiarrhythmic / Antianginal
		LIR Chapter 19, 20
8	Feb 26	Exam ONE (awaiting Exam Czar to confirm date)
9	March 4	Antihypertensive Drugs Part I
		LIR Chapter 16
10	March 11	Antihypertensive Drugs Part II
		LIR Chapter 16
11	March 18	Hyperlipidemia Drugs
		LIR Chapter 22
12	March 25	NO Class - SPRING BREAK
Oncology Drugs		
14	April 1	Oncology Drugs / Chemotherapy

		LIR Chapter 35
Anti-inflammatory Drugs – Steroids		
15	April 8	Steroids Part I
		LIR Chapter 26
16	April 15	Steroids Part II
		LIR Chapter 26

Attendance Policy

Attendance is expected, however, in-class attendance will not be taken

Required equipment and materials: None

Required Reference Materials:

Lippincott's Illustrated Reviews: Pharmacology, 7th Edition (REQUIRED)

Richard A. Harvey; Michelle A. Clark; Richard Finkel; Jose A. Rey; Karen Whalen

Recommended Reference Materials:

Clinical Ocular Pharmacology, 5th Edition

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Basic & Clinical Pharmacology, 12e

Bertram G. Katzung, Susan B. Masters, Anthony J. Trevor (available via PU Library)

Evaluation and Assessment

- Examinations:
 - There will be one midterm written exam and one written final exam.
 - Format: Multiple Choice, True/False, and/or Short Answers all using ExamSoft
- Quizzes/Assignments:
 - These will be optional and at the discretion of the instructor.
 - They could be distributed throughout the term with or without notice.
 - They may consist of:
 - In-class online quizzes and/or assignments,
 - Outside class projects (either individual or team based learning projects)
- Final grades are determined as a composite of all exams, assignments, and any quiz scores.

- Letter grades in the course will be based on the total points possible.
- Grades are assigned on the following basis:

Grade	Percentage of ATS
A	93.0-100%
A-	92.9% - 92%
B+	91.9% - 91%
B	90.9% - 84%
B-	83.9% - 83%
C+	82.9% - 82%
C	81.9% - 75%
D	70.0% -74%
F	< 69%

- An adjusted top score (ATS) will be used in adjusting the grading scale to account for overall performance by the class.
 - The ATS will be calculated by averaging the top 4 scores in the course and will be used to adjust the grading scale.
- Remediation process for a substandard grade is described in the APS manual.
 - If a student receives a sub-standard grade, the student’s academic standing will be determined in accordance with the APS manual. This includes, but is not limited to, the remediation policy, Academic Warning/Probation, and a possible Academic Review. Any necessary course remediation plans will be developed after the outcomes of deliberations by the Academic and Professional Standards Committee.

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Students are expected to complete at least one independent learning assignment per course.

Encouragements and strategies for the development of Information Literacy

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“Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. An information literate individual is able to:

- Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one’s knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal, and social issues surrounding the use of information, and access and use the information ethically and legally”

Mandatory reporting

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OPT 640 ESSENTIALS OF MEDICAL PHARMACOLOGY III

COURSE SYLLABUS FALL 2019

Course Description: *(as described in the University course catalog)*

This is the third semester of a three part course. The objective of the course is to teach students essential concepts in medical pharmacology including ocular pharmacology. Systemic pharmacology is the emphasis of the third part of course. The course will continue discussions on the medical pharmacological management of inflammatory disorders, endocrine disorders, renal disease, rheumatologic disorders, oncology, hematology, cardiovascular disease, pulmonary disorders, neurologic disorders, pain management, psychiatric disorders, gastrointestinal disorders, infectious disorders, and dermatological disorders. Selected agents and classes of agents are studied in detail. 1 credit.

Course Objectives: Upon completion of this course students should be able to:

Objective One:

Demonstrate a working knowledge of systemic medication as it applies to the current optometric profession [MGO 1.1, 2.1]

- Learning Goals for Objective One: (SP 13.1, SP13.2, SP13.5)

- Recognize the generic names and some brand names of systemic medications
- Know the mechanisms of actions for different classes of drugs
- Identify common systemic and ocular side effects of select drugs
- Apply knowledge to appropriately select drugs in the treatment and management of systemic disease

Objective Two:

Demonstrate a working knowledge of ophthalmic medication as it applies to primary eye care [MGO 1.1, 2.1]

- Learning Goals for Objective Two (SP 13.1, SP13.2, SP13.5)
 - Recognize the generic names and brand names of ophthalmic medications
 - Know the mechanisms of actions for different classes of ophthalmic drugs
 - Identify common systemic and ocular side effects of select drugs
 - Apply knowledge to appropriately select drugs in the treatment and management of ocular disease

Syllabus Addendum:

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(<https://pacificu.box.com/s/0js4hte81djqmce8lg099vlc6kv17fb>).

Schedule:

Note: Schedule may change as needed

Week	Date	Topic
		Anti-inflammatory / Analgesic Drugs
1	27-Aug	Analgesic Part I (Opioids) LIR Chapter 14
2	3-Sep	Analgesic, Anti-inflammatory and Antipyretic Part II (NSAID) LIR Chapter 36
3	10-Sep	Clinical Management of Pain
		Systemic Systems Drugs
4	17-Sep	Respiratory Drugs – Asthma, COPD and Cough LIR Chapter 29
5	24-Sep	Respiratory Drugs – Allergic and Antihistamines LIR Chapter 30

6	1-Oct	Gastrointestinal Drugs LIR Chapter 31
7	8-Oct	Dermatological Drugs LIR Chapter 34
8	15-Oct	Exam
Anti-infective Drugs		
9	22-Oct	Antiviral Drugs LIR Chapter 45
10	29-Oct	Antimycobacterial Drugs and Anthelmintic Drugs LIR Chapter 41 and 44
11	5-Nov	Antifungal Drugs and Antiprotozoal Drugs LIR Chapter 42 and 43
CNS Drugs		
12	12-Nov	CNS stimulants LIR Chapter 16
13	19-Nov	Anxiolytic and Hypnotic Drugs LIR Chapter 9
14	26-Nov	Antidepressants and Antipsychotic Drugs Part I LIR Chapter 10 and 11
15	3-Dec	Antidepressants and Antipsychotic Drugs Part II LIR Chapter 10 and 11

Attendance Policy

Attendance is expected, however, in-class attendance will not be taken

Required equipment and materials: None

Required Reference Materials:

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Richard A. Harvey; Michelle A. Clark; Richard Finkel; Jose A. Rey; Karen Whalen

Recommended Reference Materials:

Clinical Ocular Pharmacology, 5th Edition

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Basic & Clinical Pharmacology, 12e

Bertram G. Katzung, Susan B. Masters, Anthony J. Trevor (available via PU Library)

Evaluation and Assessment

- Examinations:
 - There will be one midterm written exam and one written final exam.
 - Format: Multiple Choice, True/False, and/or Short Answers all using ExamSoft
- Quizzes:
 - These will be optional and at the discretion of the instructor.
 - They could be distributed throughout the term with or without notice.
 - Format: Multiple Choice, True/False, and/or Short Answers all using ExamSoft
 - IF quizzes are conducted they will not exceed 10% of the overall point total
- Project:
 - Pharmacology Clinical Drug Quick Reference Project
 - See Moodle Course for complete description
 - Maximum points: 10
- Final grades are determined as a composite of all exams, projects, and any quiz scores.
- Letter grades in the course will be based on the total points possible.
- Grades are assigned on the following basis:

Grade	Percentage of ATS
A	93.0-100%
A-	92.9% - 92%
B+	91.9% - 91%
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- An adjusted top score (ATS) will be used in adjusting the grading scale to account for overall performance by the class.
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Independent Lifelong Learning

Students are expected to complete at least one independent learning assignment per course.

Encouragements and strategies for the development of Information Literacy

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Keyword: ICO Laser Course

V740 - Ocular Disease V: Lasers, Injections, and Minor Surgical Procedures
2020 Syllabus

Introduction

This course will introduce the student to advanced clinical procedures and treatment modalities used to evaluate and treat the health of the anterior segment of the eye and its surrounding tissues.

Students will attend a two hour lecture/lab section each week. Additional lab sections may be scheduled to ensure that material is adequately covered.

Lecture (OPT 105)MON 6:00 PM – 8:00 PM
Lab (OPT 106)THURS EVE AS NECESSARY

Course Instructors



Course Description

OPT V740 - Ocular Disease V: Lasers, Injections, and Minor Surgical Procedures (2 credits)

Prerequisites: V746 (Ocular Disease III: Neuro-Optometry)
V 788 (Optometry Clinic)
Current enrollment in V749 (Ocular Disease IV: Applied Ocular Therapeutics)

This course will introduce the student to advanced clinical procedures and treatment modalities used to evaluate and therapeutically treat the health of the anterior segment of the eye and its surrounding tissues.

Course Learning Objectives

At the conclusion of this course you should be able to perform the following procedures, and be familiar with their indications and contra-indications. Additionally, you will learn how to appropriately code for these procedures.

- 01. Safety
 - A. OSHA
 - B. Universal/Standard Precautions
 - C. Equipment disinfection techniques
 - D. Anaphylaxis and other office emergencies

02. Injections

At the end of this module and its associated 2 hour lab, you should be able to:

- A. Describe characteristics of gloves used in medical care, proper techniques to put them on and remove them while maintaining sterility, and proper disposal of medical waste

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- B. Describe characteristics of syringes, including volume, attachment types, and safety mechanisms
 - C. Describe characteristics of needles, including gauge, bevel, length, and attachment type
 - D. Describe indications, contra-indications, and how to perform one-hand-scoop technique for recapping a needle that has not been in contact with human tissue/fluid
 - E. Know how to properly dispose of a used syringe/needle
 - F. Know indications, contra-indications, technique, and management of complications for intra-muscular injection
 - G. Know indications, contra-indications, technique, and management of complications for sub-cutaneous injection
 - H. Know indications, contra-indications, technique, and management of complications for intra-venous injection
 - I. Know indications, contra-indications, technique, and management of complications for peri-ocular injections, including sub-conjunctival injection
 - J. Properly and safely perform sub-cutaneous, intra-muscular, intra-venous, and sub-conjunctival injections on a human subject (a student colleague) under the supervision of a faculty evaluator
 - K. Know characteristics (including, but not limited to, pharmacology, indications, contra-indications, mechanism of action, adverse reactions) of common medications used by ECPs for purposes of sub-cutaneous, intra-venous, peri-ocular, and sub-conjunctival injection. Much of this will involve review and amplification of material that you've already learned in V642 - General Pharmacology (4 credit hours) and V646 - Ocular Pharmacology (2 credit hours)
 - L. Based on reading the following article - *Johnstone J, Hobbins S, Parekh D, O'Hickey S. Excess subcutaneous tissue may preclude intramuscular delivery when using adrenaline autoinjectors in patients with anaphylaxis. Allergy 2015; 70: 703–706* - be able to
 - i) state two predictors for increased skin-to-muscle depth at the antero-lateral thigh
 - ii) describe the recommendation for determining the ultimate needle length at the point-of-prescription.
 - iii) state the type of injection used for AAI (adrenaline auto-injector),
 - iv) describe the reason this method is preferred over sub-cutaneous injection
 - v) state the most common location for AAI injection.
03. Wound healing and closure
- A. Anatomy of lids/skin
 - B. Wound healing
 - C. Closure techniques
 - i) Tape
 - ii) Glue
 - iii) Sutures
 - iv) Staples
 - D. Lab on interrupted sutures on model "skin"

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- 04. Minor surgical techniques
 - A. Background
 - B. Excision of lumps and bumps of the lid and adnexae
 - i) Chalazion – incision and curettage
 - ii) Papilloma
 - iii) Fluid-filled cysts
 - C. Post-operative care, potential complications and medico-legal aspects of ocular surgical techniques
 - D. Lab on chalazion incision and curettage, papilloma removal
- 05. Ocular laser therapies
 - A. Background
 - B. Laser treatment of opacification of the posterior capsule after cataract surgery
 - i) Posterior capsulotomy (Nd:YAG laser)
 - C. Laser treatment for angle closure glaucoma
 - i) Laser peripheral iridotomy (LPI)
 - D. Laser therapy for open angle glaucoma
 - i) Argon laser trabeculoplasty (ALT)
 - ii) Selective laser trabeculoplasty (SLT)
 - E. Post-operative care, potential complications, and medico-legal aspects of ocular laser therapies
 - F. Lab on Nd:YAG capsulotomy, LPI, and SLT on model eyes
- 06. Other Techniques
 - A. Epi-luminescence microscopy
 - B. Radio-frequency surgery
 - C. Emergency surgical procedures

Course Text(s)

There is currently no text for this course. Course materials will be made available to you via Canvas. The schedule of topics, quizzes, tests, assignments, labs, and other course items is available in Canvas > Syllabus

General Course Policies

01. Policies in effect

In addition to the policies outlined below, all policies of the school (as outlined in the current IUSO Bulletin) and university are in effect. You are required to be familiar with these policies.

02. Mandatory attendance

In order to be awarded the certification necessary to practice advanced procedures in states that allow it, you must attend all course activities, and you must be on time for all course activities. Absence or lateness constitutes a reason to not award the certificate.

As soon as you are aware that you will miss a required course item (test, lab, quiz, etc.), you must notify the Office of Student Administration. Within one week of missing a required course item (test, lab, quiz,

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etc.), you must provide the Director of Student Administration and the course instructor with valid written documentation of the reason for the absence. Within one week of missing a required course item (test, lab, quiz, etc.), you must email the course instructor asking to make up the required course item (test, lab, quiz, etc.) The course instructor will evaluate the situation and determine if a make-up is allowed. Failure to adhere to this policy will result in a 5% reduction in your final grade for each missed item.

03. Academic dishonesty

Anyone who cheats on any graded item will receive a zero ("0") score for that item. All other policies of the school and university, including immediate dismissal, will be applied as appropriate.

04. Sexual Misconduct and Title IX

Title IX and IU's Sexual Misconduct Policy prohibit sexual misconduct in any form, including sexual harassment, sexual assault, stalking, and dating and domestic violence. If you have experienced sexual misconduct, or know someone who has, the University can help.

If you are seeking help and would like to speak to someone confidentially, you can make an appointment with:

The Sexual Assault Crisis Services (SACS) at (812) 855-8900 (counseling services)

Confidential Victim Advocates (CVA) at (812) 856-2469 (advocacy and advice services)

IU Health Center at (812) 855-4011 (health and medical services)

It is also important that you know that Title IX and University policy require me to share any information brought to my attention about potential sexual misconduct, with the campus Deputy Title IX Coordinator or IU's Title IX Coordinator. In that event, those individuals will work to ensure that appropriate measures are taken and resources are made available. Protecting student privacy is of utmost concern, and information will only be shared with those that need to know to ensure the University can respond and assist.

I encourage you to visit stopsexualviolence.iu.edu to learn more.

05. Disability Services for Students (DSS)

Every attempt will be made to accommodate qualified students with disabilities (e.g. mental health, learning, chronic health, physical, hearing, vision neurological, etc.).

You must have established your eligibility for support services through the appropriate office that services students with disabilities. Note that services are confidential, may take time to put into place and are not retroactive; captions and alternate media for print materials may take three or more weeks to get produced.

Please contact Disability Services for Students at <http://disabilityservices.indiana.edu> or 812-855-7578 as soon as possible if accommodations are needed. The office is located on the third floor, west tower, of the Wells Library, Room W302. Walk-ins are welcome 8 AM to 5 PM, Monday through Friday. You can also locate a variety of campus resources for students and visitors that need assistance at: <http://www.iu.edu/~ada/index.shtml>.

06. Bias Reporting

As your instructor, one of my responsibilities is to create a positive learning environment for all students. Bias incidents (events or comments that target an individual or group based on age, color, religion, disability, race, ethnicity, national origin, sex, gender, gender identity, sexual orientation, marital status or veteran status) are not appropriate in our classroom or on campus.

What should you do if you witness or experience a bias incident? Report it by submitting a report online (biasincident.indiana.edu) or calling the Dean of Students Office (812-855-8187).

07. Grade disputes

You have one week after a grade is posted in Canvas to dispute that grade. An email to me with your concerns will start the process.

08. Tests and quizzes

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Unless explicitly stated otherwise, tests and quizzes are closed book, and should reflect your recall of the material.

For tests and quizzes, you are responsible for all information provided in lectures, labs, and other assigned materials throughout the course, as well as pertinent material from other courses.

09. Other assignments

Other assignments may be given during the course. No make-ups will be allowed for any of these items.

10. Medication policy

You are responsible for reading and complying with the policies outlined in "V740 Policies – Practice Partners and Use of Diagnostic Medications". This document is available online on Canvas > Files > Syllabus and Policies > Practice and Medication Policy.pdf.

11. Electronic access policy

You are responsible for reading and complying with the policies outlined in the "IU School of Optometry Building Electronic Access Agreement". This document is available online on Canvas > Files > Syllabus and Policies > IU School of Optometry Building Access Agreement.pdf.

12. Copyrightable materials

Course materials may contain copyrighted content, which qualifies for educational use under the Educational Fair Use Doctrine.

Further posting, publication, reproduction or distribution of this material, or of any original material created by course instructors (including tests, quizzes, notes, etc.), requires the author's permission. Failure to obtain this permission is a violation of federal copyright law.

Anyone who reproduces test or quiz questions in any way will face penalties - up to dismissal from the program.

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Grading Policies

The grading scale for the course is below.

Cutoff (%)	Grade
97	A+
94	A
91	A-
88	B+
84	B
81	B-
78	C+
75	C
72	C-
69	D+
66	D
63	D-
< 63	F

Online and In Class Quizzes (10% of your final grade)

01. There will be a number of online and in-class quizzes over the lecture, lab and reading material that will count as one written examination. Note that these quizzes are cumulative; i.e., material from earlier in the course may be covered.
02. A Z-score may be used if deemed necessary by the course instructor.

Written Examinations (90% of your final grade)

01. There is one (1) final written examination over all of the lecture, lab and reading material.
02. A Z-score may be used if deemed necessary by the course instructor.

Syllabus is subject to change

LSPE CONTENT OUTLINE

LASER SECTION		
Content/Skills	Multiple-Choice Portion* 50 items 60 minutes	Clinical Skills Portion 40 minutes
Selective Laser Trabeculoplasty	35% (approx. 18 items)	31%
Laser Peripheral Iridotomy	30% (approx. 15 items)	31%
YAG Capsulotomy	35% (approx. 18 items)	38%

*The multiple-choice exam can include, but is not limited to, the following:

- Complications/Contraindications
- Laser Settings
- Pre- and Post-Op Ophthalmic Drugs
- Indications for Treatment
- Treatment Protocols
- Follow-Up Protocols

SURGICAL SECTION			
Content	Multiple-Choice Portion* 50 items 60 minutes	Skills	Clinical Skills Portion 30 minutes
Suturing	19% (approx. 10 items)	Suturing	30%
Eyelid Surgery	31% (approx. 16 items)		
Injections	24% (approx. 12 items)	Chalazion Excision	70%
Anesthesia	26% (approx. 13 items)		

*The multiple-choice exam can include, but is not limited to, the following:

- Surgical Site Infections
- Neoplasia Screening
- Biopsies and Report Interpretation
- Complications/Contraindications
- Indications for Treatment
- Follow-Up Protocols
- Universal Precautions
- Topical and Injectable Anesthetics
- Intramuscular Injections
- Subconjunctival Injections
- Intralesional Injections
- Management of Lid Lesions

Keyword: OK Post Grad Course

NSUOCO Advanced Procedures Program

32 hours of COPE approved CME

The two courses being offered by Northeastern State University Oklahoma College of Optometry in this Advanced Procedures Program cover the diverse training needs of optometric physicians pursuing credentials for advanced technical skills.

Surgical Procedures for the Optometric Physician presents the educational and technical skills necessary for optometric surgical procedures performed in a primary eye care setting. Topics include a review of facial and ocular anatomy, surgical instruments, asepsis, ocular lesions, anesthesia, injections including intradermal, intramuscular, sub-conjunctival, and intravenous, wound management, basic suture technique, and techniques for performing in-office optometric surgical procedures. The indications for, alternatives to, and risks/benefits of all techniques are discussed, as well as management of possible complications. Multiple hours of video grand rounds of actual procedures performed by optometrists will be shown. In addition to lecture and video grand rounds, the course includes a hands-on workshop.

Laser Therapy for the Anterior Segment includes the training and opportunity to learn the technical skills required for performing anterior segment laser procedures. Topics include laser physics, laser tissue interactions, gonioscopy, and an in-depth discussion of the most-commonly performed clinical anterior segment laser procedures including YAG laser capsulotomy, laser peripheral iridotomy (PI), green laser trabeculoplasty (GLT), selective laser trabeculoplasty (SLT), and green laser peripheral iridoplasty. The indications, contraindications, alternative treatment options, risks, benefits, and procedural techniques are discussed in detail, as well as management of possible complications. Lecture is followed by hands-on laboratory training utilizing the Green, YAG, and SLT lasers.

NSUOCO Advanced Procedures
Tablequah, Oklahoma

Thursday, January 7, 2021

- 1:00-2:00 p.m. Intro to Optometric Surgery and Ophthalmic Surgical Instruments
Dr. Castillo
- 2:00-3:00 p.m. Review of Surgical Anatomy of the Face
Dr. Castillo
- 3:00-4:00 p.m. Oculofacial Surgical Asepsis
Dr. Castillo
- 4:00-5:00 p.m. Review of Eyelid Anatomy & Eyelid Lesions
Dr. Lighthizer
- 5:00-6:00 p.m. Dinner Provided
- 6:00-7:00 p.m. Office-based Local Anesthesia
Dr. Castillo
- 7:00-8:00 p.m. Radio Frequency Surgery in Optometric Practice
Dr. Lighthizer
- 8:00-9:00 p.m. Introduction to Oculofacial Biopsy
Dr. Castillo

Friday, January 8, 2021

- 7:00-8:00 a.m. Hot Breakfast Provided
- 8:00-9:00 a.m. Chalazion Management
Dr. Lighthizer
- 9:00-12:00 p.m. Video Grand Rounds & Surgical Concepts
Dr.'s Lighthizer & Castillo

Friday, January 8, 2021

- 12:00-1:00 p.m. Lunch Provided
- 1:00-2:00 p.m. Intro to Suturing
Dr. Castillo
- 2:00-6:00 p.m. Suture Techniques Lab
Dr.'s Castillo, Lighthizer, Miller & Penisten
- Lab Rotations
Injection Techniques
Dr.'s Miller & Penisten
- Radiosurgical Techniques
Dr. Lighthizer
- Oculofacial Biopsy
Dr. Castillo

Saturday, January 9, 2021

- 7:00-8:00 a.m. Hot Breakfast Provided
- 8:00-9:00 a.m. Laser Physics, Hazards & Safety
Neal Whittle, OD
- 9:00-10:00 a.m. Laser Tissue Interactions
Neal Whittle, O.D.
- 10:00-12:00 p.m. Clinical Workshops: Intro to Therapeutic Lasers
Dr.'s Lighthizer & Whittle
- 12:00-1:00 p.m. Gonioscopy: How to Interpret What You Are Seeing
Doug Penisten, O.D., Ph.D.
- 1:00-2:00 p.m. Lunch Provided
- 2:00-4:00 p.m. Laser Therapy for the Open Angle Glaucomas: ALT & SLT
Nathan Lighthizer, O.D.

Saturday, January 9, 2021

- 4:00-5:00 p.m. Laser Therapy in Narrow Angles/Angle Closure: LPI and ALPI
Jeff Miller, O.D.
- 5:00-6:00 p.m. YAG Laser Posterior Capsulotomy
Nathan Lighthizer, O.D.
- 6:00-7:00 p.m. Managing Potential Laser Complications
Richard Castillo, O.D., D.O.
- 7:00-8:00 p.m. Medicolegal Aspects of Anterior Segment Laser Procedures: Panel Discussion
Dr.'s Castillo, Lighthizer, Miller & Penisten

Sunday, January 10, 2021

- 7:00 a.m. Breakfast Provided
- 7:30-11:30 a.m. Lab Rotations
- YAG Capsulotomy
Dr. Castillo
- Laser Peripheral Iridotomy
Dr. Miller
- Gonioscopy & Laser Lenses
Dr. Penisten
- Laser Trabeculoplasty: ALT & SLT
Dr. Lighthizer
- 11:30 -1:00 p.m. Review & Final Exam
Nathan Lighthizer

Thank you!

Keyword: PUCO Post Grad Course

Advance Ocular Therapeutics (AOT) – OR, WA and AK licensure only course Course # 40127

Instructor: **Multiple Speakers**

Section: **Anterior Segment**

COPE Course ID:

Expiration Date:

June 1, 2023

Qualified Credits:

23.00 credits - \$1000.00

COURSE DESCRIPTION:

The Advanced Ocular Therapeutics (AOT) course is a 23-hour certificate course on systemic and injectable medications used in eye care. This course currently meets the didactic requirements for optometrists in Oregon, Washington, and

Alaska. After viewing each course of the 14 courses, the doctor will take an online exam over the course materials. To

register for Advanced Ocular Therapeutics (AOT), please complete the registration form and send to (REDACTED).

A passing score is 75 percent is required on all tests. Course

materials were recorded in May/June 2020. The instructors are Blair Lonsberry, MS, OD, MEd, Tad Buckingham, OD,

Aimee Ho, OD, & Ken Eakland, OD. *Washington requires an additional 8 hours of supervised clinical workshop and four

hours of injections workshop for licensure. Please contact Optometric Physicians of Washington for information on

upcoming workshops. Oregon and Alaska both require an additional 7-hour injections workshop. Once the all the courses

have been completed, you will receive an AOT certificate.

LEARNING OBJECTIVES:

STEPS TO TAKE COURSE:

Course 1 - Lid Lesions: Relax or Refer (https://online-ce.opt.pacificu.edu/view_course.php?courseid=194)

Course 2 - Ocular infection: Systemic antibiotics in eye care (https://online-ce.opt.pacificu.edu/view_course.php?courseid=195)

Course 3 - Ocular Pain: NSAIDs and Opioids (https://online-ce.opt.pacificu.edu/view_course.php?courseid=196)

Course 4 - Prescribing in Pregnancy & Lactation (https://online-ce.opt.pacificu.edu/view_course.php?courseid=197)

Course 5 - Principles of Systemic Therapy & Prescription Writing (https://online-ce.opt.pacificu.edu/view_course.php?courseid=200)

Course 6 - Concurrent Medications/Drug Interactions/Adverse Reactions (https://online-ce.opt.pacificu.edu/view_course.php?courseid=201)

Course 8 - Ocular Inflammation and Allergy (https://online-ce.opt.pacificu.edu/view_course.php?courseid=216)

Course 10 - Anxiety and Gastrointestinal Disorders (https://online-ce.opt.pacificu.edu/view_course.php?courseid=217)

Course 11 - Ocular Trauma, Ocular Emergencies and Anaphylaxis (https://online-ce.opt.pacificu.edu/view_course.php?courseid=219)

3/4/2021 Pacific University College of Optometry

https://online-ce.opt.pacificu.edu/view_course.php?courseid=222 2/3

You must be logged in to take the examination. To login click here

Upon completion and payment you will be issued a certificate.

Please send any questions or comments to mikibuckingham@pacificu.edu

(<mailto:mikibuckingham@pacificu.edu>).

Course 12 - Contemporary Issues in Ocular Therapeutics Injectable Pharmaceuticals in Eye Care (https://online-ce.opt.pacificu.edu/view_course.php?courseid=220)

courseid=220)

Course 13 - Prescription Drug Diversion Clinical Management and Protection (https://online-ce.opt.pacificu.edu/view_course.php?courseid=221)

You will need Adobe Acrobat Reader (<http://www.adobe.com/products/reader.html>)

Course 14 - Changing the Conversation about Pain: Pain Care is Everyone's Job (<https://www.oregon.gov/oha/HPA/dsi-pmc/Pages/module.aspx>)

Course 9 - Treatment and Management of Glaucoma (https://online-ce.opt.pacificu.edu/view_course.php?courseid=218)

Course 7 - Ocular Infection - Antivirals / Antifungals in eye care (https://online-ce.opt.pacificu.edu/view_course.php?courseid=202)

Registration Form (https://online-ce.opt.pacificu.edu/course_downloads/1609863645aot_online_registration_form.pdf)

You will need Adobe Acrobat Reader (<http://www.adobe.com/products/reader.html>)

Keyword: Pacific PA Curriculum

Curriculum | Physician Assistant Studies

In compliance with the Department of Education, 34 CFR 668.43, students who graduate from Pacific University's School of Physician Assistant Studies are eligible for the National Commission on Certification of Physician Assistants' PANCE (Physician Assistant National Certification Examination) board examination. Successfully passing the PANCE is recognized as "certification" of the physician assistant in all 50 U.S. states.

The curriculum is 27 months divided into two phases over seven consecutive semesters.

Phase I — Didactic (14 months) on campus

Phase II — Clinical (13 months) at sites throughout Oregon and surrounding states

Total Credits — 131

Students are strongly encouraged not to work while enrolled in the school.

Any student

who chooses to work is required to attend all program related activities and will not be

granted an excused absence for work obligations.

Phase I — Didactic (14 months - 67 semester hours)

The didactic curriculum is organized into blocks to allow for a comprehensive and integrated approach to learning medicine across the lifespan by organ system. Each clinical medicine module contains anatomy, physiology, pathophysiology, clinical skills, laboratory studies, study of disease states, pharmacology, behavioral medicine, preventive medicine, and evidence based healthcare (EBHC). The morning classes are traditional lectures and as possible, the afternoon classes focus on active learning through cases, skills, simulation, role playing, and problem solving. Letter grades have been eliminated and all students must earn an 80 percent or higher to pass each module and longitudinal course (Anatomy, EBHC). There is a comprehensive

assessment at the end of each module. Students take an individual assessment exam and then retake the same assessment in their small groups, facilitating the opportunity to further learn the material through group discussion of clinical concepts. If a student does not pass the assessment, there are two opportunities to further learn the medical information and reassess or remediate through extended learning. Every student graduating from the program will have met the minimum competency of 80 percent in every area of the curriculum.

Summer Semester (11 weeks - 18 semester hours)

PA 554 | Fundamentals of Anatomy I (1 semester hour)

PA 556 | Genetics (1 semester hour)

PA 553 | Fundamentals of Clinical Medicine (6 semester hours) (Physiology, Nutrition, Pharmacology)

PA 530 | Clinical History (3 semester hours)

PA 581 | CM Infection and Immunology (3 semester hours)

PA 510 | Current Topics in the PA Profession (2 semester hours)

PA 595 | Introduction to Evidence Based Healthcare (2 semester hours)

Fall Semester (16 weeks - 24 semester hours)

PA 558 | Fundamentals of Anatomy II (1 semester hour)

PA 582 | CM Dermatology, Eye, ENT (3 semester hours)

PA 571 | CM Nephrology (3 semester hours)

PA 576 | CM Hematology and Oncology (3 semester hours)

PA 583 | CM Pulmonary Medicine (3 semester hours)

PA 585 | CM Cardiology and ECG (4 semester hours)

PA 586 | CM Gastroenterology (3 semester hours)

PA 577 | CM Endocrinology (3 semester hours)

CHP 515 | Interprofessional Competence: Foundations of Interprofessional Practice (1 semester hour)

Spring Semester (18 weeks - 25 semester hours)

PA 559 | Fundamentals of Anatomy III (1 semester hour)

PA 591 | CM Musculoskeletal (4 semester hours)

PA 590 | CM Neurology (4 semester hours)

PA 520 | CM Behavioral Medicine (3 semester hours)

PA 593 | CM Pediatric Medicine (3 semester hours)

PA 557 | CM Geriatrics (1 semester hour)

PA 587 | CM Men's Health (1 semester hour)

PA 592 | CM Women's Health (4 semester hour)

PA 596 | CM Emergency Medicine (4 semester hours)

Phase II — Clinical Rotations/Graduate Project (13

months - 64 semester hours)

Summer Semester (11 weeks - 12 semester hours)

PA 597 | CM Surgery, Hospital Care (3 semester hours)

PA 599 | Whole Patient (3 semester hours)

PA 696 | Graduate Project (6 semester hours)

Fall Semester (19 weeks - 19 semester hours)

Rotation 1 | 6-week Rotation (6 semester hours)

Rotation 2 | 6-week Rotation (6 semester hours)

Rotation 3 | 6-week Rotation (6 semester hours)

PA 665 | Professional Practice Seminar I (1 semester hours)

Spring Semester (19 weeks - 20 semester hours)

Rotation 4 | 6-week Rotation (6 semester hours)

Rotation 5 | 6-week Rotation (6 semester hours)

Rotation 6 | 6-week Rotation (6 semester hours)

PA 666 | Professional Practice Seminar II (1 semester hour)

PA 667 | Professional Practice Seminar III (1 semester hour)

Summer Semester (13 weeks - 13 semester hours)

Rotation 7 | 6-week Rotation (6 semester hours)

Rotation 8 | 6-week Rotation (6 semester hours)

PA 668 | Professional Practice Seminar IV (1 semester hour)

Clinical Courses/Rotations

PA 630 | Family Practice (12 semester hours)

PA 631 | Internal Medicine (6 semester hours)

PA 633 | Inpatient Medicine (6 semester hours)

PA 634 | Surgery (6 semester hours)

PA 636 | Emergency Medicine (6 semester hours)

PA 637 | Primary Care I: primary care, specialties, community medicine, public health, or international/global health (6 semester hours)

PA 639 | Primary Care II: primary care, specialties, community medicine, public health, or international/global health (6 semester hours)

Keyword: UW PA Program

The didactic, or classroom, year of the MEDEX curriculum is designed to teach clinical reasoning skills by building a foundation of new clinical knowledge, and then applying this knowledge to clinical situations. Summer quarter is a review of basic scientific concepts. Autumn quarter teaches the skills of information gathering in a clinical setting with intensive history and physical exam instruction. Pathophysiology in autumn quarter adds the foundational information needed for understanding disease processes. Winter and spring quarter cover the clinical diagnosis and treatment of diseases and disorders from all body systems. By the end of spring quarter, students are able to perform a history and physical exam, identify differential diagnoses, arrive at the most likely diagnosis, and formulate a treatment plan for patient complaints that are commonly seen in primary care. The method of teaching in the didactic year changes over the course of the quarters to enhance clinical reasoning skills. All major body systems are taught once in anatomy and physiology, and repeated again in the basic clinical skills and pathophysiology courses. In winter and spring, body systems are studied in blocks across the courses so that the content of each course is reinforced in the other courses. Summer and autumn are factand skills-based courses where memorization and repetition are used to create the foundations needed for clinical care. Winter and spring use increasingly interactive methods for learning that include lectures from experts, small group work, team-based learning, problem-based learning and appreciative inquiry. Clinical reasoning problems are one example of assignments that cross courses to integrate knowledge and mimic patient care by walking through the assessment and treatment of a patient case that unfolds gradually. Faculty members are committed to making class time interesting and engaging while ensuring that all students learn medicine. Click on the course name in the Didactic Timeline for details and a course description.

Didactic Timeline

Summer Quarter (1st quarter) on campus in Seattle:

Course No. Name Credit Hrs.
MEDEX 451/551 Anatomy & Physiology 6
MEDEX 450/550 Basic Science in Clinical Medicine 6

Autumn Quarter: 15 Credits

Course No. Name Credit Hrs.
MEDEX 452/552 Pathophysiology for Primary Care 6
MEDEX 453/553 Basic Clinical Skills 5
MEDEX 457/557 Behavioral Medicine I 2
MEDEX 470/570 Professional Role Development I 1

Didactic Year

Sum Aut Wtr Spr Sum
9/23/2020 Didactic Year | MEDEX Northwest
<https://depts.washington.edu/medex/pa-program/curriculum/didactic-year/> 2/5
MEDEX 473/573 Technical Skills I 1

Winter Quarter: 19 Credits

Course No. Name Credit Hrs.
MEDEX 454/554 Adult Medicine I 7
MEDEX 456/556 Maternal & Child Health I 3
MEDEX 458/558 Behavioral Medicine II 2
MEDEX 460/560 Principles of Patient Management 3
MEDEX 468/568 Emergency Medicine I 2
MEDEX 471/571 Professional Role Development II 1
MEDEX 474/574 Technical Skills II 1

Spring Quarter: 19 Credits

Course No. Name Credit Hrs.
MEDEX 455/555 Adult Medicine II 7
MEDEX 462/562 Maternal & Child Health II 3
MEDEX 472/572 Professional Role Development III 1
MEDEX 459/559 Behavioral Medicine III 2
MEDEX 461/561 Principles of Patient Management II 3
MEDEX 469/569 Emergency Medicine II 2
MEDEX 475/575 Technical Skills III 1

Summer Quarter (second summer): 13 Credits

Course No. Name Credit Hrs.
MEDEX 588 Investigative Skills 5
MEDEX 540/541/542/543 Focused Study Course 5
MEDEX 581 Capstone Project I 3

Course Descriptions

Summer Quarter (1st quarter) on campus in Seattle: 12 credits

MEDEX 451/551: Anatomy & Physiology – 6 credits

Students are taught the anatomy and physiology of the following organ systems: endocrine, immune, respiratory, cardiovascular, gastrointestinal, genitourinary, gynecological, integumentary, musculoskeletal and neurological, with a focus on clinical examples of anatomic and physiologic principles encountered in primary care practice. The course is delivered partly online before arrival on campus, with two full weeks of in-class

instruction and testing.

MEDEX 450/550: Basic Science in Clinical Medicine – 6 credits

This course is an intensive review of important basic science topics relevant to clinical medicine at the PA level. The material is necessary to the understanding and integration of information that will be presented throughout the remainder of the MEDEX curriculum. Topics include cell biology, genetics, immunology and microbiology. This course requires a short research paper.

[Top \[#top\]](#)

Autumn Quarter: 15 credits total

MEDEX 452/552: Pathophysiology for Primary Care – 6 credits

This course covers basic pathological and pathophysiological concepts of diseases commonly encountered in primary care practice. Pathophysiology is studied per organ system. Students will write a research paper.

MEDEX 453/553: Basic Clinical Skills – 5 credits

This course helps the student to develop mastery of a screening history and physical examination and thorough data-collection skills. In addition, students learn branching exams of the major organ systems, medical record-keeping and verbal presentation skills.

MEDEX 457/557: Behavioral Medicine I – 2 credits

9/23/2020 Didactic Year | MEDEX Northwest

<https://depts.washington.edu/medex/pa-program/curriculum/didactic-year/3/5>

Students learn process skills and interpersonal skills needed for a career in primary care practice with an emphasis on learning to efficiently guide clinical interviews and respond to patients' emotional cues. Students will also learn assessment skills for the diagnosis of emotional problems and the management skills used in primary care practice to deal with these problems. Students will participate in an interview of a patient with a chronic mental illness.

MEDEX 470/570: Professional Role Development I – 1 credit

This course provides an opportunity to understand and develop relationships with other health professions; discover emerging issues in primary care across a wide range of urban and rural communities; and explore course topics through self-reflection essays and personal analysis.

MEDEX 473/573: Technical Skills I – 1 credit

Using lectures, simulation experiences and group exercises, this course introduces clinical reasoning, basic clinical procedures, laboratory medicine, radiology, and electrocardiography. Students will demonstrate the ability to assess a patient's clinical condition using critical thinking skills that evaluate normal and abnormal findings associated with lab results, radiographs, and ECGs. The course includes simulation workshops, procedural demonstrations and lectures throughout the didactic year.

[Top \[#top\]](#)

Winter Quarter: 19 credits total

MEDEX 454/554: Adult Medicine I – 7 credits

This course provides a problem-oriented approach to the diagnosis and initial management of common primary care conditions. The organ systems covered in winter include eye-ear-nose-throat, rheumatology, gynecology, sexually transmitted disease, HIV, gastroenterology, orthopedics and hematology.

MEDEX 456/556: Maternal & Child Health I – 3 credits

This course introduces a systems-oriented approach to the diagnosis and initial management of common primary care problems in pediatrics and obstetrics. Topics include newborn, well-child, adolescent and sports exams as well as pediatric health maintenance and an overview of normal pregnancy and delivery in the primary care setting.

MEDEX 458/558: Behavioral Medicine II – 2 credits

This course provides in-depth coverage of common emotional problems seen in primary care. Specific topics include depression and mood disorders, HIV panel discussion, healthcare for people living homeless, chronic pain, sexual assault, sexual minorities, sleep medicine, anxiety disorders and PTSD, applied ethics. All students will participate in an interview of a patient with a chronic mental illness.

MEDEX 460/560: Principles of Patient Management I – 3 credits

This course teaches a systematic approach to patient management applicable to a primary care setting. The course is devoted to drug therapy and its administration. The organ-system approach generally matches the topic sequence in Adult Medicine I.

MEDEX 468/568: Emergency Medicine I – 2 credits

This course provides an approach to the diagnosis and management of common emergency conditions for primary care physician assistants. Topics include initial trauma assessment; multiple trauma to include head, spinal and abdominal trauma, eye-ear-nose-throat and dental emergencies, toxicology, orthopedic emergencies, psychiatric, cardiac, pulmonary, GU/gyn emergencies and shock.

MEDEX 471/571: Professional Role Development II – 1 credit

This course emphasizes knowledge, skills and attitudes for dealing with diverse population groups. Students will work in groups, focus on specific health and social parameters that are pertinent to a particular underserved population and make a presentation to their classmates. Other topics include health care systems, use of medical interpreters and essentials of public health.

MEDEX 474/574: Technical Skills II – 1 credit

Using lectures, simulation experiences and group exercises, this course introduces clinical reasoning, basic clinical procedures, laboratory medicine, radiology, and electrocardiography. Students will demonstrate the ability to assess a patient's clinical condition using critical thinking skills that

evaluate normal and abnormal findings associated with lab results, radiographs, and ECGs. The course includes simulation workshops, procedural demonstrations and lectures throughout the didactic year. Workshops this quarter will include the gynecological exam, suturing and punch biopsy.

[Top \[#top\]](#)

Spring Quarter: 19 credits total

MEDEX 455/555: Adult Medicine II – 7 credits

This course provides a system-oriented approach to the diagnosis and initial management of common primary care conditions. The organ systems

covered in spring include endocrinology, nephrology, urology, cardiology, dermatology, pulmonology and neurology.

MEDEX 462/562: Maternal & Child Health II – 3 credits

9/23/2020 Didactic Year | MEDEX Northwest

<https://depts.washington.edu/medex/pa-program/curriculum/didactic-year/> 4/5

This course continues a system-oriented approach to the diagnosis and initial management of common primary care pediatric conditions.

Topics

include common respiratory, cardiac and dermatologic problems, and also issues of chronic illness in children.

MEDEX 472/572: Professional Role Development III – 1 credit

Current issues in healthcare delivery systems will be the focus of this quarter. Topics include medical ethics, managed care, reimbursement, access

and related issues.

MEDEX 459/559: Behavioral Medicine III – 2 credits

This course continues to provide in-depth coverage of common emotional problems seen in primary care. Specific topics include intimate partner

violence, dementia, sexuality through the life span, substance abuse & alcoholism, the impaired provider, psychiatric and developmental disorders in

children, somatization, and eating disorders.

MEDEX 461/561: Principles of Patient Management II – 3 credits

This course continues building on winter quarter material with a systematic approach to pharmacological therapies and follows the topic sequence of

Adult Medicine. It includes information on drug choice, drug administration and risk factor identification and reduction. Additional foci of the course

include non-pharmacological therapies and an emphasis on health education and health promotion strategies.

MEDEX 469/569: Emergency Medicine II – 2 credits

Topics this quarter include chest trauma, environmental emergencies, pulmonary emergencies, genitourinary and gynecological emergencies

including sexual assault, endocrine emergencies, neurological emergencies, cardiac emergencies including arrhythmias, and acute coronary syndrome, and toxicology.

MEDEX 475/575: Technical Skills III – 1 credit

Using lectures, simulation experiences and group exercises, this course introduces clinical reasoning, basic clinical procedures, laboratory medicine,

radiology, and electrocardiography. Students will demonstrate the ability to assess a patient's clinical condition using critical thinking skills that

evaluate normal and abnormal findings associated with lab results, radiographs, and ECGs. The course includes simulation workshops, procedural

demonstrations and lectures throughout the didactic year. Workshops this quarter will include the genitourinary exam, and casting and splinting.

[Top \[#top\]](#)

Summer Quarter (second summer): 13 credits total

MEDEX 588: Investigative Skills – 5 credits

The ongoing changes to healthcare delivery, continued advances in clinical research and publication, and evolution of the PA profession require that

the modern clinician be able to locate, critically appraise, and apply current health research outcomes. These skills are essential for PAs to remain

up-to-date. This course teaches basic concepts in measurement, biostatistics and epidemiology, and the skills needed to evaluate public health and

biomedical research. Through a series of lectures focused on research concepts, small group exercises, and online group discussions, students will

acquire skills allowing them to review and evaluate current research results and apply reliable outcomes to their practice.

Focused Study Course – 5 credits

The focused study course will follow a small-group seminar format that allows students to select an area of special interest. The various sections will

share a common theme of providing high quality care within healthcare systems, but will diverge in focus and application. Students may select only

one subject focus, and the different subject sections run concurrently.

Students will select one of the following options.

MEDEX 540: Healthcare for Rural and Medically Underserved Populations: This course will examine the nature and severity of disparities in

health care access and delivery to rural and urban underserved populations. Students will be challenged to consider these issues from the perspective of policy-makers as well as from the perspective as clinicians.

MEDEX 541: Public Health and Preventive Medicine: This course will explore the principles, systems and practices of public health and preventive medicine at the local, state and national levels. Students should recognize the breadth of health professions and how the interdisciplinary teams in which they work provide the structure for public health and preventive medicine at all levels of health care.

MEDEX 542: Academic Medicine and Specialty Practice: Material will include faculty skill development, tools to thrive in an academic environment, interdisciplinary collaboration between primary care and specialty disciplines, and specialty practice at an academic medical center.

MEDEX 543: Global Health: Material will include international healthcare systems, international models of healthcare professions, disease processes and management tools in developing countries, healthcare in areas experiencing armed conflict, promoting health and managing disease across borders, cultural competency, and national and international government and agency policy-making and its impact on care, quality and access.

MEDEX 581: Capstone Project I – 3 credits

Among the requirements for the PA program is a Capstone Project. Students will be expected to produce a finished product of sufficient depth and analytic rigor to demonstrate the independent thought appropriate to clinical master's-level work. Each student's Capstone Project will relate to his or her focused study area. Students will work on their project over five quarters, beginning in the summer between the first (didactic) and second (clinical) years of the PA curriculum. Students will plan and begin their project with input from faculty advisors.

Keyword: UW DNP Program



SCHOOL OF NURSING

UNIVERSITY of WASHINGTON

Note: Effective beginning Autumn 2020. Not applicable for students entering their program of study prior to 2020. Please check with your faculty advisor for questions concerning your program curriculum.

UNIVERSITY OF WASHINGTON SCHOOL OF NURSING
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DOCTOR OF NURSING PRACTICE FAMILY NURSE PRACTITIONER TRACK 3-YEAR PROGRAM CURRICULUM

YEAR 1	AUTUMN	WINTER	SPRING
	<p>NSG 555: Perspectives on Implementing Research in Advanced Nursing Practice 3</p> <p>NSG 530: Leadership Communication & Professional Identity 3</p> <p>NSG 553: Foundations of Health Systems and Health Economics 3</p>	<p>NMETH 535: Nursing Inquiry to Support Evidence-Based Practice 4</p> <p>NSG 551: Health Politics and Policy 3</p> <p>NSG 552: Social Determinants of Health & Health Equity 3</p>	<p>NMETH 533: Appraisal & Translation of Evidence for Practice 5</p> <p>NURS 552: Wellness, Health Promotion & Disease Prevention 3</p> <p>NMETH 536: Methods of Program Evaluation & Quality Improvement 4</p>

Total credit hours: 31

YEAR 2	AUTUMN	WINTER	SPRING	SUMMER
	<p>NSG 557: Physiology & Pathophysiology Across the Lifespan 4</p> <p>NCLIN 500: Comprehensive Health Assessment 3</p> <p>NCLIN 501: Diagnostic Health Assessment 2</p>	<p>PHARM 514: Pharmacotherapeutics for Advanced Nursing Practice 3</p> <p>NURS 518: Child Management I: Acute Conditions 3</p> <p>NSG 562: Management of Adults I 3</p> <p>NURS 541: Women's Health Care: Diagnosis and Management 2</p> <p>NCLIN 502: Pediatric Diagnostic Health Assessment 2</p>	<p>NCLIN 516: Advanced Clinical Practicum I 4</p> <p>NSG 563: Management of Adults II 3</p> <p>NSG 566: Pediatric Pharmacology 1</p> <p>NCLIN 521: Diagnostic Decision Making and Clinical Skills Lab 2</p> <p>NURS 542: Theoretical Foundations of Advanced Practice Nursing: Childbearing I 2</p>	<p>NCLIN 517: Advanced Clinical Practicum II 5</p> <p>NSG 567: Advanced Pharmacotherapeutics in Complex Case Management 1</p>

Total credit hours: 40

YEAR 3	AUTUMN	WINTER
	<p>NCLIN 518: Advanced Clinical Practicum III 6</p> <p>NMETH 801: Practice Doctorate Project 3</p> <p>NURS 573: Foundations of Advanced Practice Nursing 1</p>	<p>NCLIN 801: Advanced Clinical Practicum Immersion 9</p> <p>NMETH 801: Practice Doctorate Project 3</p>

Total credit hours: 22

- Doctor of Nursing Practice Core Course (all DNP students)
- Advanced Practice Nursing Core Course (all APN students)
- Track and Shared Track (students by track focus)



Case Log Information: Ophthalmology Review Committee for Ophthalmology

The Review Committee for Ophthalmology has defined procedural categories required for resident education in ophthalmology. The Review Committee uses Case Logs to assess breadth and depth of a program's procedural training as well as the individual resident experience. This document provides information about the categories, the minimum number of cases residents are required to perform, and properly logging procedural experiences.

Involvement in the preoperative assessment and the postoperative management of patients is an important element of resident procedural experience. It is expected that residents are involved in pre-operative planning discussions as well as post-operative management discussions, ideally in person, however when necessary Electronic Medical Records (EMR), phone, or other modes of communication can be used.

A list of ophthalmology tracked procedures can be found in [Accreditation Data System](#) (ADS) > Case Log Tab > Reports > Tracked Codes Report. The column "Min Cat" indicates if a procedure counts toward one or more minimum category.

Review Committee definitions of the surgeon and assistant roles:

To be recorded as **Surgeon**, a resident must be present for all of the critical portions and must perform greater than or equal to 50 percent of the critical portions of the procedure, as determined by the supervising faculty member.

To be recorded as **Assistant**, the resident must serve as the first assistant to a faculty member performing the procedure or to another resident performing the procedure under faculty supervision. Only one resident can claim credit as Assistant on a given procedure.

Email questions to Review Committee Executive Director Kathleen Quinn-Leering, PhD:
kquinn@acgme.org.

Procedural Categories and Minimum Numbers

Category	Minimum
Cataract (S)	86
Laser Surgery – YAG capsulotomy (S)	5
Laser Surgery – Laser trabeculoplasty (S)	5
Laser Surgery – Laser iridotomy (S)	4
Laser Surgery – Panretinal laser photocoagulation (S)	10
Keratoplasty (S+A)	5
Pterygium/conjunctival and other cornea (S)	3
Keratorefractive surgery (S+A)	6
Strabismus (S)	10
Glaucoma – Filtering/shunting procedures (S)	5
Retinal vitreous (S+A)	10
Intravitreal injection (S)	10
Oculoplastic and orbit (S)	28
Oculoplastic and orbit – Eyelid laceration (S)	3
Oculoplastic and orbit – Chalazion excision (S)	3
Oculoplastic and orbit – Ptosis/blepharoplasty (S)	3
Globe trauma (S)	4

S = Surgeon Only

S+A = Surgeon and Assistant

Notes

- Minimum numbers represent what the Review Committee believes to be an acceptable minimal experience. Minimum numbers are not a final target number, and achievement does not signify competence.
- Program directors must ensure that residents continue to report their procedures in the Case Log System after minimums are achieved.
- Procedures that are given credit in an oculoplastic and orbit subcategory are also given credit in the oculoplastic and orbit category.
- Programs are considered compliant with ophthalmology procedural requirements if all graduating residents in a program achieve the minimum number in each category.

Questions

How were the minimum requirements determined?

The procedural minimum categories represent the areas of practice and knowledge expected of a graduating ophthalmology resident. The **minimum number** for each category was set at the 20th percentile of procedures performed nationwide by residents in 2006. While the Committee feels that they remain appropriate, the minimum numbers will continue to be regularly reviewed.

Does the Committee expect residents to achieve competence once they meet the minimum procedural requirement?

Performance of the minimum number of procedures by a graduating resident must not be interpreted as equivalent to the achievement of competence. Resident procedural competence is determined by the program director in consultation with the Clinical Competency Committee.

The Review Committee uses Case Logs to assess the breadth and depth of a program's procedural training as well as the individual resident experience. Minimum numbers represent what the Review Committee believes to be an acceptable minimal resident experience. Minimum numbers are not a final target number and residents should continue to log their procedures in the Case Log after minimums are achieved.

Why do some surgical categories have low required minimums?

The Review Committee recognizes that residents will not achieve **competence** after only performing a handful of procedures in a particular discipline, but requires that residents have **familiarity** with the procedures in each subspecialty. Familiarity can be defined as the ability to perform a procedure with assistance. For that reason, certain categories of procedures have low required minimums.

If a resident participates in both sides of a bilateral procedure, can the resident enter both procedures into the Case Log?

Yes. If a resident completes both sides of a bilateral procedure and has the same role for both procedures, the resident should choose the appropriate role (Surgeon or Assistant) and add the appropriate CPT code twice to the case. The system permits the same CPT code to be added twice on the same case.

If a resident completes one side of a bilateral procedure as a surgeon and the other side as an assistant, the resident must create two cases in the Case Log System and choose the Surgeon role in one, and the Assistant role in the other. The system only permits one role per case.

Example:

A resident performs a bilateral blepharoplasty and acts as the surgeon on both sides. The resident chooses the Surgeon role and adds the appropriate CPT code twice to the case.



Accreditation Council for Graduate Medical Education

Ophthalmology Case Logs

National Data Report

Prepared by: Department of Applications and Data Analysis

I. National Resident Statistics Main Table

- A. This main table provides a national picture of educational experiences. The report is ideal for establishing and assessing national policy related to resident practical experiences. Data is broken out by resident role.
- B. Descriptive statistics have been carefully chosen to provide the most useful information for judging performance at that national level.
- i. "Natl Res AVE" - The national average describes the mean number of procedures performed per resident in the nation.
 - ii. "Natl Res STD" - The standard deviation indicates how tightly the scores are clustered around the mean in the set of data.
 - iii. "Natl Res MIN" - The minimum value among procedure counts in the nation.
 - iv. "Natl Res MED" - The median value among procedure counts in the nation.
 - v. "Natl Res MAX" - The maximum value seen among procedure counts in the nation.
- ii. National Benchmark Table for Resident Statistics
The table displays selected percentile benchmarks of program averages. For example, a score at the 10th percentile indicates that 10% of residents achieved less than the value while the remaining 90% achieved more than the value.

The information on the following pages has been created using specialty specific categories. These data should not be used for comparison across specialties as the definition of the categories will vary among the specialties. In addition, care should be exercised when comparing data from year to year as the definition of certain categories may be revised from time to time.

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OPHTHALMOLOGY: NATIONAL RESIDENT REPORT (Main Table) Reporting Period: Total Experience of Residents Completing Programs in 2018-2019 Residency Review Committee for Ophthalmology Report Date: September 10, 2019

[PART 1]		Number of Programs in the Nation: 115					Number of Residents in the Nation: 468									
RRC Area	RRC Type	Surgeon					Assistant					Surgeon + Assistant				
		Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX
Cataract	Phacoemulsification	205.4	68	77	194	453	59.0	64	0	40	370	264.4	93	90	251	590
	Non-phacoemulsification ECCE	2.7	9	0	1	185	1.6	3	0	1	24	4.3	11	0	2	209
	TOTAL - Cataracts	208.0	68	86	197	455	60.6	64	0	41	377	268.7	93	90	254	599
Other Cataract	Other cataract/IOL surgery	1.3	2	0	1	13	2.0	4	0	1	36	3.2	4	0	2	36
	Anterior vitrectomy	1.0	2	0	0	11	0.4	1	0	0	8	1.4	2	0	0	16
	TOTAL - Other Cataract	2.3	3	0	1	18	2.3	4	0	1	36	4.6	6	0	3	44
Laser Surgery	YAG capsulotomy	23.5	14	3	20	86	0.6	2	0	0	13	24.1	15	4	21	86
	Laser trabeculoplasty	16.5	15	1	12	125	0.5	2	0	0	17	17.1	15	1	12	125
	Laser iridotomy	15.6	10	1	13	65	0.5	2	0	0	12	16.2	10	1	14	65
	Panretinal laser photocoagulation	40.3	47	5	23	495	0.9	2	0	0	27	41.2	47	5	24	495
	Focal laser photocoagulation	1.6	3	0	0	25	0.1	1	0	0	10	1.7	3	0	0	25
	Cyclodestructive procedures	3.2	5	0	1	31	0.7	2	0	0	17	3.9	5	0	2	31
	Other glaucoma lasers (incl iridoplasty)	0.4	1	0	0	9	0.0	0	0	0	3	0.4	1	0	0	9
	TOTAL - Laser Surgery	101.1	63	13	87	590	3.5	6	0	1	45	104.7	63	13	89	590
Corneal Surgery	Keratoplasty	2.5	4	0	1	30	7.6	6	0	6	39	10.1	6	1	8	44
	Conjunctival procs/Pterygium excision	5.4	5	0	3	29	1.1	2	0	1	15	6.5	6	0	5	30
	Other Cornea	4.8	6	0	3	67	2.4	3	0	1	21	7.3	7	0	6	67
	TOTAL - Cornea Surgery	12.7	10	2	10	86	11.2	8	0	9	59	23.9	12	7	21	89

Statistics are based upon the number of procedures logged by residents in the indicated role.

OPHTHALMOLOGY: NATIONAL RESIDENT REPORT (Main Table)
Reporting Period: Total Experience of Residents Completing Programs in 2018-2019
Residency Review Committee for Ophthalmology
Report Date: September 10, 2019

[PART 2]		Number of Programs in the Nation: 115					Number of Residents in the Nation: 468									
RRC Area	RRC Type	Surgeon					Assistant					Surgeon + Assistant				
		Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX
Keratorefractive Surgery	Incisional procedures	1.3	3	0	0	30	0.7	3	0	0	28	2.0	4	0	0	48
	Laser procedures	4.4	12	0	0	167	7.7	10	0	8	104	12.0	16	0	8	194
	Other (keratorefractive)	0.0	0	0	0	3	0.1	0	0	0	4	0.1	0	0	0	4
	TOTAL - Keratorefractive Surgery	5.7	12	0	2	167	8.4	10	0	8	105	14.1	15	0	9	194
Strabismus	Any muscle surgery	23.3	14	7	19	102	8.5	10	0	5	77	31.8	19	9	27	115
	Other strabismus	0.2	1	0	0	10	0.1	0	0	0	5	0.3	1	0	0	11
	TOTAL - Strabismus	23.5	14	9	19	102	8.6	11	0	5	78	32.1	19	10	27	115
Glaucoma	Filtering procedures	6.0	7	0	5	73	4.1	6	0	2	36	10.1	9	0	8	73
	Shunting procedures	6.6	5	0	5	46	3.7	5	0	2	27	10.3	7	0	8	46
	Other glaucoma	3.6	7	0	2	64	1.6	3	0	0	31	5.2	8	0	3	64
	TOTAL - Glaucoma	16.3	13	2	13	152	9.3	11	0	6	90	25.6	18	5	21	167
Retinal Vitreous	RRD repair	0.8	2	0	0	28	3.6	4	0	2	28	4.5	5	0	3	30
	Posterior vitrectomy (Pars Plana)	5.6	8	0	3	57	16.6	12	0	13	84	22.2	14	3	17	87
	TOTAL - Retinal Vitreous	6.4	9	0	3	65	20.2	14	0	16	96	26.6	17	6	22	99
Other Retinal	Cryotherapy	0.2	1	0	0	14	0.2	1	0	0	9	0.4	1	0	0	14
	Vitreous tap/inject	145.1	138	10	96	834	1.5	3	0	0	26	146.6	138	10	97	834
	Other retina	0.1	0	0	0	5	0.1	1	0	0	9	0.2	1	0	0	9
	TOTAL - Other Retinal	145.4	138	10	96	838	1.9	3	0	1	28	147.3	138	10	97	838

Statistics are based upon the number of procedures logged by residents in the indicated role.

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OPHTHALMOLOGY: NATIONAL RESIDENT REPORT (Main Table)
Reporting Period: Total Experience of Residents Completing Programs in 2018-2019
Residency Review Committee for Ophthalmology
Report Date: September 10, 2019

[PART 3]		Number of Programs in the Nation: 115					Number of Residents in the Nation: 468										
RRC Area	RRC Type	Surgeon					Assistant					Surgeon + Assistant					
		Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	Natl Res AVE	Natl Res STD	Natl Res MIN	Natl Res MED	Natl Res MAX	
Oculoplastic and Orbit	Eye removal and implant	2.6	3	0	2	16	1.4	2	0	1	11	4.0	3	0	3	16	
	Lacrimal surgery	5.7	5	0	5	45	4.6	5	0	3	36	10.2	8	0	8	62	
	Other orbital surgery (eg, orbitotomy)	1.6	2	0	1	17	4.2	5	0	3	34	5.8	6	0	4	34	
	Eyelid laceration / canalicular repair	10.6	8	0	8	50	2.6	4	0	1	34	13.2	9	0	11	60	
	Chalazia excision	8.7	7	2	7	75	1.0	2	0	0	11	9.7	7	2	8	75	
	Tarsorrhaphy	2.5	3	0	2	21	0.9	2	0	0	14	3.5	4	0	2	25	
	Ptosis repair	6.9	6	0	5	34	7.5	9	0	5	53	14.4	11	0	12	59	
	Entropion / ectropion repair	4.3	4	0	3	23	4.0	5	0	2	33	8.3	7	0	7	37	
	Blepharoplasty / reconstruction	12.8	12	0	10	129	7.5	11	0	4	108	20.3	17	0	16	136	
	Temporal artery biopsy	1.4	2	0	1	22	0.7	2	0	0	13	2.2	3	0	1	22	
	Other oculoplastic surgery	13.1	11	0	10	83	4.6	6	0	2	36	17.8	13	0	15	95	
	TOTAL - Oculoplastic and orbit	70.2	37	22	61	274	39.2	39	0	27	213	109.4	59	28	101	353	
	Globe Trauma	Corneal/comescleral laceration, globe rup	8.2	5	1	7	29	1.1	2	0	0	20	9.2	5	1	8	31
		Intraocular foreign body	0.4	1	0	0	10	0.2	0	0	0	3	0.6	1	0	0	10
Other globe trauma (eg, ant chamber washout)		1.1	2	0	1	17	0.2	1	0	0	4	1.3	2	0	1	17	
TOTAL - Globe Trauma		9.6	5	1	8	39	1.5	2	0	1	23	11.1	6	4	10	39	
TOTAL	TOTAL - Credit Procedures	601.3	245	208	537	2,127	166.7	120	0	134	754	768.0	269	229	734	2,136	
Non-Tracked	Non-Tracked Codes	5.3	9	0	2	89	2.2	5	0	0	57	7.5	13	0	3	108	

Statistics are based upon the number of procedures logged by residents in the indicated role.

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OPHTHALMOLOGY: NATIONAL RESIDENT STATISTICS REPORT (Benchmarks Table)
 Reporting Period: Total Experience of Residents Completing Programs in 2018-2019
 Residency Review Committee for Ophthalmology
 Report Date: September 10, 2019

[PART 1]		Programs in the Nation: 115					Residents in the Nation: 468									
		Surgeon					Assistant					Surgeon + Assistant				
		Resident Percentiles					Resident Percentiles					Resident Percentiles				
		10	30	50	70	90	10	30	50	70	90	10	30	50	70	90
RRC Area	RRC Procedure															
Cataract	Phacoemulsification	129	166	194	231	290	2	19	40	72	143	158	208	251	299	387
	Non-phacoemulsification ECCE	0	0	1	2	6	0	0	1	2	4	0	1	2	4	9
	TOTAL - Cataracts	133	166	197	233	291	2	19	41	73	145	162	209	254	303	390
Other Cataract	Other cataract/IOL surgery	0	0	1	2	3	0	0	1	2	5	0	1	2	4	8
	Anterior vitrectomy	0	0	0	1	4	0	0	0	0	1	0	0	0	2	4
	TOTAL - Other Cataract	0	0	1	2	6	0	0	1	2	6	0	1	3	5	11
Laser Surgery	YAG capsulotomy	8	14	20	28	43	0	0	0	0	2	9	15	21	29	45
	Laser trabeculectomy	5	8	12	19	34	0	0	0	0	1	5	8	12	20	34
	Laser iridotomy	5	9	13	19	30	0	0	0	0	1	5	9	14	20	31
	Panretinal laser photocoagulation	11	15	23	41	90	0	0	0	1	3	12	16	24	43	90
	Focal laser photocoagulation	0	0	0	1	5	0	0	0	0	0	0	0	0	2	5
	Cyclodestructive procedures	0	0	1	4	9	0	0	0	0	2	0	1	2	5	11
	Other glaucoma lasers (incl iridoplasty)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	TOTAL - Laser Surgery	44	63	87	116	172	0	0	1	3	9	46	68	89	121	180
Corneal Surgery	Keratoplasty	0	0	1	3	6	1	5	6	9	15	5	6	8	11	18
	Conjunctival procs/Pterygium excision	0	2	3	6	14	0	0	1	1	3	1	3	5	8	15
	Other Cornea	0	2	3	5	10	0	0	1	3	6	1	3	6	8	14
	TOTAL - Cornea Surgery	4	7	10	15	24	3	6	9	13	22	11	16	21	27	40

Statistics are based upon the number of procedures logged by residents in the indicated role.

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OPHTHALMOLOGY: NATIONAL RESIDENT STATISTICS REPORT (Benchmarks Table)
 Reporting Period: Total Experience of Residents Completing Programs in 2018-2019
 Residency Review Committee for Ophthalmology
 Report Date: September 10, 2019

[PART 2]		Programs in the Nation: 115					Residents in the Nation: 468									
		Surgeon					Assistant					Surgeon + Assistant				
		Resident Percentiles					Resident Percentiles					Resident Percentiles				
		10	30	50	70	90	10	30	50	70	90	10	30	50	70	90
RRC Area	RRC Procedure															
Keratorefractive Surgery	Incisional procedures	0	0	0	1	5	0	0	0	0	1	0	0	0	1	6
	Laser procedures	0	0	0	2	11	0	3	6	8	17	2	6	8	12	24
	Other (keratorefractive)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL - Keratorefractive Surgery	0	0	2	6	12	0	4	6	9	18	6	7	9	13	26
Strabismus	Any muscle surgery	10	14	19	27	42	0	2	5	10	22	13	20	27	37	55
	Other strabismus	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	TOTAL - Strabismus	11	14	19	27	42	0	2	5	10	22	13	20	27	37	56
Glaucoma	Filtering procedures	0	2	5	7	13	0	0	2	5	11	1	5	8	12	21
	Shunting procedures	2	4	5	8	13	0	1	2	4	10	3	6	8	12	20
	Other glaucoma	0	0	2	4	7	0	0	0	2	4	0	1	3	5	12
	TOTAL - Glaucoma	6	9	13	18	28	0	2	6	11	24	10	15	21	30	46
Retinal Vitreous	RRD repair	0	0	0	1	2	0	1	2	4	9	0	1	3	6	11
	Posterior vitrectomy (Pars Plana)	0	1	3	6	14	5	10	13	19	33	10	13	17	25	43
	TOTAL - Retinal Vitreous	0	1	3	7	16	8	12	16	23	39	11	15	22	31	50
Other Retinal	Cryotherapy	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	Vitreous tap/inject	22	52	96	184	322	0	0	0	1	5	22	53	97	186	322
	Other retina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	TOTAL - Other Retinal	22	52	96	184	329	0	0	1	2	5	22	53	97	187	331

Statistics are based upon the number of procedures logged by residents in the indicated role.

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OPHTHALMOLOGY: NATIONAL RESIDENT STATISTICS REPORT (Benchmarks Table)
 Reporting Period: Total Experience of Residents Completing Programs in 2018-2019
 Residency Review Committee for Ophthalmology
 Report Date: September 10, 2019

[PART 3]		Programs in the Nation: 115					Residents in the Nation: 468									
		Surgeon					Assistant					Surgeon + Assistant				
		Resident Percentiles					Resident Percentiles					Resident Percentiles				
		10	30	50	70	90	10	30	50	70	90	10	30	50	70	90
RRC Area	RRC Procedure															
Oculoplastic and Orbit	Eye removal and implant	0	1	2	3	6	0	0	1	2	4	1	2	3	5	8
	Lacrimal surgery	0	2	5	7	12	0	1	3	6	11	2	5	8	13	20
	Other orbital surgery (eg, orbitotomy)	0	0	1	2	4	0	1	3	5	11	0	2	4	7	14
	Eyelid laceration / canalicular repair	4	6	8	12	21	0	0	1	3	7	5	7	11	15	25
	Chalazia excision	3	5	7	10	15	0	0	0	1	3	4	6	8	11	18
	Tarsorrhaphy	0	1	2	3	6	0	0	0	1	3	0	1	2	4	8
	Ptosis repair	1	3	5	8	16	0	1	5	9	19	3	7	12	18	30
	Entropion / ectropion repair	0	2	3	5	10	0	1	2	5	11	1	4	7	10	17
	Blepharoplasty / reconstruction	3	6	10	14	28	0	1	4	9	19	4	9	16	25	43
	Temporal artery biopsy	0	0	1	2	5	0	0	0	1	2	0	0	1	2	6
	Other oculoplastic surgery	3	6	10	16	26	0	1	2	5	12	5	10	15	21	34
	TOTAL - Oculoplastic and orbit	32	47	61	80	120	2	13	27	50	89	44	68	101	133	195
Globe Trauma	Corneal/comeoscleral laceration, globe rup	3	5	7	9	15	0	0	0	1	3	4	6	8	11	16
	Intraocular foreign body	0	0	0	0	1	0	0	0	0	1	0	0	0	1	2
	Other globe trauma (eg, ant chamber washout)	0	0	1	1	3	0	0	0	0	1	0	0	1	2	3
	TOTAL - Globe Trauma	4	6	8	11	17	0	0	1	2	4	5	7	10	13	19
TOTAL	TOTAL - Credit Procedures	341	452	537	677	934	46	92	134	200	318	470	594	734	888	1,126
Non-Tracked	Non-Tracked Codes	0	1	2	4	15	0	0	0	2	6	0	1	3	6	21

Statistics are based upon the number of procedures logged by residents in the indicated role.

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Keywords: VA Laser Policy



Department of
Veterans Affairs

Office of Public Affairs
Media Relations

Washington, DC 20420
(202) 273-6000
www.va.gov

News Release

FOR IMMEDIATE RELEASE

August 2, 2004

VA Establishes New Laser Eye Surgery Policies

WASHINGTON -- The Department of Veterans Affairs (VA) has announced a new policy providing a single, uniform standard of care throughout the Department for performing laser eye surgery procedures.

“Our Department has no higher priority than to ensure veterans receive the highest possible quality health care at all of our facilities,” said Secretary of Veterans Affairs Anthony J. Principi. “This new policy will provide an additional level of safety for our patients who come to us for eye care.”

VA’s new policy states that all therapeutic laser eye surgeries at VA facilities will be performed under the supervision of an ophthalmologist in a manner consistent with Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards.

Only optometrists who are fully trained and appropriately licensed will be granted clinical privileges by the department to perform therapeutic laser eye surgery under the supervision of an ophthalmologist.

Presently, Oklahoma is the only state that licenses optometrists to perform laser surgery. VA will continue to evaluate and consider state and national standards of practice as it sets its own standard of care.

VA currently operates 158 hospitals, 132 nursing homes, 42 residential rehabilitation treatment programs, and 854 outpatient clinics. The new policy will take effect immediately at all facilities with the capability to perform laser eye surgeries.

#

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VA rescinds laser policy, opens path to full recognition of optometric care

AUGUST 27, 2020

In a major development, the Veterans Health Affairs eliminated a recent directive on laser procedures and made significant changes to its eye care policy.



Elimination of a restrictive Department of Veterans Affairs' (VA) policy on laser eye procedures represents progress toward affording the nation's veterans with the same level of access to optometric care enjoyed by other Americans.



In an update to the Veterans Health Administration's (VHA's) [Eye and Vision Care policy](#) on Aug. 18, the administration rescinded a previous directive that effectively limited veteran access to therapeutic laser eye procedures at VA medical facilities and, in turn, issued a new directive that emphasizes the use of interdisciplinary care. This recent VA action is one in a series of access-focused efforts, including an April 2020 policy underscoring that veterans are best served when all VA doctors of optometry and other essential care providers deliver care with full practice authority.

“As leading advocates for veteran access to high-quality eye health and vision care, the AOA commends the VA for taking important steps to continue to modernize care and its delivery in VA facilities,” says William T. Reynolds, O.D., AOA president. “Doctors of optometry, who deliver more than 80% of primary eye health care in America, are trained and qualified to safely provide the full breadth of eye care services, including therapeutic laser eye procedures, and our veterans have earned and deserve access to that care.”

Optometry's advocates have long emphasized the profession's accessibility in providing Americans' primary eye health care, considering [doctors of optometry practice in counties that make up 99% of the U.S. population](#). As a growing number of states recognize that therapeutic laser eye procedures, such as selective laser trabeculoplasty and YAG laser capsulotomy, can safely and effectively be provided by local doctors of optometry, Americans—including those with coverage provided by major health insurers, Medicare, Medicaid, the Indian Health Service and other payers—are gaining access to essential care once limited to them.

The VA's new policy change eliminates a May 5, 2020, directive that limited laser procedures only to ophthalmologists due to safety concerns and updates the VA's Eye Care Handbook to include a new definition of laser eye procedures that specifically notes “therapeutic laser eye procedures in VHA are currently performed by only ophthalmologists and ophthalmology residents.” Additionally, the handbook outlines how ophthalmologists become qualified to provide these procedures within VA.

Seeking full recognition of optometric care

These changes to the VA Eye Care Handbook represent a significant pathway to seek full recognition of care for doctors of optometry who are licensed and trained to provide this level of care—and an opportunity that has been over a decade in the making.

“For 15 years, VA doctors of optometry have been expressly prohibited from performing laser eye procedures within the VA nationwide. This was due to a directive that was created by ophthalmology, under the guise of patient safety in order to restrict VA Optometry's clinical practice,” says Lindsay Wright, O.D., Armed Forces Optometric Society (AFOS) executive director.

“From the start, the AOA and AFOS have fought to have this unfounded policy rescinded. The removal of the restrictive policy, along with the language that attacked optometry, is a step in the right direction and an incremental but very significant win.”

Although these changes don’t effectively change the scope for VA doctors of optometry, Dr. Wright notes the absence of any express prohibition on care, coupled with the removal of any patient safety concerns, opens the door for potential inclusion in the future. What’s more, the abrupt reversal by the VA is recognition that “patient safety” was never an issue for limiting these procedures.

“This restrictive language and directive can no longer be used as a weapon to hurt affiliates pursuing scope expansion in their states,” Dr. Wright says.

The [AOA and AFOS continue to advance access to safe and effective care for veterans](#), fighting to ensure all veterans receive the comprehensive vision and eye health standard of care recognized nationwide. In that effort, the AOA and AFOS are proud to work alongside many Veterans Service Organizations, such as AMVETS and other veteran-focused groups, to remove the barriers veterans face to care provided by the nearly 1,000 VA doctors of optometry.

“On behalf of America’s more than 20 million veterans and their families, AMVETS is proud of and applauds the VA for its recent and decisive move toward ensuring that more of our veterans have access to the full range of eye care services, including laser eye procedures, that doctors of optometry are ready, willing and fully able to provide,” says Joe Chenelly, AMVETS national director. “AMVETS is committed to ensuring that our veterans have access to the care they need, where and when they need it—and we’re happy that the VA is increasingly joining us in that mission.”

Learn more about how the [AOA and AFOS are advocating for veterans’ eye health and vision care](#).

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Keywords: DOH Letters

April 15, 2021

Washington Department of Health

111 Israel Road S.E.

Tumwater, Wash. 98501

Re: La. Optometric Laser Procedures

To Whom It May Concern,

In response to your request, I can report that Louisiana Act 398 of the 2014 Louisiana legislature expanded the scope of practice of Optometry allowing Doctors of Optometry who qualified, with additional training, to perform advanced ophthalmic surgery procedures, including laser procedures.

In promulgating the rules to administer the act, the Louisiana State Board of Optometry Examiners (LSBOE) included a provision that all Doctors of Optometry who perform laser procedures were required, as a provision of renewal of their license to practice Optometry, to keep a log of the number of laser procedures performed, and any adverse outcomes noted, and report that to the Board.

Of the 489 Doctors of Optometry practicing in Louisiana, 292 have become certified to perform the procedures to date.

The data from the years 2015-2019 show that Louisiana Doctors of Optometry have performed 11,545 laser procedures with zero negative outcomes reported.

In addition, there have been no complaints to the Board regarding Doctors of Optometry performing these procedures from patients or other doctors, and the Board is not aware of any malpractice suits filed regarding this.

The LSBOE participates with the National Practitioner Data Bank/Health Care Integrity and Protection Data Bank (NPDB/HIPDB) in sharing data regarding Doctors of Optometry and any disciplinary actions committed or reported. The LSBOE has received no communication from the NPDB/HIPDB regarding any

malpractice suits, licensure suspension/revocations or other adverse actions regarding Louisiana Doctors of Optometry performing these advanced ophthalmic surgical procedures including laser procedures.

It is clear to the Board that the law has been of great benefit to the citizens of Louisiana, allowing greater access to these procedures, especially in the rural areas of the state.

If I can be of further assistance, please feel free to contact me at any time.

Sincerely,

Dr. James D. Sandefur

Secretary

La. State Board of Optometry Examiners

May 4, 2021

Washington Department of Health

Board of Optometry

PO Box 47877

Olympia, WA 98504-7877

Dear Washington Department of Health,

The Alaska Board of Examiners in Optometry has received no complaints regarding care rendered following the signing of CSHB103(FIN) into law on July 26, 2017 and the subsequent statute change of AS 08.72.278 and integration of regulation 12 AAC 48.040 that expanded optometric scope of practice in Alaska.

The Alaska Board of Examiners in Optometry continues to judiciously and carefully monitor all aspects of optometric care for the benefit of the citizens of Alaska.

Sincerely,

Damien R. Delzer, O.D., DiplABO

Chair, Alaska Board of Examiners in Optometry



COMMONWEALTH OF KENTUCKY

BOARD OF OPTOMETRIC EXAMINERS

CARSON KERR, EXECUTIVE DIRECTOR

2365 HARRODSBURG ROAD, SUITE A240

LEXINGTON, KY 40511

PHONE: (859) 246-2744

FAX: (859) 246-2746

May 19, 2021

To Whom It May Concern,

In 2011 the Kentucky Legislature passed Senate Bill 110 or the "Better Access to Quality Eye Care" bill. The Kentucky law became effective on June 8, 2011 and constituted an expansion of Optometrists' scope of practice which allowed Kentucky Optometrists to perform certain laser procedures, remove benign lesions from the eyelid and granted increased authority to allow medicines to be delivered by injections or other appropriate forms. The law also allowed the Kentucky Board of Optometric Examiners the authority to determine the scope of optometric practice in Kentucky outside of the procedures excluded in KRS 320.210. To date the Kentucky Board of Optometric Examiners has credentialed over 410 Optometrists to perform expanded therapeutic procedures. This law has been successful in delivering much needed medical eye care to underserved areas of the state as Optometrists credentialed in expanded therapeutic procedures practice in over 75% of Kentucky's 120 counties.

To date, there have been over 40,000 laser and surgical procedures performed in Kentucky by Optometrists. The Board of Optometric Examiners has received no complaints and has not heard of any adverse outcomes relating to the performance of this expanded scope of practice.

Furthermore, there was no increase in malpractice rates with the passage of SB110. There is no difference in malpractice rates between Optometrists in Kentucky who have extended therapeutic privileges and those who do not and there is no difference in malpractice rates between Kentucky Optometrists and Optometrists in surrounding states without extended therapeutic privileges.

I hope this information has been helpful and should you require any additional information, please let us know.

Sincerely,

A handwritten signature in blue ink that reads "Jonathan L. Shrewsbury, D.O." The signature is written in a cursive style.

Jonathan Shrewsbury, OD

President, Kentucky Board of Optometric Examiners

Keyword: Ophthalmology?! Who needs to learn that?

[OphthalmologyTimes](#)

Ophthalmology?!—Who needs to learn that?

Medical schools need to emphasize ophthalmology in their curricula

March 15, 2005

By [Peter J. McDonnell, MD](#)

In the first issue of *Ophthalmology Times* after assuming the mantle of chief medical editor, I wrote a piece praising this publication as an effective instrument for providing important, clinically relevant information in ophthalmology. I wish the same could be said for America's medical schools.

Let me explain. Each year, the Association of University Professors of Ophthalmology (www.aupo.org)

convenes in some lovely setting. The attendees are largely department chairpersons and residency program directors from about 125 departments across the United States. The idea is to have a forum where academic leaders can learn from each other about how best to teach their residents and fellows,

survive the changes in the healthcare system, strengthen their research programs, etc. For a new chairperson, it represents an opportunity to seek out advice from the most successful chairpersons and to learn some of the things about the position that were taught in medical school.

At this most recent meeting, I learned there is something else they don't teach you in medical school, and it's called ophthalmology. A speaker at the podium asked for a show of hands of those departments where the medical curriculum had a required rotation in ophthalmology. About one-fifth of the hands went up, including my own. No required rotation in ophthalmology and about 80% went up.

In this space that *Ophthalmology Times* allocates to me each issue, I recently (Feb. 1, 2005) opined about what seems to be a decline in many departments of ophthalmology because of the large number of departments without a permanent full-time leader. It seemed to me that many medical schools were deemphasizing

our specialty, and that some deans were focusing increasingly on their "flagship" departments (surgery, medicine, pediatrics) and being forced to ignore the usually small, outpatient focused ophthalmology departments (I hasten to add that such practice is not the case at my institution).

But why should a dean worry about strengthening a department that does not even have a serious place at the table when it comes to educating his/her medical students? For all I know, perhaps at some schools the ophthalmology faculty are relieved that they do not have to teach every student some of the basics about eye diseases and clinical care in our field. By extension, why should a brilliant medical student consider a career in our field if he or she has no exposure to it, and observes that house officers on the medical and surgical wards are getting by just fine without doing basic examination of the eye, including direct ophthalmoscopy, on every patient?

As an academic ophthalmologist, this trend disturbs me greatly, and I hope we can do something about it. I would like the AUPO and perhaps the American Academy of Ophthalmology to help educate all medical school deans about this issue. Perhaps those of you with influence in your local medical school can also help its leaders to realize what a minority of deans—including mine at Johns Hopkins University School of Medicine—understand, namely that educating our future

physicians about the eye is important, and that a medical school that aspires to be great should have a department of ophthalmology that is excellent.

And I would like to offer a medical school dean who doesn't think it is important to educate U.S. medical students about the eye the chance to tell us why in some future issue of *Ophthalmology Times*.

Peter J. McDonnell, MD is director of The Wilmer Eye Institute, The Johns Hopkins University School of Medicine, Baltimore, and chief medical editor of *Ophthalmology Times*. He can be reached at 727 Maumenee Building, 600 North Wolfe St., Baltimore, MD 21287-9278. Phone: 443/287-1511 Fax: 443/287-1514 E-mail: [\[email protected\]](#)

Keyword: Shortened Training Would Offer Advantages

OphthalmologyTimesOphthalmology

Shortened training would offer advantages

Physicians could begin practice brimming with ideas—and with less debt

January 15, 2007

By [Peter J. McDonnell, MD](#)

"They say that we are better educated than our parents' generation. What they mean is that we go to school longer. They are not the same thing."

—*Douglas Yates*

The president of my university, William Brody, MD, PhD, says we take too long to train the current generation of physicians and biomedical scientists. I agree.

Some will perceive this view as anti-intellectual, but I think we spend years of student-physicians' lives teaching them things they don't need to know and making them do things that will not be germane to their future careers.

Some examples:

A couple of decades ago, the American Board of Ophthalmology mandated a clinical internship for those, like me, seeking to become board-eligible in ophthalmology. This ruling immediately added a year's time to that needed to become an ophthalmologist in the United States.

No evidence exists that this additional requirement elevated the quality of ophthalmologists practicing in the United States compared with those who came before us. Rather, we learned to use drugs with names primarily of historic interest today to treat diseases we no longer managed once our internships were completed.

Despite completing the requirements for majors in both biochemistry and chemistry in college, I spent much of the first 2 years of medical school taking additional courses in these subjects. Memorizing the small bones of the hand was a challenge, and I can recall that the trapezium is the small bone supporting the thumb.

Trust me when I tell you that most of what I was taught and required to memorize in medical school has been long forgotten and never used in the practice of my profession. I am fortunate enough to travel outside the United States occasionally for professional reasons and have the pleasure and honor of meeting and observing ophthalmologists in their home countries. Every time, the youth of the junior ophthalmologists in those countries impresses me; sometimes they complete their training at an age close to that of my typical first-year resident.

Are these youthful trainees up to American standards? My observation is that many countries outside the United States are producing outstanding clinicians and superb surgeons. My residents, many of whom travel to other countries for elective courses, commonly tell me how impressed they are with the skills of these ophthalmologists.

People involved in designing medical school curricula tell me that they are not trying to teach medical students to know everything, especially because biomedical science totally changes every few years. Rather, they say, they seek to teach medical students "how to think." But why does it take 4 years to teach a medical student to think? Can't someone who was tops in his or her class in high school and college be taught to think in 3 years?

In many specialties, trainees are finishing their residencies and fellowships in their mid-to-late 30s, especially if they took time to get a PhD along the way. They graduate with an average of \$250,000 in student loans, may be married and have a child or two, and suddenly are worried about paying off their debt, buying a first home, and otherwise providing for their families.

When some of these brilliant young people decide not to pursue academic careers, many academics shake their heads sadly and wonder why.

My view is that we who are doing the training may be sowing the seeds of our own extinction by virtually bankrupting the next generation, making it increasingly not economically viable for most of our graduates to accept the lower incomes of academicians.

Pedagogical scientists may prove that I am wrong and that our current lengthy training programs are appropriate and are producing better physicians than in the past.

But if I were king, we'd shave a few years off the time required for training ophthalmologists in the United States, dramatically cut the debt burden on our trainees, and get them out in the world to start their careers when they are younger and brimming with great ideas.

Peter J. McDonnell, MD is director of The Wilmer Eye Institute, The Johns Hopkins University School of Medicine, Baltimore, and chief medical editor of *Ophthalmology Times*.

Eye Care Provider Availability for the Medicare Population in U.S. States That Have Expanded Optometrist Scope of Practice

Diane M. Gibson, PhD^{1*}

SIGNIFICANCE: Estimating a broader set of measures of local eye care provider availability than used in prior research offers information that is useful for policy decisions related to access to eye care.

PURPOSE: The purpose of this study was to examine whether policy-relevant information was gained when measures of local eye care provider availability in addition to the estimated travel time (ETT) to the closest provider were estimated for the population 65 years or older in Kentucky, New Mexico, and Oklahoma. These states have expanded surgical scope of practice for optometrists.

METHODS: This study used block group-level population data from the 2010 U.S. Decennial Census and eye care provider office address information from the 2016 Medicare Provider Utilization and Payment Data. Geographic information system analysis was used to calculate ETTs between individuals and eye care providers. Expanded measures of availability included the difference in ETT to an individual's second closest and closest ophthalmologist, the difference in ETT to an individual's closest ophthalmologist and closest optometrist, and whether only one ophthalmologist at the closest office accepted Medicare. Descriptive statistics were calculated for each state and by urbanicity.

RESULTS: Of the population 65 years or older in each state, between 10.8 (Kentucky) and 16.6% (Oklahoma) had a one-way ETT to the second closest ophthalmologist >15 minutes longer than to the closest ophthalmologist, between 21.1 (Kentucky) and 27.6% (Oklahoma) had a one-way ETT to the closest ophthalmologist >15 minutes longer than to the closest optometrist, and between 56.4 (Kentucky) and 70.0% (Oklahoma) had only one ophthalmologist at the closest office who accepted Medicare. Findings differed substantially by urbanicity.

CONCLUSIONS: Using a portfolio of travel time-based measures enhances the understanding of local eye care provider availability.

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The estimated travel time between individuals and the closest health care provider has been widely used as a measure of the availability of health care.¹ In most of the prior research, shorter travel times were associated with an increased likelihood of visiting a health care provider and better health outcomes.¹ Several recent studies have examined the local availability of eye care providers using the estimated travel time between individuals and the closest ophthalmologist and the closest optometrist.^{2–4} These studies rec-

ommend that state policy makers should evaluate eye care provider availability using travel time measures and that this information should play a role in vision-related public policy decisions such as optometrist scope of practice expansions.^{2–4} This article examines whether information relevant for policy decisions can be developed by estimating a broader set of travel time-based measures of eye care provider availability than that used in prior research.

Stein et al.² examined whether residents of Kentucky, New Mexico, and Oklahoma, three of the states that

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have expanded surgical scope of practice for optometrists, lacked reasonable access to ophthalmologists. Stein et al.² calculated the estimated travel time by car to the closest ophthalmologist for residents of each state and the estimated travel time to the nearest ophthalmologist for Medicare beneficiaries in each state who had surgery performed by an optometrist. Stein et al.² estimated that more than 77% of

the total population, 75% of the population 65 years or older, 84% of the urban population, and 20% of the rural population of each of these states lived within an estimated travel time of 30 minutes to the nearest ophthalmologist. They also determined that more than 46% of the Medicare beneficiaries in each state who had received surgery from an optometrist were within an estimated travel time of 30 minutes of the nearest ophthalmologist. Research on the specific amount of travel time individuals are willing to spend to see a doctor is extremely limited. Only McGrail et al.⁵ have addressed this topic. McGrail et al.⁵ surveyed a sample of individuals from five communities in rural Australia. Respondents were asked about the maximum amount of time they were willing to travel to see a general practitioner for something that was not an emergency. On average, residents of the two more densely settled rural communities were willing to travel a maximum of 31.9 minutes, and residents of the three less densely settled rural communities were willing to travel a maximum of 54.1 minutes.

This article uses Stein et al.² as a point of comparison to examine the extent to which the picture of eye care provider availability changed when additional measures of eye care provider availability were estimated for residents of Kentucky, New Mexico, and Oklahoma 65 years or older and when urban areas were further

subdivided into more and less densely settled areas. The additional measures included the difference in estimated travel time to an individual's second closest and closest ophthalmologist, the difference in estimated travel time to an individual's closest ophthalmologist and closest optometrist, and proxies for the availability of appointments at the office of the closest ophthalmologist. An additional contribution of this article is that it describes a low-cost method for conducting these analyses that could be used by state policy makers. While Lee et al.³ calculated the estimated travel time to the closest ophthalmologist and the closest optometrist for the population older than 65 years in each state in the contiguous United States, they did not consider estimated travel times for urban and rural residents separately, and they did not discuss the implications of their findings at the state level.

METHODS

Data

This study used publicly available data on the number of individuals residing in each census block group in Kentucky, New Mexico, and Oklahoma from the 2010 U.S. Decennial Census and office address information for every ophthalmologist and optometrist who provided care to Medicare fee-for-service beneficiaries in 2016 from the publicly available 2016 Medicare Provider Utilization and Payment Data from the Centers for Medicare & Medicaid Services (*Medicare Provider data*). Individuals 65 years or older (the *Medicare population*) were the focus of this study because the Medicare Provider data included only eye care providers who accepted Medicare. The

Medicare Provider data included one office address per eye care provider. These data do not contain information on eye care provider specialties or certification levels. Some of the previous research on the estimated travel time to eye care providers also used Medicare Provider data on ophthalmologists and optometrists combined with information on the block group or county-level population 65 years or older.^{3,4}

In 2010, in Kentucky, there were 3285 block groups and 578,227 residents 65 years or older; in New Mexico, there were 1449 block groups and 272,255 residents 65 years or older; and in Oklahoma, there were 2965 block groups and 506,714 residents 65 years or older. There were 17,596 ophthalmologists and 29,166 optometrists in the 2016 Medicare Provider data, including 196 ophthalmologists and 482 optometrists with an office in Kentucky, 80 ophthalmologists and 160 optometrists with an office in New Mexico, and 153 ophthalmologists and 554 optometrists with an office in Oklahoma.

Urbanicity, Estimated Travel Time, and Ophthalmologist Appointment Availability Variables

The 2010 Decennial Census data included the number of housing units in a block group that were in an urbanized area, urban cluster, or rural area. The Census Bureau defines an urbanized area as an area consisting of densely developed territory that contains 50,000 or more people, an urban cluster as an area consisting of densely developed territory that contains at least 2500 people but fewer than 50,000 people, and rural areas as low population density areas outside of urbanized areas and urban clusters.⁶ In this study, a block group was defined as being a part of an urbanized area if it

had any housing in an urbanized area, as being a part of an urban cluster if it had housing in an urban cluster but no housing in an urbanized area, and as part of a rural area if it had

housing in a rural area but no housing in an urbanized area or urban cluster. Previous research on estimated travel time to eye care providers did not subdivide urban areas into urbanized areas and urban clusters.²⁻⁴

The 2010 Decennial Census data also included the longitude and latitude of each block group centroid. The office addresses of the 17,596 ophthalmologists and 29,166 optometrists in the 2016 Medicare Provider data were geocoded. Addresses were first geocoded using U.S. Census Bureau Geocoding Services.⁷ The range of addresses covered by Census Bureau Geocoding Services is limited in commercial areas.⁷ Texas A&M Geoservices was used to geocode the 2314 ophthalmologist addresses and 7888 optometrist addresses that could not be geocoded by Census Bureau Geocoding Services.⁸ As mentioned previously, one of the aims of this article is to present a low-cost method for assessing the local availability of eye care providers. There is no fee for using Census Bureau Geocoding Services, and Texas A&M Geoservices offers options for geocoding a limited number of addresses at no cost.^{7,8} To avoid a fee, Census Bureau Geocoding Services was used as the first source of geocode information.

The Stata command “geonear” (Stata version 15.1; StataCorp, College Station, TX) starts with a set of origin points and a set of destination points defined in terms of longitude and latitude.⁹ This command determines which destination points are the closest (or second closest, third closest, etc.) to each origin point in terms of geodetic distance. This command was used to determine the three ophthalmologists and the three optometrists who were the closest to each block group centroid in terms of geodetic distance. The closest ophthalmologists or optometrists could have been beyond

state boundaries. Given that individuals often travel beyond state boundaries to visit health care providers, this an advantage over previous research that limited travel time estimates to eye care providers within state boundaries.^{3,4}

The Stata command “georoute” uses the HERE API to calculate the estimated travel time by car under normal travel conditions between two points.^{10,11} HERE does not charge a fee if fewer than 250,000 estimates are requested per month. As was also the case in previous research on the estimated travel time to eye care providers, the estimated travel time between two points provided by the HERE API does not include a standard error.²⁻⁴ The georoute command was used to calculate the estimated travel time between each block group centroid and the three ophthalmologists and the three optometrists who were closest in terms of geodetic distance. The two closest providers of each type in terms of travel time were then identified. This approach assumes that calculating the estimated travel times to the three closest providers in terms of geodetic distance would be sufficient to capture the two closest providers in terms of driving time. This assumption was made to reduce the number of calculations that needed to be made using georoute so that the number of estimates could be kept below the 250,000 HERE API monthly limit. As in prior research, residents of a block group were assigned the estimated travel times corresponding to their block group centroid.^{2,3} A categorical variable was created for an individual's estimated travel time to the closest ophthalmologist in terms of driving time with the following categories: ≤15 minutes, >15 and ≤30 minutes, >30 and ≤45 minutes, >45 and ≤60 minutes, and >60

minutes. A categorical variable using these estimated travel time categories was also created for the estimated travel time to the closest optometrist in terms of driving time. Proximity to providers is only one of many factors that play a role in the choice of a health care provider.^{12,13} Other factors

include the qualifications, experience, and communication style of providers, the availability of convenient appointments, and out-of-pocket costs. The importance of these factors is also influenced by an individual's sociodemographic and health characteristics.^{12,13} Therefore, the estimated travel time to the closest eyecare provider is best thought of as a one-way estimate of the minimum amount of time that an individual would need to spend to reach an eye care provider. Variables were also created for the difference in estimated travel time to an individual's second closest ophthalmologist and closest ophthalmologist and the difference in estimated travel time to an individual's closest ophthalmologist and closest optometrist.

Practices with more health care providers typically offer a greater total number of appointments than practices with fewer providers.¹⁴ An indicator variable for whether an individual's closest ophthalmologist was the only ophthalmologist at the closest office who accepted Medicare (*solo Medicare closest ophthalmologist*) was used to capture office locations where fewer total appointments were likely to be offered. Above a certain level of demand, the greater the number of individuals who would like an appointment with a provider, the longer the expected time until an appointment would be available, and the greater the likelihood that individuals would choose to visit a different provider. An indicator variable for whether an individual's closest ophthalmologist was a solo Medicare ophthalmologist who was also the closest ophthalmologist for more than 50,000 other individuals (*solo Medicare 50 K+ closest ophthalmologist*) was used to capture office locations where

the demand for appointments relative to those offered was likely to be higher. This calculation was based on the entire population rather than the Medicare population. Results using thresholds of 25,000 individuals and 75,000 individuals sharing the same closest solo ophthalmologist are available upon request. Prior research does not offer guidance about the size of the potential patient pool at which waiting times for appointments would be expected to increase meaningfully.

Analyses

The distributions of the Medicare population across categories of estimated travel time to the closest ophthalmologist, second closest ophthalmologist, and closest optometrist and across categories of differences in estimated travel time to these providers were calculated for the total Medicare population of each state and for the Medicare population of each state stratified by urbanicity of residence. The percentages of the Medicare population with a solo Medicare closest ophthalmologist and a solo Medicare 50 K+ closest ophthalmologist were also calculated for the total Medicare population of each state and for the Medicare population of each state stratified by urbanicity.

RESULTS

Tables 1 to 3 present descriptive statistics for each state as a whole and by urbanicity for Kentucky, New Mexico, and Oklahoma, respectively. The estimated travel times presented in these tables are for one-way travel to facilitate comparisons with prior research.²⁻⁴ Within each state, between 69.2% (New Mexico) and 75.1% (Kentucky) of the Medicare population was within an estimated

travel time of 30 minutes to the closest ophthalmologist, between 56.4 (Kentucky) and 70.0% (Oklahoma) had a solo Medicare closest ophthalmologist, and between 33.3 (Kentucky)

and 44.3% (Oklahoma) had a solo Medicare 50 K+ closest ophthalmologist. Of the Medicare population in each state, between

10.8 (Kentucky) and 16.6% (Oklahoma) had an estimated traveltime to the second closest ophthalmologist more than 15 minutes longer than to the closest ophthalmologist, and between 21.1 (Kentucky) and 27.6% (Oklahoma) had an estimated travel time to the closest ophthalmologist more than 15 minutes longer than to the closest optometrist.

There were considerable differences in eye care provider availability within states by urbanicity of area of residence. With respect to urbanized areas, more than 90% of the Medicare population of each state living in an urbanized area was within an estimated traveltime of 30 minutes to the closest ophthalmologist. The additional estimated travel time to the second closest ophthalmologist in comparison with the closest ophthalmologist and to the closest optometrist was less than 15 minutes for almost the entire urbanized area Medicare population. Of the Medicare population in each state living in an urban cluster, between 21.8 (Kentucky) and 46.8% (New Mexico) had an estimated travel time of more than 30 minutes to the closest ophthalmologist, between 63.9 (Kentucky) and 87.5% (New Mexico) had a solo Medicare closest ophthalmologist, and between

40.4 (Kentucky) and 61.2% (Oklahoma) had a solo Medicare 50 K+ closest ophthalmologist. Of the urban cluster Medicare population in each state, between 19.4 (Kentucky) and 36.5% (New Mexico) had an estimated travel time to the second closest ophthalmologist more than 15 minutes longer than to the closest ophthalmologist, and between 25.3 (Kentucky) and 40.9% (Oklahoma) had

an estimated travel time to the closest ophthalmologist more than 15 minutes longer than to the closest optometrist.

With respect to the Medicare population in each state living in a rural area, between 57.1 (Kentucky) and 85.0% (New Mexico) had an estimated travel time of more than 30 minutes to the closest ophthalmologist, between 60.2 (Kentucky) and 82.0% (New Mexico) had a solo Medicare closest ophthalmologist, and between 36.4 (New Mexico) and 59.0% (Oklahoma) had a solo Medicare 50 K+ closest ophthalmologist. Of the rural Medicare population in each state, between 14.6 (Kentucky) and 23.5% (New Mexico) had an estimated travel time to the second closest ophthalmologist more than 15 minutes longer than to closest ophthalmologist, and between

39.9 (Kentucky) and 47.6% (Oklahoma) had an estimated travel time to the closest ophthalmologist more than 15 minutes longer than to the closest optometrist.

closest ophthalmologist instead of the closest ophthalmologist and traveling to the closest ophthalmologist instead of the closest optometrist would have entailed a substantial increase in travel time for many

DISCUSSION

The analyses in the current study revealed that the majority of the Medicare population of each state and a higher percentage of the Medicare population living in urban clusters and rural areas may have encountered limited appointment availability at the office of their closest ophthalmologist because the closest ophthalmologist was the only ophthalmologist at the office who accepted Medicare. In addition, for more than a third of the population of each state, the closest ophthalmologist was the only ophthalmologist at the office who accepted Medicare, and this ophthalmologist was also the closest ophthalmologist for more than 50,000 other individuals. Furthermore, traveling to the second

TABLE 1. Estimated travel times to eye care providers who accepted Medicare fee-for-service patients for the total Medicare population and the Medicare population stratified by urbanicity in Kentucky

	Medicare population,* %	Medicare population in urban areas,† %	Medicare population in urban clusters,‡ %	Medicare population in rural areas,† %
ETT to the closest ophthalmologist				
≤15 min	49.6	84.2	51.6	6.0
>15 and ≤30 min	25.5	15.2	26.6	37.0
>30 and ≤45 min	15.9	0.6	17.7	32.9
>45 and ≤60 min	6.5	0	3.2	17.3
>60 min	2.5	0	0.9	6.9
Closest ophthalmologist was:				
Only ophthalmologist at office who accepted Medicare	56.4	48.0	63.9	60.2
Only ophthalmologist at office who accepted Medicare and was the closest ophthalmologist for >50,000 individuals	33.3	25.2	40.4	39.0
Difference between the ETT to the 2nd closest ophthalmologist and the closest ophthalmologist				
>0 and ≤15 min	89.2	98.4	80.6	85.4
>15 and ≤30 min	5.2	1.6	5.6	9.1
>30 and ≤45 min	2.7	0	6.2	2.9
>45 and ≤60 min	2.2	0	5.6	2.0
>60 min	0.7	0	2.0	0.6
ETT to the closest optometrist				
≤15 min	71.2	98.2	84.5	27.2
>15 and ≤30 min	21.6	1.8	11.4	54.5
>30 and ≤45 min	5.8	0	3.3	14.9
>45 and ≤60 min	1.1	0	0.7	2.7
>60 min	0.3	0	0.1	0.6
Difference between the ETT to the closest ophthalmologist and the closest optometrist				
≤0 min	16.1	18.5	17.3	12.0
>0 and ≤15 min	62.8	76.7	57.4	48.1
>15 and ≤30 min	14.4	2.8	16.2	27.1
>30 and ≤45 min	5.4	0	7.7	10.0
>45 and ≤60 min	1.1	0	1.1	2.4
>60 min	0.2	0	0.3	0.4

The 2010 U.S. Decennial Census was the source of block group–level population data, and the 2016 Medicare Provider Utilization and Payment Data was the source of eye care provider office location. Individuals were assigned ETTs corresponding to the times from the centroid of their block group of residence to eye care providers. *The term *Medicare population* is used to refer to the population 65 years or older. The Medicare population in Kentucky in 2010 was 578,227 individuals. †The Medicare population in Kentucky in 2010 comprised 228,840 individuals living in urban areas, 160,993 individuals living in urban clusters, and 183,394 individuals living in rural areas. ETT = estimated travel time.

residents of urban clusters or rural areas. The findings suggest that the local availability of ophthalmologists was more limited than what would be assumed if the estimated travel time to the closest ophthalmologist was used as the only indicator of ophthalmologist availability and if urbanized areas and

urban clusters were not considered separately. In addition, the estimates showed that visiting the closest optometrist rather than the closest ophthalmologist could have saved travel time for much of the Medicare population of each state. This information would have been missed if

ophthalmologist availability was considered in isolation as in Stein et al.²

The findings of this article with respect to the state-level distributions of the estimated travel time to the closest ophthalmologist were similar to those in Stein et al.² for the Medicare population in Kentucky and Oklahoma, but a smaller percentage of the Medicare population in New Mexico was within 60 minutes to the closest ophthalmologist in comparison with Stein et al.² Stein et al.² used data on the office location of ophthalmologists from a 2016 American Academy of Ophthalmology member database. Whereas the Medicare Provider data on ophthalmologists were not limited to American Academy of Ophthalmology members, the American

TABLE 2. Estimated travel times to eye care providers who accepted Medicare fee-for-service patients for the total Medicare population and the Medicare population stratified by urbanicity in New Mexico

	Medicare population,* %	Medicare population in urban areas,† %	Medicare population in urban clusters,† %	Medicare population in rural areas,† %
ETT to the closest ophthalmologist				
≤15 min	53.9	79.1	36.0	1.8
>15 and ≤30 min	15.3	14.7	17.2	13.2
>30 and ≤45 min	8.2	3.8	11.7	16.2
>45 and ≤60 min	4.9	1.3	5.0	17.8
>60 min	17.7	1.1	30.1	51.0
Closest ophthalmologist was:				
Only ophthalmologist at office who accepted Medicare	69.9	56.2	87.5	82.0
Only ophthalmologist at office who accepted Medicare and was the closest ophthalmologist for >50,000 individuals	37.5	35.2	42.1	36.4
Difference between the ETT to the 2nd closest ophthalmologist and the closest ophthalmologist				
>0 and ≤15 min	84.9	99.8	63.5	76.5
>15 and ≤30 min	3.4	0.2	7.9	5.1
>30 and ≤45 min	1.8	0	3.8	3.8
>45 and ≤60 min	2.5	0	3.7	9.1
>60 min	7.4	0	21.1	5.5
ETT to the closest optometrist				
≤15 min	69.1	89.9	62.5	8.9
>15 and ≤30 min	15.2	8.0	22.9	25.1
>30 and ≤45 min	5.0	0.9	4.4	20.7
>45 and ≤60 min	3.2	0.1	2.6	15.6
>60 min	7.5	1.1	6.0	29.7
Difference between the ETT to the closest ophthalmologist and the closest optometrist				
≤0 min	19.7	23.9	14.0	16.6
>0 and ≤15 min	58.5	69.8	49.7	37.1
>15 and ≤30 min	8.4	5.2	10.1	16.6
>30 and ≤45 min	3.2	1.1	4.2	8.6
>45 and ≤60 min	3.1	0	5.1	9.7
>60 min	4.1	0	16.9	10.4

The 2010 U.S. Decennial Census was the source of block group–level population data, and the 2016 Medicare Provider Utilization and Payment Data was the source of eye care provider office location. Individuals were assigned ETTs corresponding to the times from the centroid of their block group of residence to eye care providers. *The term *Medicare population* is used to refer to the population 65 years or older. The Medicare population in New Mexico in 2010 was 272,255 individuals. †The Medicare population in New Mexico in 2010 comprised 145,930 individuals living in urban areas, 85,002 individuals living in urban clusters, and 41,323 individuals living in rural areas. ETT = estimated travel time.

Academy of Ophthalmology member database included ophthalmologists who did not accept Medicare, and members could have listed more than one office location. The American Academy of Ophthalmology data are not publicly available, so it was not possible to

compare the two sources of ophthalmologist location data to determine why the results in this article and in Stein et al.² were similar for Kentucky and Oklahoma but less so for New Mexico.

As mentioned previously, the

Medicare Provider data excluded eye care providers who did not see patients in the Medicare fee-for-service

program. This has the potential to bias estimates of travel times to the closest providers for individuals 65 years or older who were willing to visit providers who did not take fee-for-service Medicare. This is a possibility because Medicare Part B does not cover refractions for eyeglasses or contact lenses, although it does cover a screening eye examination within 12 months of Medicare enrollment, annual eye examinations for individuals with diabetes, annual glaucoma tests for those at high risk of glaucoma, and treatment for eye diseases.¹⁵ Travel time estimates may also be biased for individuals

TABLE 3. Estimated travel times to eye care providers who accepted Medicare fee-for-service patients for the total Medicare population and the Medicare population stratified by urbanicity in Oklahoma

	Medicare population,* %	Medicare population in urban areas,† %	Medicare population in urban clusters,† %	Medicare population in rural areas,† %
ETT to the closest ophthalmologist				
≤15 min	48.9	82.7	45.8	3.8
>15 and ≤30 min	22.5	17.1	19.7	32.9
>30 and ≤45 min	15.2	0.2	18.3	33.6
>45 and ≤60 min	6.7	0	6.7	16.2
>60 min	6.7	0	9.5	13.5
Closest ophthalmologist was:				
Only ophthalmologist at office who accepted Medicare	70.0	55.4	82.7	78.2
Only ophthalmologist at office who accepted Medicare and was the closest ophthalmologist for >50,000 individuals	44.3	27.5	61.2	59.0
Difference between the ETT to the 2nd closest ophthalmologist and the closest ophthalmologist				
>0 and ≤15 min	83.4	100.0	65.5	77.2
>15 and ≤30 min	8.6	0	13.6	15.8
>30 and ≤45 min	5.1	0	14.1	3.6
>45 and ≤60 min	2.0	0	4.7	2.2
>60 min	0.9	0	2.1	1.2
ETT to the closest optometrist				
≤15 min	74.2	97.4	89.0	26.9
>15 and ≤30 min	20.9	2.6	9.3	58.1
>30 and ≤45 min	3.9	0	1.4	11.8
>45 and ≤60 min	1.0	0	0.3	3.1
>60 min	0	0	0	0.1
Difference between the ETT to the closest ophthalmologist and the closest optometrist				
≤0 min	8.9	12.8	7.1	5.0
>0 and ≤15 min	63.5	82.4	52.4	47.4
>15 and ≤30 min	15.2	4.8	17.0	28.2
>30 and ≤45 min	6.6	0	11.4	11.3
>45 and ≤60 min	3.0	0	6.5	3.9
>60 min	2.8	0	5.6	4.2

The 2010 U.S. Decennial Census was the source of block group–level population data, and the 2016 Medicare Provider Utilization and Payment Data was the source of eye care provider office location. Individuals were assigned ETTs corresponding to the times from the centroid of their block group of residence to eye care providers. *The term *Medicare population* is used to refer to the population 65 years or older. The Medicare population in Oklahoma in 2010 was 506,714 individuals. †The Medicare population in Oklahoma in 2010 comprised 211,564 individuals living in urban areas, 146,136 individuals living in urban clusters, and 149,014 individuals living in rural areas. ETT = estimated travel time.

who participated in Medicare Advantage plans because these plans may have covered visits to a more limited set of eye care providers. Previous research has not examined how Medicare participants choose eye care providers.

A related question is whether estimates of eye care provider

availability constructed using the Medicare Provider data for the Medicare population of a state can be used by state policy makers as a reasonable approximation of availability for the total population of the state. This depends on whether the distribution of the total state population

across census block groups is similar to that for the Medicare population, how many eye care providers in a state

and neighboring states do not accept Medicare, and where the providers who do not accept Medicare are located. The percentage of the Medicare population and the total population in each state that resided in urbanized areas, urban clusters, or rural areas was compared to provide a rough estimate of the difference in the distribution of the population across areas by age. These percentages were similar for all three states (results not shown). The 2019 Area Health Resources File included information on the state-level number of "patient care" ophthalmologists in 2016 from the American Medical Association's Physician Masterfile and the state-level number of optometrists in 2016 from the Centers for Medicare &

Medicaid Services National Provider Identification File.¹⁶ Eye care providers included in the Area Health Resources File data did not have to accept Medicare. Comparing the number of ophthalmologists and optometrists in Kentucky, New Mexico, and Oklahoma in the Area Health Resources File data and the Medicare Provider data suggests that 6.0% of ophthalmologists and 29.0% of optometrists in these states did not accept Medicare in 2016. The Medicare Provider data would therefore be expected to underestimate optometrist availability to a greater extent than ophthalmologist availability for the total population of each state.

Additional limitations of this study are that the Medicare Provider data do not contain more detailed information about the eye care providers in the data such as the types of insurance accepted in addition to Medicare, additional office locations, specialties, certification levels, or work hours. If a state is interested in assessing the likely impact of a specific optometrist scope of practice expansion on the availability of eye care services covered by the expansion,

information would also be needed about the location of optometrists currently certified to provide the expanded service and the location of optometrists who were interested in becoming certified to provide the service. Other limitations of this study include that travel time may be misestimated for individuals who were residents of geographically large census block groups or who did not have access to a car and that provider quality of care is not taken into consideration.¹⁷

Strengths of the study include that all of the data used in the analyses were publicly available and that free services were used to geocode the addresses of eye care providers and to determine estimated travel times. State public health agencies and health policy makers could conduct these types of analyses at low cost. The findings of this article suggest that a portfolio of easily calculated measures of eye care provider availability could provide policy makers with a deeper understanding of the local availability of eye care providers and help inform decisions about whether interventions are needed to improve access to eye care.

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Preventive Medicine

The geographic distribution of eye care providers in the United States: Implications for a national strategy to improve vision health

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ABSTRACT

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Objective. To describe the patterns of local eye care provider availability in the US.

Methods. Data from 2011 on the number of ophthalmologists and optometrists in each of the 3143 counties in the US were drawn from the Area Health Resources File. Population-weighted quartiles of the county-level number of ophthalmologists per capita and the county-level number of optometrists per capita were defined. Descriptive statistics were calculated and a cross tabulation of quartiles of ophthalmologist availability and quartiles of optometrist availability was conducted for all the counties in the US and for the set of counties in each region of the US.

Results. 24.0% of US counties had no ophthalmologists or optometrists. 60.7% of counties in the US were in one of the lower two quartiles of both ophthalmologist availability and optometrist availability, and 24.1% of counties were in one of the lower two quartiles of ophthalmologist availability but in one of the upper two quartiles of optometrist availability.

Conclusions. Public health interventions that are effective in a context of limited local eye care provider availability or that are able to leverage optometrist availability effectively in areas with limited ophthalmologist availability could be of widespread use in the US.

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Introduction

More than 4 million Americans aged 40 years and older are either blind or visually impaired (Prevent Blindness America, 2012). Among Americans aged 40 years and older, 25.4 million have cataracts, 7.7 million have diabetic retinopathy, 2.7 million have glaucoma, and 1.8 million have age-related macular degeneration (Eye Diseases Prevalence Research Group, 2004; Prevent Blindness America, 2012). On the basis of these numbers, projected demographic trends in the US, the availability of effective treatments for

many eye conditions, and the large financial and quality of life burden of vision loss, it has been argued widely that vision loss in the US is a public health problem (Gohdes et al., 2005; Lee et al., 2012; Prevent Blindness America and National Association of Chronic Disease Directors, 2005; Saadine et al., 2003; US Centers for Disease Control, 2009; Zhang et al., 2008). The Vision Health Initiative (VHI) of the US Centers for Disease Control and Prevention has developed a national public health strategy for improving vision health in the US. Since community characteristics such as the local availability of health care providers influence the

Abbreviations: MO, American Academy of Ophthalmology; AMA, American Medical Association; AMD, age-related macular degeneration; AHRF, Area Health Resources Files; ITT, full-time equivalent; VHI, Vision Health Initiative

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care services and the effectiveness of public health interventions, one of the recommendations in the VHI strategy is to determine the patterns of local eye care provider availability in the US in order to develop and disseminate public health interventions that are effective in these contexts (Gohdes et al., 2005; Layde et al., 2012; Prevent Blindness America and National Association of Chronic Disease Directors, 2005; Prevent Blindness America, 2004; US Centers for Disease Control, 2009; Zhang et al., 2007, 2008).

There is a small amount of previous research considering the geographic distribution of eye care providers in the US (Gamble et al., 1983; Lee et al., 2005). Gamble et al. (1983) described the number of ophthalmologists per capita in 1983 in the US and in each of the 532 ZIP Code sectional areas in the US. ZIP Code sectional areas usually cover multiple counties. They drew their information on ophthalmologists from the American Academy of Ophthalmology's (MO) list of member and non-member ophthalmologists. They reported there were 11,210 ophthalmologists and 4.8 ophthalmologists per 100,000 residents of the US in 1983. They found that the number of ophthalmologists per capita varied widely across ZIP Code sectional areas, with the number of ophthalmologists per 100,000 residents ranging from 0 to

14.5. They also determined that 37 ZIP Code sectional areas, containing 0.8% of the total population of the US, did not have an ophthalmologist. Lee et al. (2005) estimated the combined number of full-time equivalent (FTE) ophthalmologists and optometrists in 1994 in the US and in each of the four Census Regions of the US. They also drew their

information on ophthalmologists from the AAO's list of member and non-member ophthalmologists. They estimated the number of optometrists using data from the 1990 Census Public Use Microdata Sample. They estimated there were 41,738 eye care provider FfEs in the US and their estimates by region ranged from 9065 eye care provider FfEs in the Northeast to 11,890 eye care provider FfEs in the South.

This paper provides updated information on the geographic distribution of ophthalmologists and optometrists in the US using data from 2011. The county-level analysis considers eye care provider availability in a smaller geographic area than in previous research. Additionally, the county-level availability of ophthalmologists and optometrists per capita are considered both separately and combined into the category of "eye care providers." While some types of vision care can be delivered by either ophthalmologists or optometrists, these two types of providers differ in training and in the range of vision care services they provide (Lee et al., 2005). The paper also adds to previous research by examining how county characteristics differ with the availability of eye care providers.

Methods

Sample

All of the 3143 counties and "county-equivalents" in the US in 2011 were included in the analysis. "County equivalents" are defined by the US Census Bureau and include the District of Columbia, the parishes of Louisiana, the boroughs of Alaska, and "independent cities" in Maryland, Missouri, Nevada, and Virginia. Hereafter, county equivalents are referred to as counties for ease of explanation.

Measurement of the county-level availability of eye care providers

The number of "patient care" ophthalmologists and the number of optometrists in each county in the US in 2011 were drawn from the Area Health Resources File (AHRF) of the US Health Resources and Services Administration (US Department of Health and Human Services, 2013a). This is the most recent data on ophthalmologists currently available in the AHRF. The source of the ophthalmologist data in the AHRF is the American Medical Association's (AMA) Physician Masterfile (US Department of Health and Human Services, 2013b). Lee et al. (2005) found that there were similar numbers of ophthalmologists in the AMA Physician Masterfile and the AAO's list of member and non-member ophthalmologists. The source of the optometrist data in the AHRF is the Centers for Medicare and Medicaid Services National Provider Identification File (US Department of Health and Human Services, 2013b). In the AHRF, a health care provider is assigned to a county on the basis of the provider's office address if it was provided and on the basis of the provider's mailing address if it was not.

Data on county population in 2011 was drawn from the AHRF. Separate county-level variables were created for the number of ophthalmologists per 100,000 county residents, the number of optometrists per 100,000 county residents, and the combined number of ophthalmologists and optometrists per 100,000 county residents ("eye care providers").

Previous research on the US found that greater county-level availability of ophthalmologists, with availability measured using population-weighted quartiles of the county-level number of ophthalmologists per capita, was associated with increased use of eye care services and better visual health outcomes (Gibson, 2014). These findings motivate the decision to describe eye care provider availability in a similar fashion in this paper. The definitions of the population-weighted quartiles of the number of ophthalmologists per 100,000 county residents are: low, ≤ 2.95 ; medium-low, >2.95 and ≤ 5.39 ; medium-high,

>5.39 and ≤ 7.63 ; high, >7.63 . The definitions of the population-weighted quartiles of the number of optometrists per 100,000 county residents are: ≤ 10.96

"low"; >10.96 and ≤ 14.09 "medium-low"; >14.09 and ≤ 16.80 "medium-high"; >16.80 "high." Each quartile contains approximately the same total population but the number of counties in each quartile differs.

County characteristics

Additional county-level variables drawn from the AHRF were the number of "patient care" physicians, population density, median household income,

percentage of county residents who were poor, and percentage of county residents who were aged 65 years and older (all measured in 2011) and the percentage of county residents living in an urban area in 2010. The US Census Bureau is the source of AHRF demographic variables. A county's region was defined based on US Census Bureau Regions. The states in each region are listed in the footnotes in Table 4.

Statistical analysis

Descriptive statistics were calculated for the full set of counties and for these counties in each ophthalmologist and optometrist availability quartile. Across tabulation of quartiles of ophthalmologist availability and quartiles of optometrist availability was conducted for all the counties in the US and for the set of counties in each region of the US. Linear tests of trend were conducted using bivariate linear regressions of each continuous county characteristic on a categorical ophthalmologist availability variable defined based on a county's ophthalmologist availability quartile (1 = lowest availability quartile, 4 = highest availability quartile). Similarly, linear tests of trend were conducted using bivariate linear regressions of each continuous county characteristic on a categorical optometrist availability variable defined based on a county's optometrist availability quartile. All tests were 2-sided with a significance level of $P < .05$. All analyses were performed with Stata Version 13.1 (StataCorp College Station, Texas).

Results

There were 17,793 ophthalmologists and 44,402 optometrists in the US in 2011 and there were 5.7 ophthalmologists and 14.3 optometrists per 100,000 residents of the US in 2011. The county-level means were

2.1 ophthalmologists per 100,000 county residents, 11.2 optometrists per 100,000 county residents, and 13.2 eye care providers per 100,000 county residents (Tables 1 and 2). In 2011, 61% of counties had no ophthalmologists, 24.2% of counties had no optometrists, and 24.0% of counties had neither an ophthalmologist nor an optometrist. 11.7% of the US population lived in a county without an ophthalmologist; 2.2% of the US population lived in a county without an optometrist; and 2.1% of the US population lived in a county without an ophthalmologist or an optometrist.

Table 3 presents the cross tabulation of county ophthalmologist availability quartile by county optometrist availability quartile for all of the counties in the US. 44.7% of counties in the US were in the lowest quartile of both ophthalmologist and optometrist availability and 12.9% of the US population lived in these counties. 60.7% of counties in the US were in one of the lower two quartiles of both ophthalmologist availability and optometrist availability and 34.3% of the US population lived in these counties. 24.1% of counties were in one of the lower two quartiles of ophthalmologist availability but in one of the top two quartiles of optometrist availability and 15.7% of the US population lived in these counties.

The county-level availability of ophthalmologists and optometrists in the US is depicted in Figs. 1 and 2 respectively. The figures show that there was substantial variation between and within states in the county-level availability of ophthalmologists per capita and in the availability of optometrists per capita.

At the regional-level, the South had the highest total number of eye care providers (20,417) but the lowest number of providers per capita (17.6 per 100,000 residents). The Northeast had the lowest total number of eye care providers (13,323) but the highest number of eye care providers per capita (22.2 per 100,000 residents) and the highest number of ophthalmologists per capita (7.6 per 100,000 residents). The Midwest had the highest number of optometrists per capita (16.1 per 100,000 residents). Table 4 shows that 71.1% of counties in the South were in one of the lower two quartiles of both ophthalmologist and optometrist availability in comparison with

46.1% of counties in the Northeast, 51.6% of counties in the Midwest, and 56.8% of counties in the West. Table 4 also shows that 36.3% of counties in the Midwest were in one of the lower two quartiles of ophthalmologist availability but in one of the top two quartiles of optometrist availability in comparison

Table 1

Description of health care provider availability and population characteristics for all counties in the US and for counties grouped by population-weighted ophthalmologist availability quartiles. AHRF 2011.¹

	All counties in the United States (n = 3143)	Counties in the low ophthalmologist availability quartile (n = 2242)	Counties in the medium-low ophthalmologist availability quartile (n = 425)	Counties in the medium-high ophthalmologist availability quartile (n = 249)	Counties in the high ophthalmologist availability quartile (n = 227)	Significance level of linear test of trend
	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	
<i>Health care provider availability</i>						
Ophthalmologists per 100,000 population	2.1 (2.0-2.2)	0.30 (0.26-0.33)	4.1 (4.0-4.1)	6.3 (6.2-6.4)	11.9 (11.2- 12.6)	P < 0.001
Optometrists per 100,000 population	11.2 (10.8- 11.5)	9.4 (9.0- 9.8)	14.5 (13.9- 15.2)	15.9 (15.1- 16.7)	17.1 (16.1- 18.1)	P < 0.001
Eye care providers per 100,000 population	13.2 (12.9- 13.7)	9.7 (9.3- 10.1)	18.6 (18.0- 19.2)	22.2 (21.4- 23.0)	28.9 (27.6- 30.3)	P < 0.001
Physicians per 100,000 population	110.5 (105.8- 115.2)	62.0 (60.0-64.0)	159.4 (152.8- 166.0)	209.5 (198.8- 220.3)	388.9 (348.6- 429.2)	P < 0.001
<i>Population characteristics</i>						
Population density, per sq. mile	261 (201-323)	72 (63- 81)	490 (253- 726)	536 (334- 737)	1411 (751- 2070)	P < 0.001
% Living in an urban area	41.3 (40.2-42.5)	30.4 (29.3-31.6)	63.4 (61.2-65.6)	69.3 (66.1-72.4)	77.2 (74.1- 80.3)	P < 0.001
Median household income, \$1000s	43.8 (43.5-44.2)	42.1 (41.7-42.5)	46.9 (45.8- 48.1)	48.1 (46.5-49.7)	51.2 (49.2- 53.2)	P < 0.001
% In poverty	17.2 (17.0-17.5)	17.6 (17.3- 17.9)	16.6 (16.0- 17.2)	16.3 (15.6- 17.0)	15.7 (14.9- 16.5)	P < 0.001
% Aged 65 years and older	16.2 (16.0- 16.3)	16.7 (16.5- 16.9)	14.9 (14.5- 15.2)	14.9 (14.5- 15.4)	14.5 (13.9- 15.0)	P < 0.001

¹ AHRF = Area Health Resources File.

with 22.1% of counties in the Northeast, 14.6% of counties in the South, and 26.2% of counties in the West.

Compared to counties with more ophthalmologists per capita, counties with fewer ophthalmologists per capita had significantly fewer optometrists per capita, eye care providers per capita, and physicians per capita (linear tests of trend, $P < 0.001$) (Table 1). Counties with fewer ophthalmologists per capita were also significantly more economically disadvantaged, with higher poverty rates and lower median household incomes (linear tests of trend, $P < 0.001$). Counties with lower availability of ophthalmologists per capita also had significantly lower population densities, larger proportions of rural residents, and higher proportions of residents aged 65 years and older (linear tests of trend, $P < 0.001$). These trends in county characteristics were also present across optometrist availability quartiles (Table 2).

Discussion

As in Gamble et al. (1983), the current study found large differences between areas in the US in the number of ophthalmologists per capita.

Compared to Gamble et al. (1983), the current study found a larger percentage of the US population lived in an area without an ophthalmologist (0.8% vs. 11.8%). However, the geographic unit of analysis used by Gamble et al. (1983) is larger than in the current study (ZIP Code sectional area vs. county). Previous research has not addressed the local availability of optometrists in the US separately from the availability of ophthalmologists. The current study found large differences between counties in the number of optometrists per capita. A smaller percentage of the US population lived in a county without an optometrist than without an ophthalmologist.

Lee et al. (2005) estimated that the South had a higher number of eye care provider FfEs than other regions in the US. In the current analysis, the South had the largest total number of eye care providers but the lowest number of eye care providers per capita. Compared to other regions, the South had the largest percentage of counties with limited availability per capita of both ophthalmologists and optometrists. The Midwest had the largest percentage of counties with limited ophthalmologist availability but higher optometrist availability. The large difference between regions in eye care provider availability

Table 2

Description of health care provider availability and population characteristics for all counties in the US and for counties grouped by population-weighted optometrist availability quartiles. AHRF 2011. ¹

	All counties in the United States (n = 3143)	Counties in the low optometrist availability quartile (n = 1612)	Counties in the medium-low optometrist availability quartile (n = 477)	Counties in the medium-high optometrist availability quartile (n = 331)	Counties in the High optometrist availability quartile (n = 723)	Significance level of linear test of trend
	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	Mean (95% CI)	
<i>Health care provider availability</i>						
Ophthalmologists per 100,000 population	2.1 (2.0- 2.2)	0.9 (0.8- 1.0)	3.0 (2.6-3.3)	3.7 (3.2- 4.2)	3.5 (3.1- 3.9)	P< 0.001
Optometrists per 100,000 population	11.2 (10.8-11.5)	4.0 (3.8- 4.2)	12.6 (12.6- 12.7)	15.3 (15.2- 15.4)	24.3 (23.6- 25.1)	P< 0.001
Eye care providers per 100,000 population	13.2 (12.9- 13.7)	4.9 (4.6- 5.1)	15.6 (15.3- 16.0)	19.0 (18.6- 19.6)	27.8 (27.1- 28.6)	P< 0.001
Physicians per 100,000 population	110.5 (105.8- 115.2)	65.4 (62.0-68.8)	135.0 (124.0-146.1)	170.4 (149.3- 191.4)	167.4 (154.6- 180.2)	P< 0.001
<i>Population characteristics</i>						
Population density, per sq. mile	261 (201-323)	156 (91- 220)	392 (263-522)	368 (289- 448)	362 (160.7- 565.2)	P< 0.001
% Living in an urban area	41.3 (40.2- 42.5)	28.4 (27.0- 29.8)	53.4 (50.8- 56.1)	57.1 (54.0- 60.0)	55.1 (53.1- 57.2)	P< 0.001
Median household income, \$1000s	43.8 (43.5- 44.2)	41.8 (41.3- 42.3)	45.7 (44.6- 46.7)	46.3 (45.0- 47.7)	46.2 (45.4- 47.0)	P< 0.001
% In poverty	17.2 (17.0- 17.5)	18.3 (18.0- 18.7)	17.0 (16.4- 17.5)	16.5 (15.9- 17.2)	15.3 (14.9- 15.7)	P< 0.001
% Aged 65 years and older	16.2 (16.0- 16.3)	16.7 (16.4- 16.9)	15.2 (14.8- 15.5)	15.3 (14.9- 15.7)	16.1 (15.8- 16.4)	P< 0.001

¹ AHRF= Area Health Resources File.

TableJ

Cross tabulation of quartiles of ophthalmologist availability and quartiles of optometrist availability for all counties in the US, AHRF 2011.^{1,2}

	Counties in the low ophthalmologist availability quartile (n = 2242)		Counties in the medium-low ophthalmologist availability quartile (n = 425)		Counties in the medium-high ophthalmologist availability quartile (n = 249)		Counties in the high ophthalmologist availability quartile (n = 227)	
	% of US counties	% of US population	% of US counties	% of US population	% of US counties	% of US population	% of US counties	% of US population
Counties in the low optometrist availability quartile (n = 1612)	44.7	12.9	3.9	7.7	1.5	2.4	1.1	2.2
Counties in the medium-low optometrist availability quartile (n = 477)	8.7	5.4	3.4	8.3	1.7	6.7	1.3	4.4
Counties in the medium-high optometrist availability quartile (n = 331)	5.4	3.0	2.2	4.4	1.5	9.4	1.5	8.4
Counties in the high optometrist availability quartile (n = 723)	12.5	3.5	4.0	4.8	3.3	6.6	3.3	9.9

¹ AHRF = Area Health Resources File.

² The correlation between county-level per capita ophthalmologist availability and per capita optometrist availability was 0.28 for the US as a whole.

(Zhanget al., 2008). Data are not available currently to test whether re-gional disparities exist (Lee et al., 2012).

On average, counties with lower eye care provider availability per capita had fewer physicians per capita, lower population density, and a poorer, less urban, and older population than counties with greater eye care provider availability per capita. These characteristics may exacerbate or moderate the challenges for public health interventions in counties with limited eye care provider availability, although most of

these characteristics increase the expected challenge (Gohdes et al., 2005; Layde et al., 2012; Prevent Blindness America and National Association of Chronic Disease Directors, 2005; Prevent Blindness America, 2004; Saadine et al., 2003; US Centers for Disease Control, 2009; Zhang et al., 2007). For example, older individuals are both more likely to need eye care services and to use eye care services (US Centers for Disease Control, 2009; Lee et al., 2009). However, lower socioeconomic status is associated with lower education levels



Ophthalmologist Availability Quartiles

- D Low Availability
- Medium-Low Availability
- Medium-High Availability

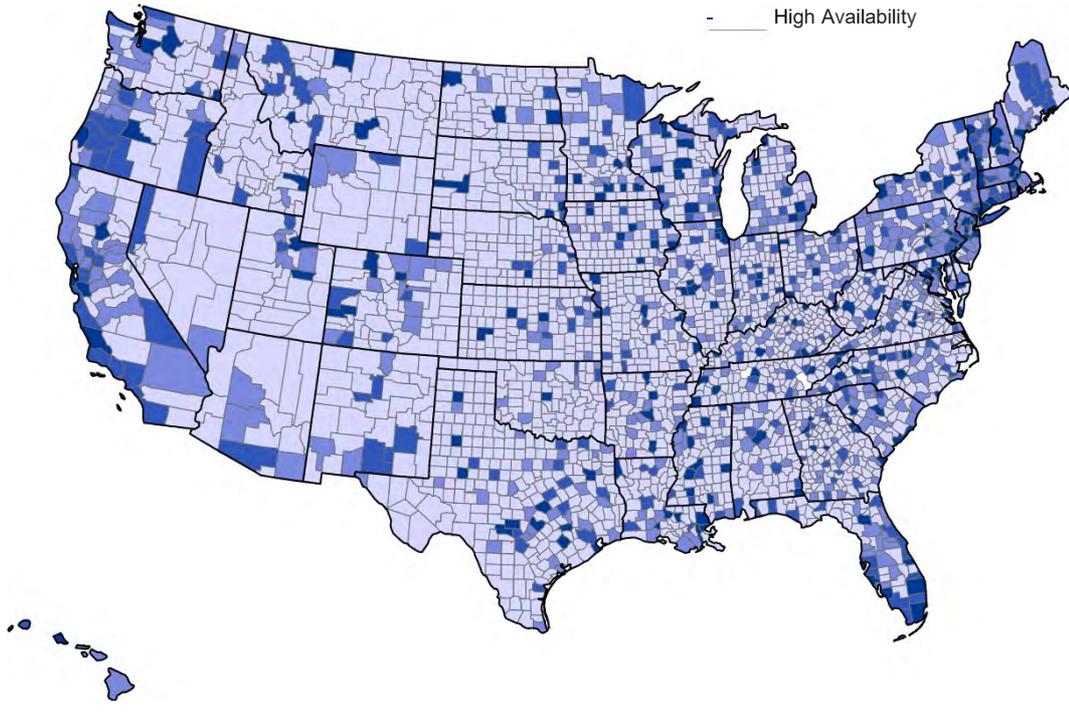


Fig.1. County-level availability of ophthalmologists in the US.

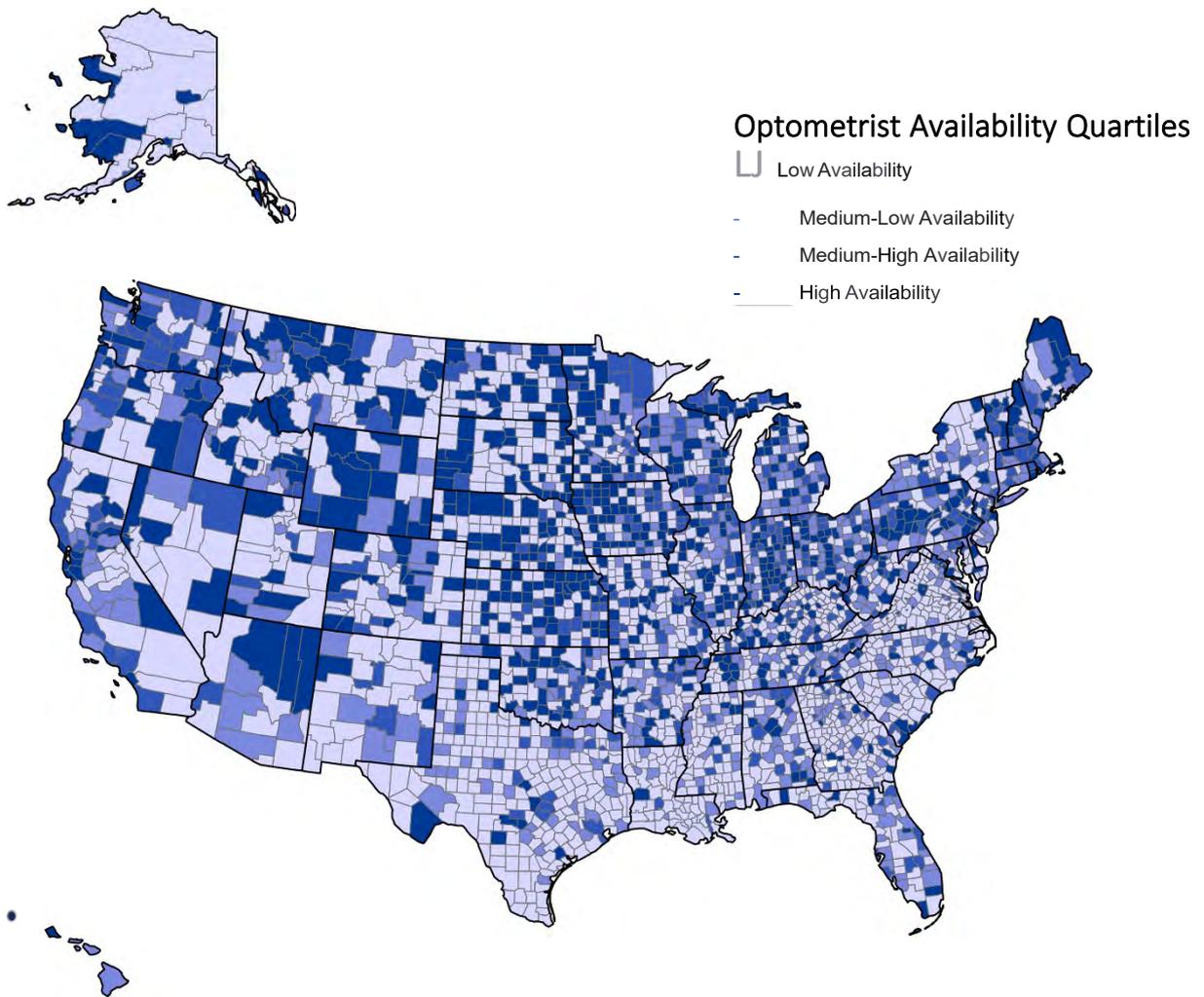


Fig.2. County-level availability of optometrists in the US.

and a lower likelihood of having vision care insurance, both of which are associated with a lower likelihood of seeking eye care (US Centers for Disease Control, 2009; Lee et al., 2009).

Greater local availability of ophthalmologists per capita has been associated with increased use of eye care services and better visual health outcomes among adults with diabetes, diabetic retinopathy or age-related macular degeneration (AMD) and the combined number of local ophthalmologists and optometrists per capita was associated with significantly increased odds that an individual with AMD had an eye exam during a 15 month period (Gibson, 2014; Sloan et al., 2004; Wang and Javitt, 1996). However, information beyond providers per capita would be useful in order to get a fuller picture of the local availability of providers. Ideally, information would also be gathered about the distribution of providers within

a county, the proximity of providers beyond county borders, the skill level, specialties and work hours of local providers, the need for providers in a county, and the ability and willingness of area residents to travel (Kwan and Weber, 2003; Guagliardo, 2004; Lee et al., 2005, 2007a, 2007b; Rosenthal et al., 2005; US Centers for Disease Control, 2009). Further research is needed that considers the relationship between a wider range of vision health outcomes and measures of local provider availability and uses samples with a broader age range. With additional research it may be possible to draw conclusions about what constitutes an "adequate" local availability of providers.

The descriptive analysis revealed that over half of US counties had both limited ophthalmologist and limited optometrist availability

per capita. Around a quarter of US counties had limited ophthalmologist availability per capita but greater optometrist availability per capita. This indicates that public health interventions that are effective in a context of limited local eye care provider availability or that are able to leverage optometrist availability effectively in areas with limited ophthalmologist availability could be of widespread use in the US as a part of VHI's national vision health strategy. Previous research suggests that public health strategies to increase access to eye care providers through the use of telemedicine and the implementation of "shared care" models of eye care, where eye care is managed jointly by ophthalmologists and optometrists, may hold promise for increasing the use of eye care services in these areas (Au and Gupta, 2011; Banes et al., 2006; Hanson et al., 2008; Kelly et al., 2011; Lee et al., 2007a, 2007b; Liu and Swanson, 2013; O'Connor et al., 2012; Rein et al., 2011; Taylor et al., 2007; US Department of Health and Human Services, 2010). In order to improve the ability of public health initiatives to respond to the local availability of eye care providers effectively, more research is needed to determine the optimal division of labor between ophthalmologists, optometrists, and other health care providers in the delivery of care that leads to the prevention, early detection, and timely treatment of vision conditions (US Department of Health and Human Services, 2010).

Conflict of interest statement

The author declares that there are no conflicts of interests.

Table 4

Cross tabulation of quartiles of ophthalmologist availability and quartiles of optometrist availability for counties in each US region, AHRF 2011.^{1,2,3}

	Counties in the low ophthalmologist availability quartile		Counties in the medium-low ophthalmologist availability quartile		Counties in the medium-high ophthalmologist availability quartile		Counties in the high ophthalmologist availability quartile	
	% of counties in region	% of population in region	% of counties in region	% of population in region	% of counties in region	% of population in region	% of counties in region	% of population in region
Northeast (n = 217)								
Counties in the low optometrist availability quartile	20.3	5.1	8.8	12.6	3.2	1.6	0.9	1.5
Counties in the medium-low optometrist availability quartile	6.4	1.6	10.6	11.4	3.7	8.9	2.3	6.7
Counties in the medium-high optometrist availability quartile	4.1	1.1	5.5	7.0	2.8	3.6	6.0	14.4
Counties in the high optometrist availability quartile	2.8	1.2	9.7	4.6	6.5	9.7	6.4	14.0
Midwest (n = 105)								
Counties in the low optometrist availability quartile	37.8	9.6	1.8	3.6	0.5	4.2	0.3	0.6
Counties in the medium-low optometrist availability quartile	10.0	9.3	1.9	4.3	0.6	0.8	0.5	0.3
Counties in the medium-high optometrist availability quartile	7.2	5.4	1.9	4.0	1.1	4.7	0.9	15.5
Counties in the high optometrist availability quartile	22.2	8.7	5.0	7.5	4.2	7.5	4.1	14.0
South (n = 123)								
Counties in the low optometrist availability quartile	54.5	20.5	4.6	7.2	2.2	3.0	1.9	4.8
Counties in the medium-low optometrist availability quartile	8.6	6.7	3.4	7.8	2.0	10.1	2.3	8.5
Counties in the medium-high optometrist availability quartile	3.8	2.6	2.0	4.1	1.0	5.6	1.5	5.6
Counties in the high optometrist availability quartile	6.3	2.1	2.5	3.2	1.4	3.3	2.0	4.9
West (n = 48)								
Counties in the low optometrist availability quartile	41.7	9.4	4.2	8.3	0.9	0.4	0.9	0.3
Counties in the medium-low optometrist availability quartile	7.1	2.8	3.8	10.7	2.2	5.2	0.0	0
Counties in the medium-high optometrist availability quartile	6.5	2.7	1.8	3.3	3.1	24.0	0.9	1.6
Counties in the high optometrist availability quartile	14.3	2.7	3.6	5.0	5.6	12.5	3.4	11.1

¹ AHRF = Area Health Resources File.

² The northeast region includes counties in the following states: CT, ME, MA, NH, NJ, NY, PA, RI, and VT. The midwest region includes counties in the following states: IN, IL, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI. The southern region includes the District of Columbia and counties in the following states: AL, AR, DE, FL, GA, KY, MD, NC, OK, SC, TN, TX, VA, and WV. The

western region includes counties in the following states: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, and WY.

³ The correlation between county-level per capita ophthalmologist availability and per capita optometrist availability was 0.37 for the Northeast, 0.24 for the Midwest, 0.34 for the South, and 0.37 for the West.

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Evaluating Access to Eye Care in the Contiguous United States by Calculated Driving Time in the United States Medicare Population

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Abstract

Purpose—To quantify the proximity to eye care in the contiguous United States by calculating driving routes and driving time using a census-based approach.

Design—Cross-sectional study based on United States (US) census data, Medicare payment data, and OpenStreetMap.

Participants—2010 US census survey respondents older than 65 years.

Methods—For each state in the United States, the addresses of all practicing ophthalmologists and optometrists were obtained from the 2012 Medicare Provider Utilization and Payment Data from the Centers for Medicare and Medicaid Services (CMS). The US census data from 2010 then were used to calculate the geo-location of the US population at the block group level and the number of people older than 65 years in each location. Geometries and driving speed limits of every road, street, and highway in the United States from the OpenStreetMap project were used to calculate the exact driving distance and driving time to the nearest eye care provider.

Main Outcome Measures—Driving time and driving distance to the nearest optometrist and ophthalmologist per state.

Results—Driving times for 3.79×10^7 persons were calculated using a total of 3.88×10^7 available roads for the 25 508 optometrists and 17 071 ophthalmologists registered with the CMS.

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Nationally, the median driving times to the nearest optometrist and ophthalmologist were 2.91 and 4.52 minutes, respectively. Ninety percent of the population lives within a 13.66- and 25.21-minute drive, respectively, to the nearest optometrist and ophthalmologist.

Conclusions—While there are regional variations, overall more than 90% of the US Medicare beneficiary population lives within a 30-minute drive of an ophthalmologist and within 15 minutes of an optometrist.

The identification of medically underserved geographic areas is critical to health care policy and delivery models.^{1,2} The issue of rural access to care has been cited as a reason to increase eye care providers, as has providers' arguments for expansion, including increased responsibilities and scope of practice for optometrists.³⁻⁵

Geographic information systems often have been used to aid in geospatial analysis. Driving time in particular is used to estimate access to medical care in other fields of medicine such as cardiology, obstetrics, and emergency medicine.⁶ Many of these studies have estimated driving distance at the zip code level and have used a direct spherical distance (time of flight) and have converted the distance to time using validated heuristics.⁷ OpenStreetMap (available at: <https://www.openstreetmap.org/>) is a collaborative open-source mapping project in which the geographic data for every drivable surface and the speed limit for each segment of road are captured. OpenStreetMap can be used to estimate the shortest driving distance and time between 2 addresses, thus measuring the burden of travel and location of patients relative to a clinic.

Access to ophthalmic care has been evaluated by visit rates to an eye care provider^{8,9} and by the number of providers per 100 000 persons at the United States (US) county level to approximate overuse or underuse.¹⁰ However, the analysis of driving distance or time to health care providers can provide useful information regarding key barriers to access to adequate health care providers in a particular region. In this study, we sought to leverage the geographic data from the OpenStreetMaps project and combine it with the US census data from 2010 to calculate driving routes and driving times directly for every census block group, a much smaller geographic unit of analysis than in prior studies. By using this strategy, we attempted to measure the driving time to the nearest optometrist and ophthalmologist, one of the key components of access to care. To our knowledge, this is the first

study in medicine to evaluate the accessibility of care by directly calculating driving routes and time.

Methods

Public data from the 2010 US census were obtained from the US Census Bureau. Census data were analyzed at the block group level, and the geolocation for all participants older than 65 years who responded to the US census was analyzed. The data were loaded into a PostGIS database (available at: <http://postgis.net/>). Geometries for all block group polygons were calculated, and the number of people living inside each block group also was extracted from the census data.

All optometrists and ophthalmologists who billed Medicare in 2012 were extracted from the 2012 Medicare Provider Utilization and Payment Data from the Centers for Medicare and Medicaid Services. When this research was initiated, this data set was the most recently available from the Centers for Medicare and Medicaid Services. All provider addresses were converted to global positioning satellite coordinates by geocoding the addresses after natural language processing. This data set contains only 1 office location per provider, and no data from additional satellite offices or the percentage of coverage of these offices were available to be included in the analysis.

Data for each state were downloaded from the OpenStreetMap servers and the geometries for every drivable surface (road, streets, and highways) were extracted, along with the speed limit for each segment of the road. The line geometries of each drivable segment then were used to create a collection of nodes and edges. Dijkstra's algorithm was used to calculate the shortest route, defined as the path of shortest driving time from one location to another.¹¹

For each state, a list of optometrists and ophthalmologists was created, and the shortest driving distance and time for all locations of every census participant were calculated. In addition, the distance for each optometrist to the nearest ophthalmologist was calculated for the US Medicare population.

Data analysis was performed by custom code written in Ruby (available at: <http://www.ruby-lang.org>). All statistics were calculated using R (available at: <http://r-project.org>). Database technologies included PostgreSQL (available at: <http://www.postgresql.org/>), PostGIS, and pgRouting (available at: <http://pgRouting.org/>). Maps were rendered using Mapnik (available at: <http://mapnik.org/>).

Results

Driving routes and times to the nearest optometrist and ophthalmologist were mapped for 3.79×10^7 people older than 65 years in each state in the contiguous United States. Nationally, addresses for 17 071 ophthalmologists and 25 508 optometrists were geo-coded from the 2012 Medicare Provider Utilization and Payment Data. A total of 3.88×10^7 available roads from OpenStreetMap were used to compute the shortest driving time to the nearest eye care provider. Nearly half a million driving route geometries and driving times were calculated (Fig 1).

Nationwide, median driving times to the nearest optometrist and ophthalmologist in the Medicare population were 2.91 and 4.52 minutes, respectively, without considering traffic patterns and stopping at intersections. Ninety percent of the Medicare population lived within 13.66 minutes of an optometrist and 25.21 minutes of an ophthalmologist. Each region of the United States was subanalyzed by US economic regions (Fig 2). The time to the nearest optometrist and ophthalmologist for 75% of the national population was 6.23 and 11.34 minutes, respectively. The region with the least difference between optometrists and ophthalmologist was the Mideast, with only 2.10 minutes' difference for 75% of the population. The 2 regions with the highest differences were the Plains and the Rocky Mountains, with a difference of 16.84 and 10.23 minutes, respectively.

At a state level, the average state median driving times to the nearest optometrist and ophthalmologist were 3.309 minutes (interquartile range [IQR], 1.90 minutes) and 6.20 minutes (IQR, 4.93 minutes), respectively. The average state driving time for 90% of the population was 16.17 minutes (IQR, 9.30 minutes) to an optometrist and 29.65 minutes (IQR, 17.47 minutes) to an ophthalmologist. Figure 3 shows a state-level Circos plot encapsulating these data, with the arc length of each state scaled by the number of people older than 65 years living in each state, the outermost track shaded by the difference between driving time to an ophthalmologist versus to an optometrist, the middle track shaded by the absolute driving time to an ophthalmologist, and the inner track shaded by the absolute driving time to an optometrist.

To evaluate how much farther a patient would have to drive to see an ophthalmologist after seeing an optometrist, the driving routes and times from every optometrist to the nearest ophthalmologist were calculated. Nationally, the median additional driving time was 1.96 minutes, and 90% of optometrists practiced within 19.62 minutes of an ophthalmologist. The average median state driving time between optometrist and nearest ophthalmologist was 2.27 minutes (IQR, 0.85 minutes), and the average median state driving time for 90% of optometrists was 27.80 minutes from the nearest ophthalmologists (IQR, 20.79 minutes).

Discussion

Access to eye care often is cited as a medical burden.¹² In this study we sought to measure the access to optometric and ophthalmic eye care directly and to compare the burden on the US Medicare population by driving time. By combining the data from the US census and the OpenStreetMaps project, we were able to create driving routes from each census block group to the nearest eye care provider. In addition, by using the speed limit data, we were able to measure the driving time directly in minutes in every state in the contiguous United States.

Prior studies addressing accessibility to medical care used direct time of flight or distance to major highways.⁶ These previous methodologies likely underestimated the access in remote regions, where circuitous driving routes may further hinder patients' ability to seek medical care, specifically eye care. The latter method, using distance to major highways, is more realistic

but has several drawbacks. First, it does not take into consideration the difficulty of reaching a major highway. Second, it makes the assumption that as soon as a major highway is reached, access is universally available. In this study, we sought to overcome these limitations by definitively calculating the driving route using a public mapping project. To our knowledge, this is the first study in medicine to measure access to care through direct driving routes and driving time. In addition, we used the smallest feasible geographic unit of analysis by using census block groups in contrast to larger regions distinguished by zip codes. We found that the overwhelming majority of the US Medicare population lives within less than half an hour of an ophthalmologist.

Our findings contrast with the results of Gibson,¹⁰ who analyzed 3143 counties in the United States and found that 24.1% of the counties were in the lower 2 quartiles of ophthalmologist availability but in the upper 2 quartiles of optometrist availability. For each US county,

Gibson analyzed the number of optometrists or ophthalmologists and the population of the respective county. However, this method of analysis grossly underestimates availability, because neighboring counties within a reasonable driving distance may have vastly different numbers of practicing eye care providers. In contrast, this study analyzed 2.1×10^5 geographic units and used a much more sensitive method for assessing access to care.

Access to care is associated not only with delivery of care, but also with clinical outcomes.¹³ In children, the inadequate supply of primary care physicians has been shown to be associated with higher rates of missed preventative care, primary care, or newborn visits, resulting in higher incidence of asthma- and diabetes-related admissions.¹⁴ Similarly, in eye care, access to care may lead to earlier detection and better clinical outcomes of potentially blinding diseases.¹⁵ Nevertheless, insurance coverage and social and cultural factors play an important role in shaping access to care. Both optometrists and ophthalmologists are essential in eye care delivery in the United States. Thus, determining the availability of both providers is critical to assess our ability to deliver a comprehensive range of routine eye care to complex surgeries.

Our study has several limitations. First, our driving time analysis does not take into account any traffic or stop signs, which likely would add to the overall driving time. However, our driving time calculation included only routes within each state, likely overestimating driving time for patients who live closer to an eye provider in a neighboring state. Second, the list of actively practicing ophthalmologists and optometrists were obtained from the Medicare payments data from 2012; thus, our study does not include providers who see only pediatric and young adult patients. Third, only 1 office location is recorded in the data set, and no data are present on additional branches or secondary offices; proximity to the nearest provider thus may be less than we have calculated. Fourth, the census and Medicare data are from different years but represent the latest available data from each data source. Fifth, our study does not differentiate subspecialists; access for patients with conditions requiring particular subspecialty expertise likely will be less than our estimates. Additionally, this study focuses on driving time and distance in a particular region and does not account for patients who may not have access to transportation via cars (either because of visual disability or socioeconomic factors) and may rely on public transportation as their primary method to arrive at eye care. This will increase the average time to receive eye care from both optometrists and ophthalmologists. Nevertheless, most of our limitations likely would cause a systematic bias, underestimating the driving time to the nearest provider, and the true driving time to the nearest provider may be even lower than estimated in our work.

An even higher proportion of optometrists may be missing from this study because approximately 40% of optometrists do not bill Medicare^{16,17}; however, this would reduce the driving time to the nearest optometrist and would not dilute the finding that 90% of the US Medicare population lives within half an hour of an ophthalmologist. Indeed, 95% of the US Medicare population lives within 36.18 driving minutes of an ophthalmologist. Finally, we estimated the burden of the number of Medicare participants in each geolocation by assuming that everyone older than 65 years is eligible for Medicare, which may overestimate the size of this population.

In conclusion, we estimate that 90% of the US Medicare population live within 15 minutes' driving time of an optometrist and half an hour of an ophthalmologist. In the case that a patient is seen by an optometrist and needs an elevated level of care, 90% of optometrists practice within 20 minutes of an ophthalmologist. Our findings have implications in the future planning of adequate eye care delivery in the United States.

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Abbreviations and Acronyms

IQR interquartile range

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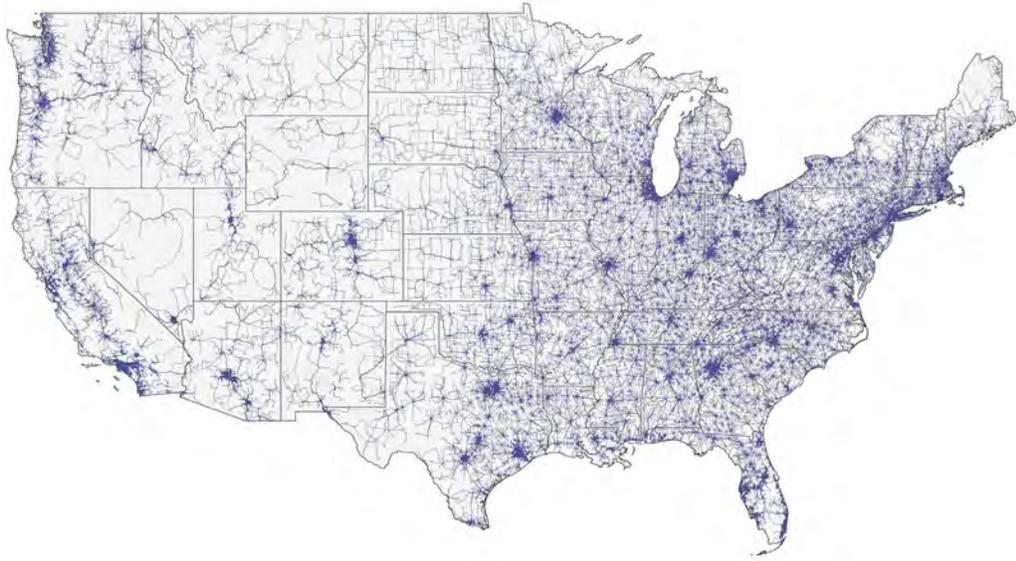


Figure 1.

Map of the continental United States with calculated driving routes for every United States census block group. Blue lines represent routes to the nearest ophthalmologist and red lines represent routes to the nearest optometrist. The width of the line is determined by the number of people who would use that road segment.

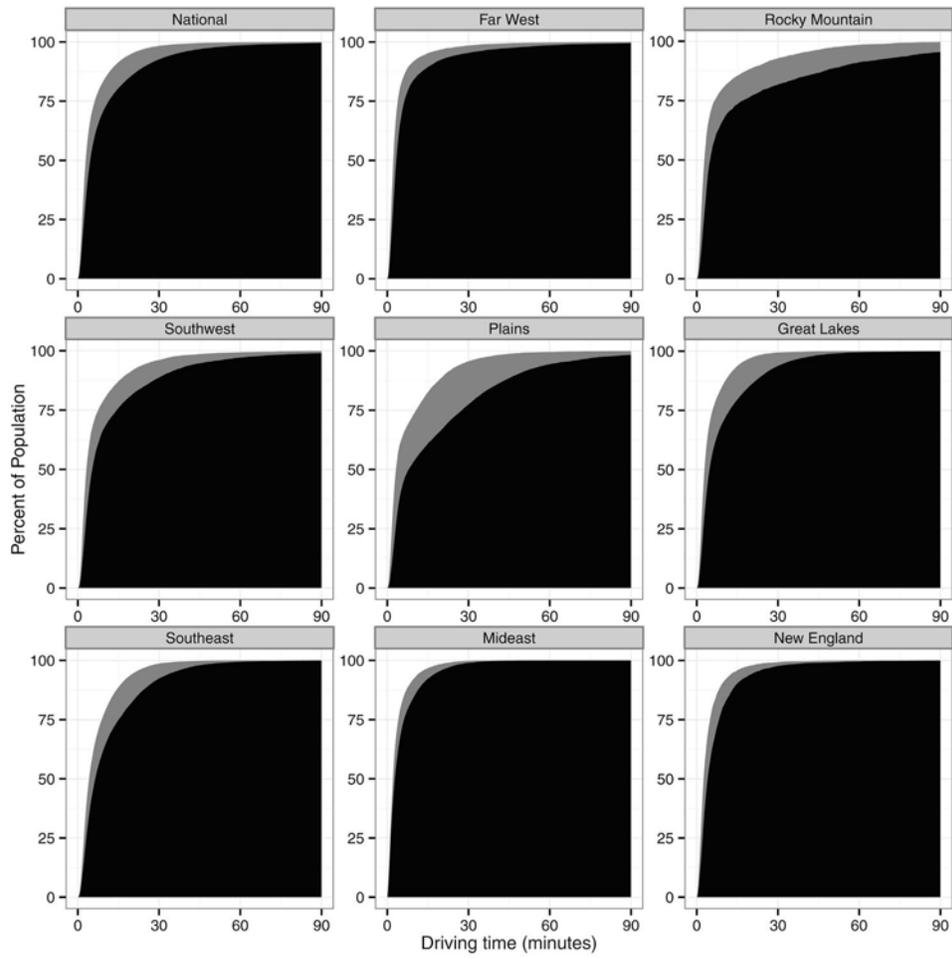


Figure 2.

Graphs showing the cumulative distributions of driving time to the nearest ophthalmologist and optometrist for national and United States economic regions. The black area represents the percentage of people under a given driving time to an ophthalmologist. The grey area represents the incremental percentage of people under a given driving time to an optometrist.

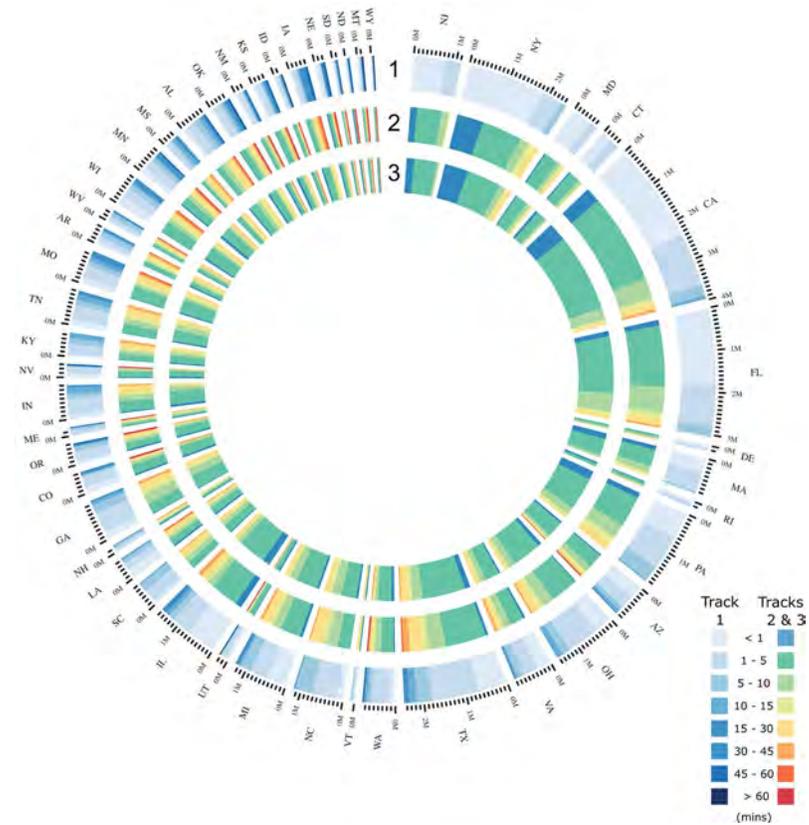


Figure 3.

Circos plot of state statistics on distribution of driving time. The outermost track designates the states as well as the number of people living in the state (in millions of people). Track 1 shows the difference in driving time in minutes (M) to the nearest optometrist versus ophthalmologist. Tracks 2 and 3 show the driving time in minutes to the nearest ophthalmologist and optometrist, respectively.

Optometry Sunrise Review comments

Commentor	Representing	Position	Role	Comment
Maile Mohsenian	Self	Opposed	Rehabilitation Therapist	I am an occupational therapist who works in an outpatient clinic practicing rehabilitation therapy. I believe that the scope of practice regarding the practice of optometry should be limited to visual rehabilitation therapy. 2. (iii) "The prescription and provision of visual therapy, ocular exercises, rehabilitation therapy, subnormal vision therapy, orthoptics, and the adaptation of prosthetic eyes;"
Dr. Suzanne Zamberlan	Self	Support	Optometrist	I am writing to you as a local optometrist who has been in practice for 17 years, the last 13 of which have been in my private practice in Vancouver, WA. I am a graduate of Pacific University College of Optometry and am licensed in both Oregon and Washington. Every week, I see patients that I cannot fully treat due to the fact that I am in Washington. If I was to be just seven miles south, I would be able to help them much more because I am licensed to perform procedures in Oregon that I am unable to do in Washington due to our scope of practice. These include: - prescribing oral steroids (which I would not do for more than a two week time period as most eye infections should be resolved by then) - eyelid lesion removals - superficial injections for infections and lesions in the eyelid - board approved laser procedures Optometrists are like the primary care provider for the eye. We are the people that patients see first and then if needed, we can refer them to specialists. Much like a primary care physician sees a patient and then refers them to a cardiologist or neurologist or endocrinologist, etc. By allowing us to practice as we have been trained and board certified to do, you are enhancing the care of every patient we see.
Dr. Judy Chan	Self	Support	Optometrist	I am an optometrist that has been practicing in Washington since I graduated in 1990 and I would like to share my experience with regards to Washington's antiquated scope of practice laws. The current law prevents optometrists like me from fully caring for my patients. On almost a daily basis, I am shackled by the current scope of practice laws in Washington, effectively reducing my ability to practice to the full extent of my training and directly causing an increase in the cost of quality eyecare for Washington residents. Let me give you an example: recently I had a patient with a clogged gland in his lid. After examining him, I had to either send him to another provider (an ophthalmologist) in town, or another optometrist in Portland (where they can take care of the problem). The patient was not happy and felt that his visit to me was "a waste of time". The current law prohibits procedures for which I have been trained and may easily perform in other states. Updating Washington's scope of practice laws would bring them into closer alignment with laws in other states such as Oregon and Idaho. This would also entice many graduating optometry students into practicing in our state. When optometrists are forced to refer patients to other providers for procedures they are trained to safely provide, it does not serve the patient well as care may be delayed or the patient may have to travel a long distance. In neither case is this a desired scenario. Healthcare costs will be driven upwards as the patient may incur multiple co-pay expenses or incur expenses for multiple diagnostic tests. In America, we are already dealing with a substantial issue in rising healthcare costs. This merely compounds the problem. The proposed changes would authorize the State Board of Optometry to determine optometrists' scope of practice and to establish education standards. Optometric physicians provide a valuable entry point into the health care system for many patients. We are the primary physicians for our patient's eyes and are often the first to diagnose serious health conditions such as diabetes, hypertension, multiple sclerosis, thyroid disease, high cholesterol, and cancer. I urge you to please consider this scope expansion bill with the welfare of the public in mind. We are merely asking to practice, as taught, to serve the communities in which we live. We are highly trained doctors who have completed undergraduate degrees and at least four years of specialized biomedical training at an accredited school of optometry and must comply with strict licensing and continuing education standards.
Dr. Nicholas Jankowski	Self	Support	Optometrist	My name is Nicholas Jankowski and I am an optometrist in the state of Washington. I was born and raised in Washington State and with the exception of my college and doctoral schooling, I have lived in Washington my entire life. I am writing to you today to voice my support for the proposed legislation you are reviewing in regards to the expansion of optometrist's scope of practice and board authority. In the last 5 years of practice, these unnecessary restrictions and outdated scope language has hindered patient care to a significant degree, even in a suburban area like Vancouver, where I live. There have been countless times in the last 5 years where I have seen patients for conditions that would be easily treatable in my own practice which would not only save patient's time, but also significant amounts of money. Simple things like providing an injection to an eyelid sty, removing skin tags, or prescribing oral steroids. When we are required to refer patients to an ophthalmologist, this delays care and many patients are frustrated that they have to go see another doctor, pay another copay (or more if they have not met their deductible), go through another evaluation, only to be told the same diagnosis we already provided them. Then they have to schedule back for the same procedure that we could have done a month earlier. This puts the patient a month behind getting their life back to normal and is incredibly frustrating. Patients constantly ask me, "Why can't you just do it? I trust you." I have to inform them that unfortunately, being in Washington State, I am unable. I can perform these procedures in Alaska, where I am also licensed, but not here in Washington State. An excellent example to how the expansion of scope of practice can be a cost saving measure for the citizens of Washington State and the government is through a situation that arose last week. I had a patient that I have seen for many years come in for a glaucoma follow up examination. She stated that she's been having headaches on the temporal side of her head with intermittent vision loss for the last 2-3 months. Symptoms like these are classic for a condition called Temporal Arteritis, which if not treated can cause a patient to go blind rapidly. It's a condition that often requires an ER referral. This patient was begging me not to send her to the ER because she couldn't afford the high copay and was requesting that we try to get in touch with her primary care provider to get a prescription provided for her. Unfortunately, her primary care provider was closed for the day and urgent care stated they would send her to the ER if she came in. If I had been able to write her the prescription for steroids, all of this would have been avoidable and she could have been sent in for her blood work the next day with ease of mind that the steroid prescription was doing its job. This patient would rather take the risk of going blind rather than pay the ER copay which could set her budget back months of hard work. It is not that Washington State's scope of practice for optometrists is just delaying care, it is actively harming patients by restricting what services they can receive in their primary eye doctor's clinic. This not only harms patients in the suburban areas, but disproportionately harms patients in the rural settings where ophthalmologists typically do not practice. I urge you to consider passing this review with a positive recommendation on all counts.
Denis R Holmes	Self	Support	Public/Patient	I have reviewed the proposed rule/bill and approve of the new language. The people of the State of Washington will benefit from the increased access to eyecare this bill provides.
Rebecca Martin	Self	Neutral	Public/Patient	" The proposed changes include expanding the medications optometrists prescribe and therapeutic procedures they perform consistent with national standards." Is the state of WA reasonable in its current regulation or outdated and backward in regard to national standards? Adjust or not based on that comparison

Virginia Henderson	Self	Support	Resident-Optometrist	My name is Virginia Henderson, and I'm currently a student doctor at the Southern College of Optometry in Memphis, Tennessee. I would like you to know that I support the plan of action that would increase the scope of practice for optometrists in the state of Washington so that we may practice to our full ability. My husband is a doctor and already has his license for the state of Washington; however, due to restricted scope for optometrists, we will unlikely move there once I've graduated next May. We think Washington is a beautiful state and are eagerly watching the progress of this bill. To be able to treat patients to the best of my ability is very important to me and my classmates. Having our skills clipped doesn't benefit the state or the people we serve. I hope that you truly take this bill into consideration and familiarize yourself on the extent of our education.
Dr. Shawn P. Brittain	Self	Support	Optometrist	I'm writing in hopes of adding information and knowledge that seems to have either been disregarded or ignored. I'm an optometric physician practicing in the Vancouver area for 28 years. I have a heavy medical practice and am frequently frustrated when I have to refer out so many of my patients for simple procedures that I've been trained and tested and could take care of right on the spot but knowing because of archaic laws in Washington I'm forced to refer out. Most of these patients, once referred out, will not be seen for more than a month and sometimes up to 3 months. This oftentimes causes an exacerbation of the issue and prolonged pain and or discomfort for the patient. A majority of my colleagues are performing these procedures in other states. We've all been trained and tested. Let's help the people of Washington get the care they need in a timely manner by allowing the optometric physicians in Washington to perform the procedures we've been trained to do.
Dr. Bernard Stewart	Self	Opposed	Optician	As a Licensed Optician and Ophthalmic Educator an honored Fellow Contact Lens Society of America. National Contact Lens Examiners Master and American Board of Opticianry member with a Diploma in Refraction I am opposed to any scope of practice by Optometry. My father was an Ophthalmologist and if he were alive he would agree The term Optometric Physician is itself a misleading title because it confuses and blurs the line between a Medical Doctor and and Optometrist who has no where near the training of an MD. I urged the legislature for public safety not to pass this bill. Thank you
Dr. Richard Bensinger	Self	Opposed	MD	Optometrists have for years lobbied to achieve the privileges of going to medical school without having done so. The difference in education is staggering: four years for optometrists vs 8-10 years for ophthalmologists. Much of optometric education is like a business school - marketing, accounting, advertising, etc. Medical education for MD's is all disease and patient oriented. Optometrists do not require board certification. I have always suggested that a discriminator would be to have optometrists attempt the board examination for ophthalmologists. They have always declined and in fact have voted against a much simpler one for optometrists alone. Expanding privileges for optometrists would be a public health mistake and is not in the public interest. I urge that any efforts in this direction be dismissed.
Michele Ross Rockwell	Self	Support	Public/Patient	I have used Optometrists my entire adult life after I injured one of my eyes years ago I couldn't get into any Ophthalmologist but could get into an Optometrist office. By the time I found him I couldn't see out of either eye. It was pre-Uber time. He actually sent someone from his office to get me, put a patch on me after cleaning my eye and said I needed antibiotics but he couldn't prescribe them. It was kind of a hassle getting them. These trained, credentialed doctors need to have the ability to prescribe what they need to thoroughly treat their eye patients.
Katrina Kessler	Self	Opposed	Public/Patient	After reviewing the proposal bill and the optometrist statement / request for expansion of their territory, I would like make the following cautionary statements based on my perspective, which is rooted in experience: 1) The proposed bill strikes me as absurd, to put it very bluntly. The field of optometry is only a quasi-medical field. Practitioners in that field do not attend medical school, do not undertake an internship supervised by experienced practitioners, and do not undertake a post-graduate 3-year residency program involving close mentorship by experienced physicians. Optometrists acquire a general BA degree, then go on for 3 or 4 years to a specialized school that is not considered to be an actual medical school, very much like how dentists acquire their education, and the result is that many optometrists, just like dentists, get to be called "doctor" even though they have very little education in reality, and they frequently have no experience before opening a private practice! To me, this is extremely frightening, and this reality is the result of the long-term 'push' by various quasi-medical professions, to attempt to gain full stature as physicians when in fact they have only a fraction of the knowledge and experience than genuine doctors have before their first practice on their first patient. 2) If you open up the field of optometry to surgery, which appears to be their main thrust, as surgery is an extremely lucrative endeavour, and they certainly would like to have their "piece of the pie" that really should only be reserved for ophthalmologists, who are genuine medical doctors, not quasi-doctors who get to use the title that is technically unwarranted as their education and experience is nowhere near the same level as actual real doctors.... if you allow optometrists to perform surgeries you will open the door for incompetent practitioners to practice surgery and to make many mistakes, guaranteed, for which the public will suffer. People will suffer the rest of their lives for the mistakes that will certainly be made by those who are not technically qualified to be surgeons, but who want to gain access to the power to do surgery because of the financial incentive. 3) Like the field of dentistry, which has almost no oversight at the state level, and which in fact causes great harm to the public as dentists routinely do experiments that often go awry, but that leave the public with no means of reparation let alone investigation, because the dental industry expects people to sue in order to make legislators aware of the mistakes being made, but the fact is that it is nearly impossible to ever sue a dentist for wrongdoing, so the State of WA never finds out about the mistakes made that leave people in pain and suffering for the remainder of their lives, if they cannot afford to hire a malpractice attorney for the going rate of \$500 per hour, which of course, most cannot. If you open up optometry to conducting experiments the way that dentistry is allowed to operate, you will most certainly increase the pain and suffering of public who expects medical industries to be tightly regulated in order to avoid predatory activities. 4) I believe that if you allow optometry to under-cut the legitimate field of ophthalmology, you will in effect, reduce medical students' interest specializing in that area if it is saturated by optometrists who are allowed to perform advanced treatments without adequate education and experience, because the level of competition between the two fields will increase, as genuine doctors who have attended medical school and undertaken extensive post-graduate training will still be required to pay exorbitant malpractice insurance fees while optometrists will not be required to carry that same burden yet would be allowed to carry out risky procedures with essentially no legal protection and no means of recourse in the event that procedures inevitably go wrong. Please do not succumb to the pressure of the industrialization of optometry; that field knows little more in practice than their optometrist counterparts, and the field is known to be "money grubbing" to put it bluntly: for example, many optometrists offer cosmetic treatments such as botox, filler injections, etc., because such treatments are lucrative. The attempt to gain the authority to perform surgery I am certain would be a disaster, as optometrists are simply unqualified to perform the complex procedures that genuine doctors have taken many years to learn to do in a safe way with a minimized chance of mistakes. Even basic surgical procedures should not be allowed by optometrists.
Marleigh Lang	Self	Opposed	RN	I oppose increasing the scope of practice of optometrists in Washington state.

Nathan Kazmersen	Self	Supprt	Student-Optometrist	<p>My name is Nathan Cazmersen. I am a proud native of Washington state, and a current optometry student at Pacific University in Oregon. All my life I have considered Washington as my home, and looked forward to returning to practice optometry someday. However, I have recently become aware of the regressive nature of Washinton's optometric scope of practice. If this does not change, it would be very disappointing to me. It would unavoidably impact my decision on where to practice.</p> <p>Even a cursory look at how optometry's scope of practice in Washington compares to that of other medical subspecialties (dental, PAs, NPs, etc) makes it obvious that there is dire need for scope expansion. With our four years of education, we learn a great deal about systemic conditions, pharmacological substances, laser procedures, and more. The fact that even some very simple prescriptions and procedures cannot be performed by optometrists in Washington currently is unnecessarily limiting the access of Washingtonians to vital eye care that could otherwise be available.</p> <p>I look forward to someday providing quality, safe, and affordable care to my patients. I think that patient well being needs to be the number one concern in considering subjects like scope of practice. It would fill me with joy if I could someday provide this care to my fellow Washingtonians. The state of Washington has given me so much, and I want to give back to its people. If scope of practice laws are updated to match national standards and the training that we work so hard to complete, this can be a reality for me. Please consider supporting this legislation.</p>
Dr. Sean Woolsey	Self	Support	Optometrist	<p>I'm an optometrist that practices in Tumwater, Washington. I am writing in support of the bill to expand the optometry scope of practice. Washington has fallen behind in optometry's scope of practice when compared to all surrounding states and many other states in the country. I think it is time to change that.</p> <p>Optometrists practicing in Washington are limited by the current legislature, making us unable to provide the best possible care to our patients. Optometrists are highly trained doctors who have completed undergraduate degrees and minimum four years of specialized biomedical training at an accredited school of optometry. Along with our formal training, we must comply with strict licensing and continuing educations standards. The current restrictions on optometry's scope of practice prohibit us from performing procedures that we are trained to do and are legally allowed to do in other states. By increasing our scope of practice, we can increase access to medical care, increase quality of care, and reduce costs to our patients and state.</p> <p>Currently, optometrists are forced to refer our patients to ophthalmologists to perform simple in office procedures that we could easily perform ourselves. Optometrists far outnumber ophthalmologists in our state and are further spread out to the rural communities. Ophthalmologists are localized in large cities and can be very busy making it difficult to schedule an appointment in a timely fashion. We are reducing our patient's access to care by being forced to refer to another clinic; this creates a bottleneck in care. It is unnecessary to make our patient's wait months before they can get into an ophthalmologist for a simple procedure that optometrists are trained to perform. This also increases cost for both the patient and insurances. A patient may have to drive several hours to get to the nearest large city with an ophthalmologist which costs time and money. This also creates another appointment charge being billed to insurances and to the patient. Additionally, the patient now has a see another doctor they have never met before and doesn't have a long trusted relationship with. Patients would be much more comfortable remaining at their local optometrist's office that they know and trust to get the care they need.</p> <p>Many other states in the country have already passed similar legislature to what we are proposing. In these states with expanded scope of practice, we have not seen any increase in adverse patient outcomes. The most common argument that arises against increasing optometrist's scope of practice is the fear that the patient safety is at risk. They claim we will perform these procedures at an inferior level. However, research shows that optometrists provide equal care, at lower costs, compared to ophthalmologists.</p> <p>A current side effect of Washington State having a limited scope of practice compared to other states is that new optometry graduates are choosing to move to states with a larger scope of practice. I am have seen this effect first hand when recently trying to hire. This issue is especially difficult in smaller towns; retiring doctors often are unable to find a doctor to replace them leaving the residents without a local eye doctor. Washington is unable to draw in the best doctors, as these doctors are choosing other states where they are able to practice at their full potential.</p> <p>The proposed changes in this bill would align optometrists' approved scope of practice with national standards. The changes include expanding the types of medications optometrists may prescribe and expanding the range of therapeutic procedures an optometrist may perform. This bill is only asking to expand our scope to the level at which we are trained. This bill does not overreach into procedures we are not trained to perform such as cataract surgery, LASIK, and posterior segment injections and lasers.</p> <p>I urge you to provide a favorable review to optometry's scope expansion bill as this bill will increase access to medical care, improve quality of care, and reduce costs to both patients and Washington State.</p>
Erika Dehnke	Self	Support	Public/Patient	<p>My name is Erika Dehnke and I live in Washington state. I support my optometrist being able to perform the procedures in this bill and believe that their board should be allowed to decide what they can and can't do, just like other medical professions in Washington.</p>

Dr. Aaron M. Banta	Self	Support	Optometrist	<p>I am sending this email in support of the expansion of optometric scope of practice in Washington State as supported by the Optometric Physicians of Washington.</p> <p>I practice in a rural and medically underserved area in Washington State. Our practice, along with those of my regional colleagues, serves a large geographic area in rural Washington and Oregon States that is home to over 400,000 residents. In the greater Tri-Cities area, we are nearly a 2 hour drive from Spokane, WA and 3.5-4 hours from Seattle, WA and Portland, OR. While I love rural medicine, practicing so far from readily available sub-specialty care presents challenges both to my practice and my patients. When patients' needs fall outside my scope of practice, I often have no recourse but to refer those patients out of our geographic area. Doing so delays treatment, incurs hardship, and increases medical costs to my patients.</p> <p>Washington State has some of the most outdated and restrictive scope statutes for Optometric Physicians in the country. I graduated Optometry school nearly 20 years ago and have never been allowed to practice to the extent of my training since I moved back to this state. In contrast, my Oregon license would allow me to serve my patients in a more comprehensive way if I were to drive 35 minutes to cross the border to do so. Unfortunately, patients have to come to my practice; not the other way around.</p> <p>Maintaining such an outdated scope of practice harms patients. Optometric Physicians in other states have performed the kinds of diagnostic and therapeutic procedures allowed under the proposed scope expansion for years at levels of safety equivalent to or surpassing that achieved by our colleagues in ophthalmology. As such, the safety objections you will hear from their lobby regarding the proposed expansion of scope simply do not "hold water." It defies common sense that well trained nurses, pharmacists, nurse practitioners, and physician assistants be allowed to perform procedures that are prohibited to Optometric Physicians in Washington State who have more years of training and oversight. Our colleagues in other states have already proven scope expansion can be done safely as well as reduce health care costs. This scope expansion proposal would still require Optometric Physicians to be fully trained and licensed to perform the applicable procedures and maintain all required levels of continuing education to ensure patient safety. Optometry should be allowed to grow and evolve with medical advancements and training like every other medical specialty. Imagine if your dentist or physician were required to practice the way they did 30 years ago. That is what the Washington State Legislature is requiring of Optometric Physicians today.</p> <p>One final note for consideration: failure to expand the scope of practice for Optometric Physicians perpetuates poor patient access to care in rural areas. As a private practice owner, I have found it exceptionally difficult to recruit new providers to our rural area. Newly graduating providers want to be able to practice to the level of their training and Washington State simply does not allow them to do so. We are already beginning to see a slow attrition of Optometric Physicians through retirement; the likes of whom are not being sufficiently succeeded by younger providers because they simply do not want to practice in Washington State. I cannot grow my practice to meet patient demand because I have not been able to recruit enough doctors to the area to do so. The most common reason cited by providers declining to join our practice is Washington State's outdated scope of practice statutes.</p> <p>If the Washington State Legislature is SERIOUS about improving patient access to health care and minimizing health care costs, they simply MUST vote in favor of reasonable scope of practice expansion for Optometric Physicians.</p>
Dr. Brian Johnson	Self	Support	Optometrist	<p>I am writing to express my support for the proposal to expand optometry's scope of practice and grant the Board of Optometry regulatory oversight authority consistent with that of other healthcare professional boards. Optometry's scope of practice laws are lagging behind most other states. This effectively reduces access to and increases the cost of quality eye care for Washingtonians. Updating optometric scope of practice laws in Washington should allow for procedures for which optometrists have been trained for and procedures that are allowed in other states. Other states with more modern optometric scope of practice laws have seen no increase in adverse patient outcomes.</p> <p>By expanding optometry's scope of practice, we would actually be increasing access to quality eye care and decreasing costs for Washingtonians. Optometrists currently practice in significantly more rural Washington towns and counties than ophthalmologists do. When an optometrist is forced to refer a patient to an ophthalmologist for procedures that they could safely perform themselves, a number of negative things can transpire for the patient. These include a delay in treatment while the patient waits for an appointment. The patient may have to travel a significant distance and miss work. The patient may incur additional costs in the form of travel expenses, additional co-pay expenses, or costs associated with redundant examination fees and diagnostic tests.</p> <p>The proposed changes would authorize the State Board of Optometry to expand the scope of practice to a level consistent with national standards. Specifically, this should include adding oral steroids to optometrists prescription authority and expanding the range of procedures an optometrist can perform (therapeutic injections around the eye, eyelid lesion removals, and board-approved laser procedures). The proposed expansion of procedures will not include many other surgical procedures (cataract surgery, LASIK, or posterior segment injections and lasers).</p> <p>Optometric physicians are highly trained doctors who have completed undergraduate degrees and then four years of biomedical training at an accredited school of optometry. They must comply with strict licensing and continuing education requirements. Optometrists follow the same practice guidelines and standards of care as their ophthalmology counterparts.</p> <p>Thank you for your consideration of this perspective during your review process.</p>

				<p>As a licensed Optometric Physician in Washington State since 1999, I would like to express my strong support for the proposed scope modernization as proposed by the Optometric Physicians of Washington.</p> <p>To start I would like to provide a little background. After graduating from optometry school I decided to pursue an ocular disease and surgical co-management residency. I selected an ocular disease and surgical co-management residency in Oklahoma specifically due to the broad scope of practice which includes laser eye procedures, and minor lid procedures. I felt that the opportunity to train under Oklahoma's broad optometric scope would be the best way to prepare for future practice. During my time in Oklahoma, I had the privilege of successfully completing many laser procedures and lid procedures.</p> <p>Immediately after my residency I moved to Washington where the constrained scope of practice has limited my ability to care for patients despite receiving the training, experience and certification to deliver advanced procedures. My experience with advanced optometric procedures and the success in the growing number of states with modern optometric scope, demonstrates that patients benefit most when their providers are able to fully apply their expertise.</p> <p>In closing, I would like to share my unique perspective garnered from working at a regional eye surgery center for over 20 years. In this role I have the opportunity to interface with hundreds of optometrists. What is constantly apparent to me is that my fellow colleagues are focused on patient centered care, lifelong learning and a steady commitment to do everything they can to maximize the vision of their patients. I am regularly reminded why I am proud of my profession!</p>
Dr. Shaun K. Coombs	Self	Support	Optometrist	I am absolutely confident that modernizing the optometric scope of practice will positively benefit the citizens of Washington State. I respectfully request your support for this proposed scope modernization.
Charlotte Jay	Self	Support	Public/Patient	<p>I recently had a very scary experience that could have been life threatening if it were not for my Optometrist, Dr Stephen Cassidy.</p> <p>I had an eye infection, orbital cellulitis, that Dr Cassidy diagnosed for me and then sent me to the ER to have it looked at immediately.</p> <p>Dr Cassidy asked me to let the ER department know what he thought was happening. They acted on his thoughts and recommendations. They took the necessary tests and admitted me for IV Antibiotics.</p> <p>During my 5 days stay at the hospital, Dr Cassidy stayed in contact with me, was willing to talk to my hospitalists, and consulting ophthalmologist. He also worked with all the doctors I had to see after I was released.</p> <p>Dr Cassidy was the one constant that was willing to listen to what was going with me and what the hospital was doing daily. As a matter of fact, had Dr Cassidy not listened to me and make recommendations that the medical doctors followed, I am not sure I would be on the road to recovery right now.</p> <p>What is concerning to me, is that once released from the hospital, I was required to meet with a local optometrist, ophthalmologist, my PCP and my dentist. All those medical people relied on notes from the hospital from Dr. Cassidy and the test results. At that point they either called on him or used his recommendations to treat me.</p> <p>Also, it took me days to find an ophthalmologist that was in my insurance network as I could not use the hospital consultant due to my insurance network. And, the bottom line, is I had to pay a lot of money and so did my insurance for all these doctors to say or recommend exactly the same thing as Dr. Cassidy.</p> <p>I believe Dr. Cassidy saved my life. I know this may sound dramatic; he was, however, the only one that took me seriously in the beginning of this enough to get me to the ER.</p>
Dr. Ami Halvorson	Self	Support	Optometrist	I am an optometrist licensed in Oregon and Washington practicing in a co-management practice with ophthalmology. At Pacific University, I had training in removing periocular lesions and hours of supervised, hands-on training during residency at the Portland VA. I have cared for and removed over a hundred lid lesions without complication. I believe Doctors of Optometry should practice to their highest level of education to allow better access to critical care. There are certain procedures that I can do in the Portland office but not my Vancouver office. Technology and optometric training have changed to the point that it is time to update Washington's scope of practice to reflect these changes.
Dr. Michael Glanzer	Self	Support	Optometrist	<p>I am licensed optometrist in multiple states including WA, OR, ID, MT, and AK. I am employed at a large multistate ophthalmology referral center employing dozens of optometrists and ophthalmologists. Many states are passing legislation to allow optometrists to practice to their full ability and training, and Washington needs to join them. Optometrists have been performing these procedures safely for decades, and as the numbers of ophthalmologists recede, it makes sense to allow optometrists to meet the need.</p> <p>Ophthalmology has become increasingly specialized. Giving the ability to do simple procedures to optometrists would make an incredible difference in the overall efficiency of delivering eye care, allowing ophthalmologists to focus on the complex procedures only they can do. The fact that I can perform vastly difference procedures depending on what state I am in is vexing. I urge you to support the scope expansion. These procedures are well within the capabilities of Washington optometrists and will be greatly needed in the coming years.</p>
Judy Balzer	Self	Support	Public/Patient	<p>I have seen an optometric physician for many years and received very high quality care. I would like to know that she is able to practice to the full extent of her education. I speak for many when I say that I am not interested in being referred to another physician for eye care when my doctor is more than capable of performing the care. Additional appointments are time consuming, costly, and may create a delay in care.</p> <p>I am told that surrounding states have much more progressive scope laws. There is no advantage to limiting patient care if the doctor is educated and trained. Therefore, I am in full support of updating Washington State law.</p>
Dr. Mike McCown	Self	Support	Optometrist	<p>I am currently trying to recruit an optometric physician to join our eyecare team. One of the factors limiting the pool of candidates coming to our state after graduation is the limitations imposed by the current scope of practice. My own son, a recent graduate from optometry school told me that there were classroom discussions on the relative level of licensure that students could expect to practice at when they graduated. He called me after one of these discussions and asked, " Why is Washington listed as one of the 10 least favorable states to practice in?"</p> <p>We discussed the scope of practice was the main issue and he pointed out how expensive getting 8 years of college was and he wondered why our state was making it harder to practice and use the skills and procedures that he was learning. He thought that this would affect the decision of some of the graduates who might prefer the Northwest to live, but feel they could not practice to the level they had been trained, so they would look elsewhere to more favorable states. Ultimately, it did affect "some of the graduates" since both he and his fiance elected to explore other options rather than come to Washington after graduation.</p> <p>So I urge this committee to give a favorable review for this bill and allow Washington to be competitive in recruitment of new providers.</p>

				Our offices are directly across the street from a well-established optometry clinic. We regularly refer patients to this clinic. Proximity is no guarantee of prompt, quality, optometric care but that is what we receive. Emergent situations when referred are handled immediately, normal referrals for eye examinations are handled promptly, and feedback from the patients we refer has uniformly been marked by high praise.
Dr. Howard B. Miller	Self	Support	MD	We write specifically to urge the Department of Health to approve professionally trained and equipped optometric physicians to handle procedures such as chalazion removal.
				My name is Dr Aaron Bronner. I am an Optometrist writing to voice my support for the expansion of scope of practice of optometrists in Washington state. The current scope of practice for Optometrists within our state is regressive, and often is assessed as one of the poorest in the nation limiting the use of medications and procedure based care our profession was trained in. The ramification of our limited scope is not a simple matter of frustrating Optometrists, unfortunately. I practice in rural eastern Washington where the number of practicing ophthalmologists does not come close to satisfying the demand for care. Because of this bottle neck in availability of care, many patients suffer unnecessary delays in care and as a result, unnecessarily drawn out resolution of symptoms or stabilization of disease. Simply modernizing the scope of optometric care would alleviate this lack of access for many simple to treat conditions. Imagine being told that you need a treatment which is "the easiest procedure to go through in all of medicine" (my description to patients of a YAG laser capsulotomy – one of the procedures requested by our scope expansion). This is a painless procedure that takes one minute to perform, which almost never requires post procedure medication and with only minimal risk involved (from the American Academy of Ophthalmology's own Preferred practice patterns " Two case series reported a 0% to 0.4% incidence of retinal detachment 1 to 8 years following laser capsulotomies") but you can't be seen for this procedure any sooner than 8 weeks due to access issues. Or perhaps you have a stye – an infected inflamed gland of the eyelid which can be painful and unsightly and would like to have it removed prior to some event you have planned in the next 2 weeks, but can't have it removed any sooner than 3 weeks due to availability of the Ophthalmologist – despite optometrists having received training in the removal of these lesions in out schooling. These are not hypothetical situations, unfortunately, and occur with some regularity in Eastern Washington. I have practiced as an Optometrist for 14 years, nine of which have been in Kennewick Washington working for Pacific Cataract and Laser Institute, a medical and surgical eye care center with several locations throughout Washington state. My entire practice revolves around providing medical, preoperative and postoperative eye care to patients. I have not written a glasses or contact lens prescription in at least 9 years. With that introduction, I will say I routinely perform more challenging, higher risk procedures in office than those that are being asked for with our scope expansion; procedures like: suture removal or adjustment following corneal transplant, removal of corneal foreign bodies, culturing and management of sight threatening infectious corneal ulcers. Seeing what Optometry is already doing and capable of, you can see the scope elements in question will not stretch us beyond what we are trained in, they will simply allow us to treat more pathologies that are well within our capabilities and provide patients easier access to care. My final comment is that I am moving out of the state this fall and so don't have a personal incentive to support this bill, the improved access to care this will allow to patients in the non-urban centers though makes it a bill highly worth supporting.
Dr. Aaron Bronner	Self	Support	Optometrist	If there are further questions or concerns I can answer, I would be happy to. Please reach out to me
Emily Chance	Self	Support	Public/Patient	My name is Emily Chance and I work and see my optometrist in Washington. I support them being able to perform the procedures in this bill and believe their board should be allowed to decide what they can and can't do, just like other medical professions in Washington.
				I am an Optometrist practicing in the state of Washington. On a regular basis I see patients for a variety of medical eye care needs. There are certain cases where a specific procedure is needed to be done but due to state regulations I am unable to provide this care to my patients. I was trained to do these procedures during my Optometry program and it is becoming increasingly frustrating when I have to refer patients to other providers to complete procedures I am completely qualified to complete. It's even more frustrating when my fellow Optometrists across the border from me in Oregon can do these procedures. I have had many occasions where I have spoken to current Optometry students, time and time again they ask me: what are Optometrists able to do in Washington? I have to inform them that we can't do certain procedures that other states are able to do and have been able to do for years. This greatly shifts their mindset as to if they even want to come to Washington to practice. We are missing out on talented new graduates to other states with a better scope of practice. I truly believe our profession should be regulated by our state board same as many other health professions. In fact, in many of these situations with patients where I have to refer them out for a procedure I should be able to complete, they are baffled that our board of Optometry is not the one who regulates these things. I fully support the proposed legislation that the board of Optometry be able to regulate the profession the way other health care professions like dentists, podiatrists, and nurse practitioners can.
Dr. Shannon Soper	Self	Support	Optometrist	
				I am contacting you regarding the comment period for the optometry scope of practice "sunrise review" at the Department of Health. I am in favor of the proposal to expand optometry's scope of practice and grant the Board of Optometry regulatory oversight authority. This is how other States regulate our profession. This is how this State regulates other professions here in WA. The current status of our RCW 18.53.010 has affected many of my patients by introducing additional inconvenience, loss of time from work, and additional delay in resolution of that patient's medical problem, not to mention additional copays to the patient and costs to the insurer. Sometimes patients fail to follow through on the referral to the additional provider due to the inconvenient circumstances, putting their care at risk. I hope that Washington State will grant the Washington State Board of Optometry authority to determine the optometrist scope of practice to be based on education and training, not on an outside profession's competitive motivations.
Dr. Bryan Karrick	Self	Support	Optometrist	Thank you in advance for your support of these important changes.
				My name is Julie McCord and I live in Washington state. I am a registered voter and I support my optometrist being able perform the procedures in this bill and believe that their board should be allowed to decide what they can and can't do. Much like other medical professions have the right to in Washington." For many years Optometry has not been given the same respect and/or reverence as other branches of the medical field. I do believe this initiative will go a long way to remedying this.
Julie McCord	Self	Support	Public/Patient	Thanks for your time and consideration in this matter.
Linette Winters	Self	Support	Public/Patient	My name is Linette Winters and I trust my optometrist to perform the necessary treatment deems necessary.

Paul Naber	Self	Support	PharmB	<p>As a health care provider for over 50 years, continuing education equipped to practice Clinical Pharmacy for over 50 years as good as a newly graduated Clinical Pharmacist, I am indicating:</p> <p>We should increase the optometrist scope of practice as outlined.</p>
Dr. Joseph Sifferman	Self	Support	Retired- Optometrist	<p>I'm writing in support of an increase in an optometrist scope of practice. I enthusiastically endorse the optometrists' desire in the state of Washington to fully care for their patients.</p> <p>My name is Joseph Sifferman. I'm a retired optometrist. I testified before a Sunrise Review session on behalf of the Optometric Physicians of Washington in the mid 1990's. I understand the importance of this process.</p> <p>As a past president of the Optometric Physicians of Washington, I am in a unique position to know first hand the high level of education each of us received, and the training, and the required continuing education that optometrists have had over the decades. I was also in a position, as I traveled around the state, to observe the common sense, high regard, and sense of privilege that optometrists have always had for their patient's eye and general healthcare.</p> <p>I think, after all this time, that it's time to allow the State Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within their scope of practice.</p> <p>In closing and with her permission, I'm including this email I received last week from my daughter in Anchorage, Alaska. Her name is Dr. Laura Kompkoff. Dr. Sherry Leftner and my daughter own the Katmai Eye and Vision Center in Anchorage. Her email said, "Dad, the tides are turning! Today an internal medicine doctor referred a patient to us due to pupil size differences. Then he called to ask my opinion on whether the patient had had a stroke. WOW, thanks to you Dad and others who worked so hard to propel our profession forward." (For your information, the state of Alaska has a much more enlightened scope of practice law for optometry.)</p> <p>This email from my daughter is the perfect example of the type of collegial healthcare possible for patients in the state of Washington if this bill is passed.</p>
Dr. Jeremy Marcuson	Self	Support	Optometrist	<p>My optometric colleagues and I are taking the first steps to modernize our allowed scope of practice in Washington state.</p> <p>Our intention is to expand access to quality eye care in the state, while helping to keep healthcare costs in check. To do so, we are proposing changes in optometric scope of practice that would align with those already in effect and benefitting patients in Oregon, Idaho, Alaska, and other states.</p> <p>Our proposal is currently being reviewed by the Washington State Department of Health (WSDOH) in a non-political, information gathering step called the "sunrise review."</p> <p>Our professional association, the Optometric Physicians of Washington (OPW), is asking for your help by contacting the WSDOH to express your support for our efforts to update optometry's scope of practice. As a leader in the field of health care, your input to this process is vitally important.</p> <p>Issues that you may consider commenting on could include how increasing optometry's scope of practice will:</p> <ul style="list-style-type: none"> •Fully utilize optometrists' training to benefit their patients •Grant the Washington State Board of Optometry authority to determine scope of practice based on education and training •Improve access to eye care •Reduce or eliminate delays in care due to referrals •Reduce patient travel costs, inconvenience, and time-loss from work •Reduce patient costs by eliminating multiple co-pays <p>I practice in a rural area. There are no ophthalmologists available for my patients that are close by. Many patients express to me that they are unable to have eye health services done that I have been trained to do that would help preserve their eyes and vision.</p> <p>Please let me know if you are willing to weigh in with the WSDOH in support of these changes. I will then have OPW contact you with the details of when and how to submit comments. We can also provide you with a draft letter for your consideration if that would help.</p> <p>Thank you in advance for your support of these important changes.</p>

Dr. Nate Biancardi	Self	Support	Optometrist	<p>My optometric colleagues and I are taking the first steps to modernize our allowed scope of practice in Washington state.</p> <p>Our intention is to expand access to quality eye care in the state, while helping to keep healthcare costs in check. To do so, we are proposing changes in optometric scope of practice that would align with those already in effect and benefitting patients in Oregon, Idaho, Alaska, and other states.</p> <p>Our proposal is currently being reviewed by the Washington State Department of Health (WSDOH) in a non-political, information gathering step called the "sunrise review."</p> <p>Our professional association, the Optometric Physicians of Washington (OPW), is asking for your help by contacting the WSDOH to express your support for our efforts to update optometry's scope of practice. As a leader in the field of health care, your input to this process is vitally important.</p> <p>Issues that you may consider commenting on could include how increasing optometry's scope of practice will:</p> <ul style="list-style-type: none"> •Fully utilize optometrists' training to benefit their patients •Grant the Washington State Board of Optometry authority to determine scope of practice based on education and training •Improve access to eye care •Reduce or eliminate delays in care due to referrals •Reduce patient travel costs, inconvenience, and time-loss from work •Reduce patient costs by eliminating multiple co-pays <p>I practice in a rural area. There are no ophthalmologists available for my patients that are close by. Many patients express to me that they are unable to have eye health services done that I have been trained to do that would help preserve their eyes and vision.</p> <p>Thank you in advance for your support of these important changes.</p>
Dr. Justin Wright	Self	Support	Optometrist	<p>As a doctor of Optometry in WA State, and having practiced here since 2007 when I first completed my graduate training, I see the need for furthering my ability to help care for patients. I work full-time with Northwest Eye Surgeons in our Mt. Vernon and Bellingham locations. I have the privilege of working closely with my Ophthalmology (eye surgeon) colleagues who also recognize the increasingly long waits for patients to receive the care they need.</p> <p>Specifically, I am in support of allowing those in my profession (Optometry) to have the ability to remove skin lesions around the eye, perform other non-incisional laser procedures, and to be able to prescribe oral steroids. Currently, I am not able to provide these services and it is difficult to coordinate care when more urgent situations arise that require the use of these treatments.</p> <p>By way of example, I have had to occasionally first see a patient myself and then ask one of my surgical colleagues to see the patient in order to prescribe oral steroids for an individual with corneal graft rejection, Giant Cell Arteritis, or Optic Neuritis. If I could initiate such treatments this would definitely be beneficial to patients.</p> <p>Patients would also have better access to clinical procedures like eyelid lesion removal and YAG capsulotomy with less waiting periods should optometrists be able to perform these in office procedures. I am already able by licensure to perform foreign body removal and other in office procedures like punctal plug placement. I feel our state lags behind the optometry licensure scope compared to most other states.</p> <p>Please consider the opportunity to have improved access to patient eye care in our state by allowing for scope expansion for Optometry.</p>
Dr. Mary Ferris	Self	Support	Optometrist	<p>I would like to express my support for a bill to expand the scope of optometric practice to include the removal of "lumps and bumps." The most common occurrence that comes to mind is that of chalazia- the "lump" left behind following a "stye" or infection of a hair follicle. Depending upon the size of the lesion, these can result in discomfort, irregular vision (via compression of the globe) and cosmetic concerns. I have referred 43 patients to ophthalmology during the last 5 years that we have had our electronic medical records system. The most recent patient last Thursday was referred to our local ophthalmology group and the soonest available appointment to remove the lump from his right upper eyelid is October.</p> <p>This delay in care is preventable- I was trained in the excision of chalazia during my residency training at the Jonathan M. Wainwright VA Medical Center in Walla Walla. I also spent a day per week for a year training at PCLI (Pacific Cataract and Laser Institute) in Kennewick, WA, also performing this procedure with supervision. I would be happy to provide this service to my current patients, even if the law required additional training to prove continued competency.</p> <p>For a comparative analysis, please consider neighboring states like Oregon and Idaho in which optometrists currently perform this procedure.</p> <p>Thank you for taking the time to listen and to consider my request in your review.</p>
Bernie Montes	Self	Support	Public/Patient	<p>In (year), my optometrist diagnosed me with (condition). However, although s/he was capable of treating me for this condition, s/he was unable to do so, due to Washington's laws limiting the delivery of optometric care.</p> <p>As a result, I was referred to (type of doctor) in (city). My treatment was (add details regarding any poor outcomes, delay in care, continued pain during the delay, expenses or inconvenience of travel, or expenses related to multiple co-pays or duplication of diagnostic services, etc.)</p> <p>It is my understanding that your department is currently reviewing a proposal that would update Washington licensing to match the training that optometrists have and the care they are authorized to provide in other states. I urge you to support these changes so that other patients don't have to go through what I did.</p>

Merrie Sekulich	Self	Support	Public/Patient	<p>In 2019-2021, my optometrist diagnosed me with Uveitic Glaucoma. However, although she was capable of treating me for this condition, she was unable to do so, due to Washington's laws limiting the delivery of optometric care. As a result, I was referred to an Ophthalmologist in Seattle. My treatment has caused a lot of prolonged pain and decreased vision due to delay in care, continued pain during the delay, expenses or inconvenience of travel, or expenses related to multiple co-pays or duplication of diagnostic services. It is my understanding that your department is currently reviewing a proposal that would update Washington licensing to match the training that optometrists have and the care they are authorized to provide in other states. I urge you to support these changes so that other patients don't have to go through what I did.</p>
Jim Sekulich	Self	Support	Public/Patient	<p>In 2019-2021, my wife's optometrist diagnosed her with Uveitic Glaucoma. However, although she was capable of treating my wife for this condition, she was unable to do so, due to Washington's laws limiting the delivery of optometric care.</p> <p>As a result, my wife was referred to an Ophthalmologist in Seattle. Her treatment has caused a lot of prolonged pain and decreased vision due to delay in care, continued pain during the delay, expenses or inconvenience of travel, or expenses related to multiple co-pays or duplication of diagnostic services.</p> <p>It is my understanding that your department is currently reviewing a proposal that would update Washington licensing to match the training that optometrists have and the care they are authorized to provide in other states. I urge you to support these changes so that other patients don't have to go through what my wife did.</p>
Dr. David Finch	Self	Support	Optometrist	<p>My name is Devin Finch, and I am an optometric physician practicing at Tumwater Eye Center in Tumwater, WA and I am writing today to urge you to support the expansion of the scope of practice of optometry. Optometrists in Washington are currently being held back by antiquated laws which prevent us from treating patients to the degree that we have been trained. I graduated from Pacific University College of Optometry in 2019 and our modern education is heavily based in diagnosing and treating medical conditions far beyond simple glasses prescriptions. As a resident doctor within Veterans Affairs, I served on-call with the emergency room to address the eye conditions that ER doctors did not feel comfortable managing themselves. By that I mean medical situations of urgency that MDs, who had gone to medical school, did not feel they had the knowledge to manage on their own. I even had a case of Giant Cell Arteritis, a blinding condition, I diagnosed that the ER physician missed. The Residency Director at my VA hospital even invited the current MD students on 4th year rotation up to the optometry department to ask me, an optometrist, about how I diagnosed the condition based on ocular and systemic symptoms. My point here is to express to you the wealth of knowledge that modern optometric physicians have, as result of their modern educations, which focus on much more than simply giving glasses prescriptions and diagnosing self-limiting ocular diseases. I have also received training, and am certified to operate YAG lasers, as well as provide non-pharmaceutical, laser treatment options for the management of glaucoma. I have been trained and certified on radiofrequency surgical techniques to remove lid lesions, lumps, and bumps as well. However, I cannot currently provide these services to my patients, which means patients go to specialists who are frequently doctors the patients have never seen before, may not be comfortable with, and they are often forced to wait weeks to months to be seen.</p> <p>Another thing for the committee to consider, is that the only thing that brought me, a recently graduated doctor, back to Washington was my family in Olympia. I very nearly took another job in another state that allowed me to practice optometry without as many restrictions on my scope of practice. My concern is that if Washington's scope of practice does not change, then there will be many good, qualified doctors that end up working in other states because they want the ability to pursue the things that interest them the most in the profession, such as doing SLT for glaucoma patients, or working with Ellman units to do simple cosmetic procedures. Not only does it interest them more, but it potentially offers them greater earning potential which is attractive to new graduates for a whole host of obvious reasons, not the least of which is the repayment of increasing student loan burdens.</p> <p>Thank you for your time, and I hope you will support the scope expansion of Optometry in Washington.</p>
Dr. Keith Dahlauser	Self	Opposed	Ophthalmologist	<p>Unfortunately many people do not understand the difference between an ophthalmologist and an optometrist. An ophthalmologist is a Medical Doctor who goes to medical school for four years. (I am an Ophthalmologist in the South Sound). To go to medical school someone has to be at the top of their undergraduate training. After medical school they spend four more years specializing in eye surgery and treatment of eye disease. Only the best medical school graduates are accepted into Ophthalmology training programs, usually the top 10%. That's at least 12 extra years of advanced education, being at the top of the class along every step. In their training they are being taught by experts in the field. Surgery starts slow, and if quality exists, surgical abilities are advanced. If not, they are removed from the training and do not become ophthalmologists. Along every step of training someone is looking over their shoulder, someone with ability to repair and correct any problems along the way.</p> <p>Optometry school is a four-year school that concentrates on glasses and contacts. Not to be negative, some are very bright, but It is usually filled with people that cannot be accepted to medical school. They do not see pathology in their school, patients with eye diseases are seen and treated by ophthalmologists in other locations. Optometrists do not have surgical/medical experts teaching them. If they are given the ability to do surgery now, they will be experimenting on patients to try to increase their skills. An eyeball is not something to experiment with in this uncontrolled fashion.</p> <p>This expansion of optometry practice is not needed, ophthalmologists in the state of Washington are able to provide enough care in all counties.</p> <p>Traditionally the difference between an ophthalmologist and an optometrist is surgery. This proposed expansion would give them the ability to do surgery, lasers, and injections. The approval to do surgery should not come from legislation, but should come from medical school. Optometrists have requested, in the recent past, the ability to treat medical eye disease; and have been given that ability through legislation. As an ophthalmologist, I frequently see inappropriate or delayed treatment from Optometrists. This proposed bill is even more aggressive than giving optometrists the ability to give medicines, and will cause even more harm to patients who are being inappropriately treated surgically.</p> <p>This proposal also would grant sole authority to determine what constitutes the practice of optometry to the Board of Optometry. Can you imagine that? That would be like giving investors on Wall Street the ability to regulate themselves and not answer to anyone. Very dangerous for patients. In this proposed bill, optometry has no formal training requirements needed, thus the bill would allow them to do surgery without extra training. Even if it required training, it could not match four years of ophthalmology training. If optometrists want to do surgery, they should go to medical school and ophthalmology training to become an MD.</p> <p>Daily patients tell me that their eyesight is, to them, their most precious sense. We cannot risk this precious sight to minimally trained optometrists for no clear patient benefit. Many patients do not know the educational difference between training programs and specialties, you need to help protect those patients by keeping surgery for surgeons. Do not expand optometry scope of practice.</p>

Dr. Leigh Gongaware	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I am an optometrist that graduated from Pacific University College of Optometry in 2014. I was trained for scope of practice that is beyond the current laws for Washington State. I also practiced as an optometrist and officer in the United States Army, which allowed more scope of care than Washington state as well. I have worked in Washington state in a commercial practice as a contractor optometrist and now as a medical scope optometrist working jointly with ophthalmologists in a surgical clinic. The current restrictions for scope of care for optometrists compared to other states create undue burdens on Washington state citizens, such as decreased access to care and increased costs of care. Living in the northwestern most part of the state, the surgical clinic I work at sees patients spreading from Blaine to the Mount Baker residents to the San Juans and even parts of Snohomish County. It is a significant distance range that we cover. That being said, when a patient takes a ferry from Friday Harbor, drives to our Mount Vernon Clinic, sees one of the optometrists for their evaluation and is told they have to come back another day for the actual needed treatment with an ophthalmologist, that is frustrating for everybody. A good example would be the YAG laser for posterior capsular fibrosis. With this step in scope expansion, we could avoid multiple trips and multiple appointments for patients. The patient could be evaluated and receive treatment in one trip.</p> <p>I highly recommend that Washington state take the necessary steps to improve optometric scope of care. We have fallen behind surrounding states and are creating unnecessary burdens and costs for our state citizens. Please allow the Board of Optometry to work on the specifics of scope expansion and concurrent required educational steps. I urge you to work with your staff to recommend the Legislature enact the proposed optometric scope of practice changes for Washington state.</p>
Melanie Smith	WA State Psychological Association	Support	Association	<p>The Washington State Psychological Association (WSPA) reviewed the Sunrise Application, submitted to the Washington State Department of Health (DOH) by the Optometric Physicians of Washington (OPW), proposing a scope of practice expansion that would permit appropriately trained optometrists to conduct additional advanced procedures and a limited expansion of their prescriptive authority.</p> <p>Based on our review of the application, WSPA supports this proposed scope of practice change for optometrists in the state of Washington. The Applicant has addressed public safety by clarifying the training, supervision, continuing education and disciplinary procedures required. OPW has further shown evidence that the proposed procedures and prescriptive authority are already practiced safely and effectively by optometrists in other states.</p> <p>The case for the expansion of scope of practice for non-physician trained healthcare providers has become even more compelling with significant shortages of physician providers. Support nationally for scope of practice expansion for non-physician providers continues to grow and is predicated on demonstrable evidence (e.g., Dower, Moore, & Langelier, 2013; Institute of Medicine, Safriet, 2002). Psychologists are trained in biopsychosocial models that emphasize the importance and interdependence of physical, emotional and social health. We are acutely aware that physical wellbeing and health are paramount to a patient's behavioral health. Increased access to medical care, including eye care, that is safe and effective is an important factor in the overall well-being of our shared patients. In light of the evidence provided by the Applicant, efforts to restrict this scope of expansion for optometrists in Washington can at best be described as misguided and at worst as guild protection. Improved access to safe and effective eye care benefits every Washingtonian. WSPA support OPW in their pursuit to provide greater access to these services.</p>
Dr. Ashley Bailey	Self	Support	Optometrist	<p>I am writing to show my greatest support for the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>For two years I have been practicing optometry. I currently practice in a co-management ambulatory surgical center in Chehalis. I am also licensed to practice in Oregon and Idaho as I frequently travel to our other clinical locations throughout the Pacific Northwest.</p> <p>Unfortunately, I am unable to care for my patients to my fullest potential as Washington's current scope of practice regulations prevent me from practicing as I have been trained. This is inconsistent with both the regulatory structure of other states and the national standards in optometry. As a result, access to quality eye care decreases and the cost to the patient increases. Optometrists practice in over 90% of Washington's counties. Contrastingly, ophthalmologists practice in approximately 40% of our counties. Allowing optometric physicians to practice at the highest capability can reduce referral wait times, increase accessibility to care, reduce travel time, decrease repeat testing and procedure costs, etc.</p> <p>Under the current scope of practice for optometrists in Washington, there are restrictions prohibiting procedures that we have been trained to perform. Additionally, optometrists are able to perform these procedures when licensed in other states. Some of these include superficial injections, eyelid lesion removals, and board-approved laser procedures.</p> <p>I believe it is imperative for Washington to keep up with rapidly changing technology in the delivery of eye care. The best way to ensure this is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This isn't unlike the authority granted to other health care professional boards in Washington, a system that has served patients well.</p> <p>In conclusion, I strongly urge you and your staff to recommend that the Legislature enact these proposed changes to the scope of practice for optometric physicians in Washington. Thank you.</p>

Dr. Kerri Norris	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 5 years, and I currently practice in a surgical center with optometry and ophthalmology colleagues in Kennewick, WA. I also am licensed to practice in Idaho. I personally know very promising and well-trained optometrists who settled and practice elsewhere because Washington's scope of practice is so limited. Understandably they would rather practice to the full extent of their education in another state, further restricting access to care in Washington.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>Just one example that has effected hundreds, if not thousands, of my own patients at this point would be an OD's inability to treat secondary cataracts. More and more states are granting this right to primary care eye providers in order to allow same day examinations and treatments for a condition that affects one out of three patients who have had cataract surgery. Nationally this leads to millions of patients who have delayed care, extra travel, more time off work, and additional copays and other charges that place a hefty burden on our healthcare system. This is only more greatly felt in the more rural communities where patients are traveling for even primary eye care.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,</p>
Dr. Charissa Young	Self	Support	Optometrist	<p>I support the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 6 years and am in a private practice with offices serving the Seattle and Bellevue communities for medical and primary eye care. During my four years of post-graduate training in Oregon for my doctorate of optometry, I was trained to do many procedures beyond the scope of Washington's current practice regulations. Washington's current scope prevents me from caring for my patients as I have been trained, and are inconsistent with other states and national standards.</p> <p>The current scope restrictions on optometry in Washington state make it challenging for me and my colleagues to provide expedited care, increasing the cost of care to patients and delaying sight-saving care. For example, several of my optometric colleagues are unable to perform procedures to treat post-surgery complications (such as secondary cataracts formed after a primary cataract extraction) even when they are the first person to diagnose the complication; they work in interdisciplinary settings where they have access to the instruments to treat the patient immediately and have also been trained under their degree to do so, but Washington's scope inhibits them. The patient may be left with a visually disabling issue that decreases their quality of life, including their ability to work until they are seen by another provider which can take weeks if not months depending on their access to care.</p> <p>Washington needs to keep up with changing technology and standards to provide the best eye care for patients. If you authorize the Board of Optometry to regulate the scope of optometry as other health care professional boards in the state do, it expedites the best patient outcomes.</p> <p>Please recommend that the Legislature support the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Kaitlin Hash	Self	Support	Optometrist	<p>I am writing you in an effort to encourage you to support updating Washington state's scope of practice for optometric physicians to that of similar states around us. I have been practicing here since graduating from optometry school in 2016 and love what I do. Within optometry, my passion is providing primary eye care and vision therapy to children and those with special needs. I am in a unique setting where I see many patients who may otherwise not receive eye care, due to being nonverbal or having other physical or intellectual disabilities that may make access to care more difficult. I have formed deep bonds with my patients and their families, and see myself as an important gatekeeper to help them receive the care they need. Part of this depends on the ability for me to get them timely and appropriate access to care and procedures, whether being able to complete the procedures that I have been trained to do, and would be able to do in other states, or refer to someone who could see them in a timely manner.</p> <p>The challenge with the state's current framework and scope wording for optometry is that it does not allow for streamlined updating as technology and procedures continue to improve and grow. If we allow the state board of optometry to facilitate this piece, to determine how our state's optometrists can practice and what education and training requirements will be needed like how some of the other state health care boards do, this will make a more streamlined process over time. Ultimately, this will allow us to provide the most timely and quality care to our patients.</p> <p>Thank you greatly for your support of this modification. I truly believe this is in the best interest for Washingtonians.</p>
Christine Berger	Self	Support	Public/Patient	<p>I am a patient at Renton vision and a few months ago I had a sty on the inside of my bottom eyelid it grew and was huge and hurt and was an ordeal for me. I had it over the weekend so when I went on Monday to see Dr Paul Jensen hoping he would be able to remove it but couldn't and I had to be referred out to a few eye specialists. It was very frustrating and painful I first had to find a eye specialist who wasn't booked up and could see me it was also an extra added charge on my insurance. If only Dr Jensen could have been allowed to do procedure I wouldn't have had to suffer in pain waiting to get procedure done not to mention my insurance.</p>
Christa Allegar	Self	Support	Public/Patient	<p>My name is Christa and I live in Vancouver, WA. I want to voice my support for the proposed bill. I trust my optometrist/office to perform these procedures and I think their board should be able to decide what optometrists can and cannot do, similar to how dental/podiatry boards make those decisions.</p>

				<p>I am an Optometrist practicing in the state of Washington. On a regular basis I see patients for a variety of medical eye care needs. There are certain cases where a specific procedure is needed to be done but due to state regulations I am unable to provide this care to my patients. I was trained to do these procedures during my Optometry program and it is becoming increasingly frustrating when I have to refer patients to other providers to complete procedures I am completely qualified to complete. It's even more frustrating when my fellow Optometrists across the border from me in Oregon can do these procedures. Patients are often frustrated they need to go to a whole new clinic and pay another copay/deductible. I have had patients refuse necessary treatment because they didn't want to travel or have the means to do it.</p> <p>I have had many occasions where I have spoken to current Optometry students, time and time again they ask me: what are Optometrists able to do in Washington? I have to inform them that we can't do certain procedures that other states are able to do and have been able to do for years. This greatly shifts their mindset as to if they even want to come to Washington to practice. We are missing out on talented new graduates to other states with a better scope of practice. Allowing us to practice to the level that we are taught in school, will also allow patients more access to eye health care and at a lower cost to patients.</p> <p>I truly believe our profession should be regulated by our state board as many other health professions. In fact, in many of these situations with patients where I have to refer them out for a procedure I should be able to complete, they are baffled that our board of Optometry is not the one who regulates these things. I fully support the proposed legislation that the board of Optometry be able to regulate the profession the way other health care professions like dentists, podiatrists, and nurse practitioners can.</p>
Dr. Jason Egbert	Self	Support	Optometrist	<p>Thanks so much for your support of my small business here in Battle Ground and all of its citizens that deserve the best eye care possible for a reasonable price. Competition makes us all better.</p>
				<p>Hello! I am an optometrist working in Lynnwood Washington and I wanted to write to you regarding the current scope of practice optometrists have in Washington state.</p> <p>I am a fairly recent graduate, having completed optometry school in 2016. During school we were trained to the maximum scope of the practice of optometry in the US, including many procedures that are not yet under the purview of our profession in Washington.</p> <p>I have been practicing for 5 years now, and I have encountered many occasions where I was trained in a procedure that could help a patient-but I was not allowed to. Thankfully we have a good network of ophthalmologists in the area that we comanage with, but even in the best circumstances the best I ever hope for is a 2-3 week wait to have an appointment with them.</p> <p>It is very frustrating to have to send a patient home for an indeterminate amount of time while they wait for care, during which they may have blurry vision, discomfort or pain. I know that should our scope be expanded, patients would receive the same care as if I referred them out, but much faster.</p> <p>We learn these skills in school because in some states, optometrists are allowed to do them. In the states with broader scope of practice than Washington, these procedures are done safely and effectively by the optometrists that perform them. I would like the ability to practice to the full scope of my training in our state, for the good of my patients.</p>
Dr. Jacob Gilbar	Self	Support	Optometrist	
				<p>I am an optometrist practicing in Washington State (in Ellensburg and Cle Elum) since 2004. I am writing in support of the proposed changes to the scope of practice for optometry, and also to give the board of optometry the ability to be the governing body to determine future modifications—as it is for many other healthcare professions in the state.</p> <p>As a recent graduate (in 2003), I was excited to come home to practice in Washington. The bill to allow for prescribing oral medications (and injectable epinephrine) had just passed and in comparison to other states WA was fairly progressive. As a side note: all the currently proposed changes are procedures or skills that in 2003/04 between optometry school and VA residency I had been trained in, and were either performing independently (lumps and bumps) or in the mid-latter stages of training (laser).</p> <p>Since that time, many other states (including all our neighboring states) have passed bills allowing for more progressive scope of practice. The best new and established clinicians want to work where they can actually do most of what they have been trained, and WA is not competitive here. This limits the pool of potential providers available to the public, and it also limits the pool of potential candidates for practice owners looking to hire associate or to sell their practice.</p> <p>I am at a point in my career where I personally am not looking to perform any of the proposed procedures. But, another OD across town has a dual license in Oklahoma and is experienced with all of them. Since we only have one part-time general ophthalmologist, having another local provider (and potentially providers) able to perform laser for secondary cataract or excise a chalazion reduces waiting times for my patients as well as the need for out of town referrals. It also frees up the ophthalmologist to be able to do more surgical procedures that require an OR, further increasing access to care for rural citizens.</p>
Dr. Sarah Storrs	Self	Support	Optometrist	<p>Thank you for your consideration of these proposed changes.</p>

Dr. Michael Van Brocklin	Self	Support	Optometrist	<p>I am asking you to please approve the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been in practice in the State of Washington for 42 years both in private practice for 16 years and in a co-management center setting where I know reside in Bellingham, Washington. I also have been licensed to practice in Alaska, so have a firsthand experience to care for patients with a more reasonable set of practice regulations than we now have in the State of Washington.</p> <p>I understand the concerns that will be brought before you that Optometry is undertrained and lacks the professional judgment and clinical experience needed to expand the scope of practice for Optometrists in the State of Washington.</p> <p>These are the same concerns that have been expressed when Optometry asked for the privilege to use diagnostic drops for the detection of ocular disease and later topical medications for the treatment of ocular disease. If these voices had their way, Optometry would still not be able to dilate an eye during an exam, the patient may have to be referred to another doctor just to complete care for the patient! Patients that need a topical medication for ocular allergy, infection or inflammation would have to be seen by another doctor before they could get treatment. Just think of the inconvenience and increased cost to the patient and the health care system had the scope of practice not changed. These examples may appear dramatic, however, with the rapid expansion of technology similar examples of treatments may occur unless a more efficient way to approve scope of practice is employed.</p> <p>Medical diagnoses and treatment are changing at an increasing pace and a more efficient and reasonable way to define the scope of practice for Optometry is putting those decisions in the hands of Optometry.</p> <p>The Board of Optometry and the practicing optometrists in our state shown good judgement and practice outcomes after previous expansions of the scope of our practice.</p> <p>Washington State's regulatory framework needs to keep up with rapidly changing technology in the delivery of eye care. The Board of Optometry should be allowed to determine which procedures are included in the scope of practice and the educational requirements needed to be met to provide them.</p> <p>Please recommend to enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Cynthia Ruggeiro	Self	Support	Optometrist	<p>I have had the pleasure of working with you and Governor Inslee on behalf of my professional association, Optometric Physicians of Washington (OPW), on our state's response to the COVID-19 pandemic. I have been gratified by the sense of collaboration among our health care professionals and state agencies in responding to this crisis. Recognizing the importance of science based decisions while acknowledging the role of historic inequities in health care have guided the excellent work of the Department of Health. We can be proud of our work during this unprecedented time.</p> <p>I am writing to ask for your support during the upcoming Sunrise Review to expand Optometry's scope of practice. This expansion will update Washington's scope of practice laws to bring them into closer alignment with laws in other states. But the reasoning behind my personal support of this expansion is because it is science based and acknowledges the role of historic inequities in health care. Current restrictions do not allow procedures for which optometrists have been trained. Earlier access to medical eye care prevents delays which increase morbidity and cost. As we have been reminded during the pandemic, these delays and obstacles to care are often localized in marginalized communities. Optometrists currently practice in all but three Washington counties, while 15 counties (nearly 40%) have no ophthalmologists.</p> <p>I am proud of the commitment to equity embraced this last year by OPW to address systemic racism by the formation of its Diversity, Inclusion and Access Task Force. Their mission will be to explore ways we can offer solutions to communities who are burdened by disproportionate lack of access to eye care. The pandemic has only widened this gap. A local optometric physician can capably handle many eye health conditions which avoids patient travel and time off work. These same communities often deal with pre-existing conditions which increase the risk of avoidable vision loss. This Optometric scope expansion is a critical step in addressing this inequity and I fully support the proposed changes to Washington State's optometric scope of practice.</p>
Dr. Dave Shin	Self	Support	Optometrist	<p>I practice optometry in Gig Harbor, WA, and serve many patients who live in surrounding rural areas.</p> <p>Just a few years ago, before moving to Washington, I practiced in the state of Oregon. In Oregon, I was able to prescribe oral medications and perform certain minor in-office surgeries. This allowed me to better serve my patients by preventing the delay of patient care in a cost-effective manner. Unfortunately, crossing state lines has limited my ability to provide the same care I provided in Oregon.</p> <p>It is very common for patients to wait weeks and months to see an eye doctor in my area. Allowing optometrists like me to practice to the fullest extent of our training would lower the cost of care, improve patient access to care, and reduce patient barriers to eye care that lead to poorer outcomes.</p> <p>Please support the Department of Health Optometric Sunrise Application.</p>
Dr. Stacy Tovarek	Self	Support	Optometrist	<p>This letter is to state my support for the Optometric Physician of Washington's effort to increase their scope of practice. I am an optometrist in Gig Harbor, WA and the sole owner and practitioner at Gig Harbor Vision Source. I have several reasons that I would like this to move forward. First and most importantly, I believe it would allow me to better serve my patients. I have several patients that I have referred to have lid lesions removed and the average wait time to get into to a specialist is six weeks. When these patients establish care at a specialist's office it usually takes a minimum of two visits to get the care they have desired. That creates redundancy and adds significantly to the dollars spent in our healthcare system to get these patients cared for. Optometrists in several other states have the ability to perform these procedures and have been doing so safely. I currently hold a Wyoming license, as well, and would have the ability to travel there and practice the fullest extent of my education. The training received in optometry school prepares us well. Also, as a business owner in the latter half of my career, I have begun to consider my exit strategy from practice. It concerns me that my business will not be as attractive to a newer practitioner if the scope in the state of Washington is not kept on par with the rest of the country.</p>
Dr. Benjamin C. Winters	Self	Support	Optometrist	<p>I am writing in support of scope expansion for the profession of optometry. As an optometrist who has been practicing now for 13 years, I take great pride in my profession. It hurts to see students graduating from optometry school passing up Washington State as a potential place to practice due to the antiquated scope of practice we have in this state. When I graduated, Washington was one of the best states as far as our scope of practice.</p> <p>I live in Yakima, WA. Right now there is an extreme shortage of ophthalmologists. I have patients that have had to wait months to get in to see an ophthalmologist for fairly routine procedures. This is not likely to get better as we have an additional 2 ophthalmologists in our area that are preparing to retire. Expanded scope would be better for patients as well.</p> <p>I think it is unfortunate that discussion over scope is often very political in nature. My own feeling is that our state's board of optometry should be the ones deciding what is within our scope and what we are qualified to do, similar to other medical professions in our state.</p> <p>Please feel free to contact me if you have any questions regarding my letter.</p>

Dr. Andrea Morton	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for going on 8 years now, and currently practice in both Camas and Vancouver Washington at a multi-location private practice office. I am also licensed to practice in Oregon as I worked for Pacific University College of Optometry for a period of time as a lab instructor as well as a clinical attending.</p> <p>Especially as compared to Oregon, our closest neighboring state, Washington's current scope of practice regulations prevent optometrists here from caring for our patients as we have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. From a consumer and business standpoint, these restrictions on our scope increase the cost of care and serve to hinder access to quality eye care.</p> <p>In particular treatment of chalazions (or "stye" in layman's terms) comes to mind. We often have patients present with a chronic chalazion which is easily excisable. This is something we as optometrists have been trained to do but are currently unable to under Washington's scope of practice. Because of this, when a patient presents for a visit to be diagnosed they are unable to receive treatment. They must then be referred to or find another office that is covered by their insurance, make additional copays, take additional time off work for a referral appointment, and ultimately experience a delay in treatment while the aforementioned transpires. In reality, the patient could have walked in, had the lesion treated and moved on with their day saving both time and money. We as optometrists certainly are not asking to practice outside of what we are trained to do but simply to practice what we know to deliver efficient and effective patient care.</p> <p>I am actively involved with the Optometric Physicians of Washington (our state association) and along with this comes speaking with students at Pacific University about their future plans upon graduation. Many highly skilled and trained doctors are electing to move elsewhere because of the poor scope in Washington, knowing they are unable to practice to their fullest extent if they elected to work here.</p> <p>I believe that is important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you and please feel free to reach out with any questions I may be able to help answer.</p>
Jessica Cudjoe	Self	Support	Public/Patient	<p>My name is Jessica Cudjoe and I have been a patient of Dr. Sopaś in Vancouver, WA, Mt. View Eyecare Center for 6 years now. I have grown to trust both Dr. Sopa and her husband as my optometrists. I would like to be able to see them for other procedures as well when it comes to my eyes instead of being referred to someone in Oregon. I suffer from chronic stye and I have a stubborn stye that has not gone away and I have to see another Opthomologist in Oregon to have it taken care of if I want it gone. This is a huge hassle when I already have a trusted doctor I want to work with, not to mention the time it takes away from my work to go to another doctor which costs me even more money. I have a lot of anxiety about going to doctors I don't know and I trust them to take care of my eye needs here in Washington. I would like to see this law changed for them to do more so they don't have to refer people like myself and other patients to Oregon. I would really appreciate it if you would consider this and help make it easier for people in Washington not having to go into Oregon to take care of these problems when our trusted eye doctors could do the same thing here in Washington. Thank you for your consideration.</p>
Patrick Armstrong	Self	Support	Public/Patient	<p>I am forty seven years old, and I have been an Optometry patient for the last thirty nine years. I currently have several eye disorders (glaucoma, chronic eye inflammation, dry eyes, blepharitis, and at times clogged eye ducts) which require multiple optometric visits a year to monitor and treat. I take both prescription and over the counter medications on a daily basis, and at times even require medical interventions. I also wear corrective glasses.</p> <p>My Optometrist, and the optometrists who care for my family, are highly trained and dedicated medical professionals. Without out the care that I receive from my optometrist I would actually lose my sight. That is not hyperbole. It is a statement of fact. I am also a health care provider, an Occupational Therapist, as is my wife, a Registered Nurse. I have a masters degree and am the clinic director of an outpatient therapy clinic. I am saying this because I understand how hard it is to earn a degree like Doctor of Optometry, and the ongoing continuing education required to maintain a license.</p> <p>Several years ago my optometrist treated a common eye lid stye in her office while I was there for other diagnostic testing. I understand now that the Washington State practice act for Optometrists prevents her from treating this common disorder. I would have had to take additional time away from work, paid an additional insurance co-payment and probably a higher office visit cost, to have an Ophthalmologist treat the stye.</p> <p>Considering the multiple eye issues that I deal with on a daily basis, I want my Optometrist to be able to treat me as quickly, and cost effectively, as possible for whatever issues that may arise. I know that my Optometrist, as are all Optometrists, is highly trained and qualified to provide comprehensive eye care.</p> <p>It is my understanding that your department is currently reviewing a proposal that would update Washington licensing to match the training that optometrists have and the care they are authorized to provide in other states. I urge you to support these changes.</p>

Dr. Sylvianne Youngblood	Self	Support	Optometrist	<p>I am writing to add my voice in supporting the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>Medical professionals around the world work as hard as they can every day to give the best care possible to their communities. Restricting optometrists' ability to treat their patients to the full scope of their training is a disservice to these patients, especially in underserved areas. As you may already know, optometrists are present in nearly all Washington counties except three, whereas there are 15 counties (nearly 40%) without ophthalmologists. Increasing the scope of optometry to better align with laws in other states will expand access to health care and reduce its costs to Washington residents.</p> <p>Avoiding unnecessary referrals will also improve our care to our communities because we can decrease wait times for appointments, minimize the distances our patients have to travel to find care, and limit the need for multiple co-pay expenses or expenses for multiple diagnostic tests. I, as well as my colleagues, want to continue working together towards eliminating obstacles facing our patients when trying to receive health care.</p> <p>Thank you for your time, and I hope that you and your staff consider recommending that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dale Zimmerman	Self	Support	Public/Patient	<p>I have been diagnosed with a secondary cataract, a condition that is treated by an in-office YAG laser procedure. I had to delay having the procedure done because I am moving soon, so instead of having my optometrist perform the laser for me at my convenience, I now need to wait until I reestablish care in my new community, get a referral, and wait until an ophthalmologist can see me. It would have been much more convenient and less costly for me to have my optometrist perform the in-office procedure in a timely manner before I had moved. And as you can imagine being able to see more clearly would make packing and moving much easier. I understand that both doctors at the Tumwater Eye Center have been trained to do the procedure, however, are not allowed due to current law in this state. I support changing the law to allow optometrist to do procedures they are trained to do.</p>
Carol Langley	Self	Support	Public/Patient	<p>I was seen by optometrist today, June 29, 2021 and had a new bump on my lower lid. I was told by my optometrist Dr Douglas Jaske that it was a blocked oil gland. He told me that one treatment option would be to use a medication injected into the gland that would allow it to calm down and get better quickly. However, due to current Washington law, he is unable to do this procedure, even though he is trained to do it and that many other states allow his profession to do the procedure. I now had to decide if I wanted a referral to a different office to see a doctor that I do not know in order to have the procedure done. I did not want to go anywhere else due to the extra cost and inconvenience. It would be great to approve new laws to allow my optometrist to do procedures that he his trained to do.</p>
Viola Dougherty	Self	Support	Public/Patient	<p>I want Dr Jeske to do the procedures I need that he is trained to do! Thank you</p>
Dr. Crystal Edison	Self	Support	Optometrist	<p>I'm writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 8 years, and I currently practice in partnership with LensCrafters in Vancouver, WA. I also am licensed in Oregon, and have recently worked through the Kaiser system in all of the Oregon Kaiser optometry locations.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>For instance, I've had to send all of my patients with Chronic styes to ophthalmologists for drainage/removal even though I have been trained to do this myself during school. This is a procedure I would be legally doing in my Oregon practicing locations. These patients have needed to travel long distances and pay multiple copays in order to see an ophthalmologist.</p> <p>It's important that Washington's regulatory framework keeps up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,</p>
Dr. Lisa Dok	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for six years, and I currently practice in Seattle, WA and Mill Creek, WA. I also am licensed to practice in California, and have been licensed in Tennessee.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>For example, I am trained to treat posterior capsular opacification with YAG laser, a simple outpatient procedure which can immediately improve the vision of my elderly patients impacted by this condition. Instead, I must refer these patients to a specialist, where they often face long wait times to get an appointment, as well as forcing them to travel longer distances and in more severe traffic with their impaired vision. This reduces their quality of life by adding more financial burden and risk of injury or death by driving with reduced vision.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>

				<p>Hello there, I am an eye care provider in California and have had privileges to practice in Oklahoma for nearly 2 decades. I retired from University of California, Berkeley, School of Optometry and is currently an adjunct faculty at Ketchum University, formally known as Southern California College of Optometry. I am a chief of optometry at a California HMO. I now lead a department of 15 optometrists, conduct patient care and am in charge of an Optometry Primary Care residency program. I also received a J.D. in 1998, a Masters degree in education in 1987.</p> <p>Expanding the scope of optometry will improve access and quality for eye care for the general population, furthering a greater need. Historically, many states in other parts of the country have demonstrated that such expansion produced no harm. Optometrists are well qualified to perform the currently proposed legislative proposal.</p>
Dr. Paul Peng	Self	Support	Optometrist	<p>Thank you for your consideration.</p>
				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I am in my third year of optometry school and plan on practicing optometry in Washington State for my entire career.</p> <p>As it stands, Washington's current scope of practice regulations will hinder me from caring for my patients. They are inconsistent with other states' regulatory structures and national standards in optometry. These restrictions will not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>We are currently learning many procedures that increase the quality of life for patients but are prohibited under the current legislation. Some of these include subconjunctival injections, lid lesion removal, minor wound suturing, and LASER procedures.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p>
Joseph Baker	Self	Support	Student-Optometrist	<p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,</p>
				<p>I am writing to request a review of and increase in Scope of Practice for WA Optometrists. As a retired RN, I am fully appreciative of the fact that licensing restrictions, do NOT always reflect qualifications to perform said procedures.</p> <p>It is ridiculous to force WA patients to have to endure the added expense and inconvenience of seeking care with an already overburdened ophthalmologist, when we could easily receive this care from our trusted and qualified optometrist.</p> <p>I can give you a few recent examples. My husband just recently needed bilateral yag therapy. He had to wait almost TWO full months to receive treatment. He had to travel 20 additional miles for said treatment. To add insult to injury, he then was REQUIRED to pay for a totally needless "exam" to "confirm" he needed the yag procedure. More time and more dollars! A few years ago, I had to go thru the same experience for my yag procedure!</p> <p>Recently, I also found a weird little growth on my upper eyelid. Although, it likely could be removed by my OD, I have to be "referred" to the ophthalmologist, who had little or no appointment time available.</p> <p>Another frustrating side note. When I have been referred to the allegedly "more qualified" MD for care, several portions of the new exam (which is a repeat of what has already been done by the OD), is completed by TECHNICIANS! Yet, the general public is led to believe they are receiving more "qualified" care. That is crazy.</p>
Alexandra Evans	Self	Support	Public/Patient	<p>I understand that your department has an upcoming review of a proposal to update the scope of practice for optometrists that would reflect their current training and care they would be licensed to offer patients. Please support these licensing changes. Cost of living and medical care is already outrageous, without added additional burdens to patients.</p>
				<p>I am writing today in support of updating the scope of practice law for Washington State Optometrists.</p> <p>I have seen my optometrist for all my eye care for several years. The quality of eye care I have received has been of the highest standard and I am confident in the care I receive. As a pharmacy assistant and registered medical assistant I work with medical providers throughout the community. Optometrists are an integral and important part of the healthcare system in our small, rural community. I would like to feel secure in knowing that optometrists are able to practice to the full extent of their education. In addition to his professional degree, my optometrist has undergone advanced training including a residency program in which he was trained to do eyelid bump removal and eye laser surgery. Unfortunately he is unable to practice to the full extent of his training in Washington State. As advances in care become available I would like my optometrist (really all healthcare providers for that matter) to be able to treat me with the most up to date knowledge, technology, and standards.</p> <p>Washington State citizens like me are inconvenienced by being referred to another physician for eye care when my current doctor is more than capable of performing the care. Additional appointments are time consuming, costly and may create a delay in care, which could affect outcomes. There is no advantage to a patient in limiting the care a doctor can provide if the doctor is properly educated and certified to provide the care. This is why I am in full support of updating Washington State law.</p>
Jacqueline Leal	Self	Support	Public/Patient	

Michael Wagner	Self	Support	Student-Optometrist	<p>My name is Michael Wagner, and I am writing in support of legislation to pass an expanded scope of practice for optometrists in Washington State under RCW 18.53.010. I am a current 4th year optometry student at Southern College of Optometry (SCO) in Memphis, TN. I am from Washington State and would like to return next year after graduation. However, after several years of study and training, I am having second thoughts about returning to practice in Washington because of optometry's limited and outdated scope in the state.</p> <p>As a student at SCO, I have been trained to perform minor therapeutic procedures to remove lesions from the eyelid as well as perform several laser procedures. I am committed to providing my community with the safest and highest quality eyecare available, but if optometrists are not allowed to practice to the full extent of their training in Washington, I may have to choose to practice in a state where I am able to give my patients that highest level of care.</p> <p>With optometrists having an expanded scope, patients will be able to receive their care sooner and more efficiently. Patients will be able to avoid being referred to an additional doctor, which forces them to take additional time off work, and they will be able to keep seeing an eyecare professional with whom they already have a relationship and trust for their eyecare.</p>
Dr. Michelle Darnell	Self	Support	Optometrist	<p>Good morning. My name is Michelle Darnell, and I am a practicing OD in Liberty Lake, outside of Spokane, WA. I attended graduate school at Pacific University in Oregon, where I learned procedures such as eyelid lesion excision/removal, and how to prescribe medications such as oral steroids.</p> <p>I maintain active licenses in three states: Washington, Idaho, and Montana. In Idaho and Montana, I can perform minor surgical lid procedures, such as removal of a hordeolum (sty) or chalazion (residual bump from a resolved sty). I was taught how to do this in school in a state that also includes that procedure under Optometry's scope. I saw a patient on 2/17/2021 with a very painful hordeolum on her right lower eyelid. She came to my office literally begging me to lance it, as she'd been jabbing it with a needle for several days and had been unsuccessful. I offered to refer her to a colleague in Idaho, five miles to the east, where such a procedure can legally be done by an optometrist. Unfortunately, the patient had an insurance plan that was only valid by a Washington provider, so I referred her to our local ophthalmology surgery center, Spokane Eye Clinic. The patient has been seen by Spokane Eye Clinic three times as of 6/16/2021 and has been treated for glasses, dry eyes, and cataracts (none of which the patient was seeking active treatment for at that time), but for some reason she does not understand, they refuse to remove the excision. The patient is very bothered by the unsightly hard lump in her lower lid, which would not be a problem today, had I been able to lance the lesion the first time I saw her. Situations like this make me wish I had established my practice in Post Falls, ID or Coeur d'Alene, ID, where I could practice the full scope of what I was taught in school. Every time I think of this patient, I am actually embarrassed by how limited I was in my legal ability to help her, despite having been taught how to perform the procedure safely.</p> <p>As another example, six months ago I had a soon-to-be bride walk into my office with her eyelids swollen shut. She had gotten eyelash extensions in preparation for her wedding in 48 hours, and developed a severe allergic reaction to the glue used to glue them on. While I was able to remove the lash extensions and the glue in-office, I had to refer her to a colleague in Post Falls, Idaho, to prescribe her a medrol dose pack, because I am not allowed to prescribe oral steroids under my Washington license. Thus, the patient had to pay for TWO office visits to get the medication she needed to resolve the swelling in time for her wedding. We as a profession are not asking for IV steroids, or to prescribe oral steroids to treat systemic conditions that are clearly outside of our scope, but a contact dermatitis reaction of the eyelids is clearly within our scope, and something I was, again, taught to treat appropriately in school. When I practice in Montana and Idaho, I can prescribe oral steroids for ocular conditions and no one bats an eye. Again, I am embarrassed by the limited scope of the state that I primarily practice in, and that I constantly have to send my patients "over the border" into Idaho.</p> <p>Please consider this bill, as it not only brings our state's standard of care up to the level equal to our surrounding states (MT, ID, OR), but it allows us to treat our patients more fully, more efficiently, and with less cost to the insurance companies and the medical system in general than referring them out-of-state or to our already overburdened surgery/ophthalmology centers, and the problem is only going to get worse as the population continues to age and the number of new ophthalmologists declines.</p> <p>Please help us expand our scope to include what we were taught in school, for the betterment of all Washingtonians.</p>
Dr. Rob Gilbert	Self	Support	Optometrist	<p>I am an Optometrist practicing in Clark County, Washington. Every day I see patients for a variety of medical eye care needs. I am often presented with cases where a specific procedure is necessary to be performed but due to state regulations I am unable to provide this care to my patients. I spent 4 years at a post-graduate school specific to optometry and eye care to become an expert at diagnosing and treating specific ocular conditions. It is becoming increasingly frustrating when I have to refer patients to other providers to complete procedures I am completely qualified to complete. It's even more frustrating when my fellow Optometrists across the border from me in Oregon can do these procedures. Patients are often frustrated they need to go to a whole new clinic and pay another copay/deductible. I have had patients refuse necessary treatment because they didn't want to travel or have the means to do it. I service many rural areas around the Battle Ground, WA area where these procedures would make a significant difference in the patient's life if they were able to follow through on the procedure.</p> <p>I have had many occasions where I have spoken to current Optometry students, time and time again they ask me: what are Optometrists able to do in Washington? I have to inform them that we can't do certain procedures that other states are able to do and have been able to do for years. This greatly shifts their mindset as to if they even want to come to Washington to practice. We are missing out on talented new graduates to other states with a better scope of practice. Allowing us to practice to the level that we are taught in school, will also allow patients more access to eye health care and at a lower cost to patients.</p> <p>I truly believe our profession should be regulated by our state board as many other health professions are regulated. It seems unfair that we have been through the same training and are not allowed to practice to our full scope. And many of my patient's are baffled that our board of Optometry is not the one who regulates these procedures that they need. I fully support the proposed legislation that the board of Optometry be able to regulate the profession the way other health care professions like dentists, podiatrists, and nurse practitioners can.</p> <p>Thank you for your support for my patient's in the Battle Ground area that deserve the best eye care possible for a reasonable price. Competition makes us all better.</p>

				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 20 years, and I currently practice in rural North Central Washington, specifically Chelan.</p> <p>Washington's current scope of practice regulations prevents me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>Both patients and other local healthcare providers contact me to care for the eyes. There are a significant number of times I must refer the patient to another eye care provider for conditions that I can both diagnose and treat based upon my education or if we were in another state with up-to-date privileges for optometrists. Of course, this leads to delayed care and additional time and expense related to travel and, in many cases, redundant care with another eye care provider.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p>
Dr. Nathan L. Scott	Self	Support	Optometrist	In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.
				<p>I am in full support of the proposed revision of the optometric physician scope of practice in Washington State.</p> <p>I started practicing in Washington state in 2017 and currently am practicing in Everett, Washington in a private practice setting.</p> <p>I was born and raised in the greater Seattle area and pursued a Doctorate in optometry to help my community. In my procedure training I was educated and tested on: yag laser procedures, removal of "lumps and bumps" (cyst, skin tags, chalazion, etc) around the ocular region and prescribing systemic steroids. With my return to Washington State, I was educated on how dated our regulations regarding optometric physician scope of practice are compared to neighboring states (Oregon, Idaho etc). This states current practicing regulation hinders my ability to help my patient without legal implications.</p> <p>In my training at the Spokane VA (under an Idaho license) I was allowed to remove numerous ocular lesions, as stated above. Currently, under Washington State licensing regulations, if a patient requires any removal I would have to refer them to an ophthalmologist. These minor procedures do not require an oculoplastic surgeon for removal, however, due to the legality I am required to refer out resulting in patient frustration.</p> <p>Multiple hours are spent educating patients on the obstacles that are required to overcome, which include insurance policies and copays. Many times this results in more patient frustration. Educating our patients on prior authorization, multiple copays between visits, and out-of-network care has become the biggest challenge as a practitioner.</p>
Dr. Benyam Kahsai	Self	Support	Optometrist	In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. I have only provided a few examples of the barriers presented to optometric physicians and their staff to support our patients' needs at an exceptional level. It is extremely important that Washington's regulatory framework keeps up with the rapidly changing technology in eyecare.
				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 30 years, and I currently practice with Pacific Cataract and Laser Institute (PCLI) in Silverdale, WA. PCLI is a surgical co-management referral center.</p> <p>It's important that Washington's regulatory framework keep up with the rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p>
Dr. Doug Hansen	Self	Support	Optometrist	In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.
				<p>As a practicing Optometric Physician in Washington state for the last 37 years, I am proud of the progress our profession has taken in both meeting and delivering the expanding medical eyecare service needs of this state. However, Washington state has now fallen behind many other states in terms of the scope of practice available for its practicing Optometric Physicians. As a license holder in Washington, Montana, and California, I find Washington state now has become the most restrictive state in terms of both clinical procedures and pharmaceutical privileges. For example, in other states in which I'm licensed, I may use injectable agents other than in the treatment of anaphylaxis and may prescribe oral steroids, a privilege not allowed in Washington state.</p> <p>As a practitioner nearing retirement age, it is no secret that to attract newly licensed Optometric Physicians to Washington state depends on its ability to offer a scope of practice at least on par with neighboring states in the region.</p> <p>I further believe that as we move into the future, increasing needs to deliver medical eye care to Washington state residents will depend on the ability of Optometric Physicians to have a flexible scope of practice necessary to evolve with emerging technologies and pharmaceutical agents.</p>
Dr. Paul Sheperd	Self	Support	Optometrist	Thank you for your time and consideration of this issue.

Dr. Alex Baldwin	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 8 years, and I currently practice in White Salmon, WA a rural area where access to eye care can be a long drive for patients. My practice serves the Columbia River Gorge and the secluded communities of Trout Lake and Glenwood where a drive for groceries or to my eye clinic is 30-45 minutes in good weather.</p> <p>Often I have patients that require a simple laser treatment or eyelid lesion removal that will require them to drive an extra hour to receive care. My optometry training allows me to perform these treatments a few miles across the river in Oregon however with Washington's limited scope of practice I have to refer these patients. Sometimes I can refer patients to an eye doctor across the river in Oregon, however if the patient has medicaid insurance these patients often need to receive care in Washington to receive coverage. These patients then must drive to Vancouver or the Tri-Cities well over an hour drive each way. Medicaid patients are sadly the least able to afford to take off that much time from work or drive that far, leading some to postpone treatment.</p> <p>This scope expansion for Washington brings the level of care that optometrists can provide up to the level of training I have received and to a level comparable to our neighboring states of Alaska, Oregon, and Idaho. My optometric colleagues and I strongly support the passage of the optometry scope expansion which allows for increased access to quality eye care helping me better serve my patients by utilizing the full scope of our training.</p>
Dr. Brian Chow	Self	Support	Optometrist	<p>I am writing in support of expanding the scope of practice for optometry in the state of Washington.</p> <p>My experience as an optometrist for the last 12 years spans the states of Oregon and Arizona in addition to Washington. Having practiced all three states, I found that only the regulations for optometry in Washington seemed to be excessively restrictive.</p> <p>In particular, Washington is the only state among the three that does not allow for optometrists to oral steroids, as indicated in RCW 18.53.010 (4). In the treatment of uveitis, a commonly managed condition among optometrists, oral steroids may be necessary when treatment with topical medication is insufficient. Just recently within the last month, I had a patient who suffered from a severe episode of anterior uveitis and had to wait to be seen by her primary care provider to be prescribed oral prednisone as I was unable to prescribe it myself. Because I was unable to prescribe oral steroids in the state of Washington, this patient, and others in my care in the past, had to endure the severe symptoms of their condition longer than necessary.</p> <p>Moreover, I also want to point out that neither of the other two states that I have practiced in possessed such restrictive language regarding the manipulation of any amount of tissue when performing procedures on the eye, as described in RCW 18.53.010 (8). This language prevents an optometrist from even removing rust-stained corneal epithelium during a superficial foreign body removal. The removal of rust is standard of care when a metallic foreign body is involved as leaving rust on the cornea may result in further necrosis of surrounding tissue even when the original foreign body is removed. Prior to my experience in Washington state, I had many opportunities to manage patients with this relatively simple procedure without any complications.</p> <p>I thank you for allowing me to share my thoughts on this matter, and I hope this helps in bringing forward a proper review and expansion of the scope of optometric care in the state of Washington.</p>
Dr. Robert Gibbs	Self	Support	Optometrist	<p>I am writing in support of the Sunrise Review – Optometric scope of Practice expansion in Washington. I am a licensed optometric physician in Oregon and Idaho as well as Washington. In Oregon and Idaho my scope of practice and therapeutic privileges are significantly amplified in comparison to Washington. For example in Oregon I am authorized to administer periocular injections and remove eyelid lesions. When I work in our Oregon sites I perform such procedures safely and efficiently. When I return to Washington however, I am unable to provide similar care.</p> <p>I ask that you fully support expanded Optometric Scope of Practice in Washington.</p>
Michael Balzer	Self	Support	Public/Patient	<p>I am writing in support of updating the Optometry Law in Washington State. I understand that the proposed changes will allow Optometric Physicians in Washington State to perform procedures they are educated and fully trained to perform and are allowed to provide in most other states.</p> <p>If my doctor has to refer me to another doctor for treatments he is educated and fully trained to do there will be a delay in my care which could impact the outcome as well as additional costs in doctor's fees, cost and inconvenience of additional travel, and an interruption in my workday.</p> <p>Therefore, I urge you to support these changes. Thank you!</p>
Dr. Rick McManus	Self	Support	Optometrist	<p>I have been practicing Optometry in the State of Washington since receiving my license right out of Optometry School in 1985 some 36 years ago. Optometrists have an amazing track record of providing appropriate care to our patients at a reduced cost compared to our medical school compatriots. (Ophthalmologists).</p> <p>As technology advances and we are able to provide more and better care to our patients, our profession should be able to go to the Washington State Board of Optometry to determine if a procedure or treatment is within our scope of learning and understanding and NOT to the State Legislature. With our extensive training, background and proven safety track record, this request for autonomy from the Legislature should be a no-brainer.</p>
Dr. Bryan Heitmeyer	Self	Support	Optometrist	<p>I have been practicing optometry to the fullest scope since 2004 in the state of Washington. I take pride in my commitment to delivering safe, high-quality eyecare to my patients. Throughout my career, I've established collaborative working relationships with other health care providers in the community who often refer their patients to me for urgent eyecare needs. Unfortunately, the Washington scope of practice laws prevent me from caring for my patients to the fullest extent of my training. These limitation force me to send patients for treatments that I could have performed, resulting in delays in care and increased cost burden to those patients. Scope of practice decision should be made by those with appropriate medical training to understand the issues, such as the Washington State Board of Optometry. In a rapidly evolving profession like optometry, scope of practice training requirements should be constantly evaluated, which the Board of Optometry is better equipped to do than Legislature. While the OPW proposal allows optometrists to perform some advanced procedures if they have the requisite training, it also specifically excludes a number of procedures that ophthalmologists are better prepared to perform.</p>
Dr. Terri L. Haley	Self	Support	Optometrist	<p>I'm writing to you today to say that it is beyond time to adopt the proposed optometry scope expansion in order to get Washington optometrists practicing to the level of their training. I practice in Washington and Idaho. As an example, there have been numerous times I've sent patients to my Idaho office just so I could do a simple skin tag removal - a procedure I've been doing for two decades.</p> <p>I urge you to pass the scope expansion bill to better serve patients in Washington State.</p>

Dr. Stephen L. Christensen	Self	Support	Optometrist	<p>I am writing regarding the upcoming sunrise bill for optometry in the state of Washington.</p> <p>My ability to practice optometry is severely limited in the state of Washington due to the outdated optometry regulations governing my practice. I am licensed in two other states both of which allow me to practice an expanded scope of practice that is far more advanced than what is allowed in the state of Washington. I enjoy practicing in the area I am in, it being a slightly more rural area, and I would like to continue to practice in the state.</p> <p>I would urge you to allow a more expanded scope of practice which will allow me to take better care of my patients and my experience warrants a more expanded scope of practice.</p>
Dr. Dale Tosland	Self	Support	Optometrist	<p>I am writing to you in support of the proposal to adjust the scope of practice for optometric physicians in Washington and to grant the State Board of Optometry authority to adjust scope in the future.</p> <p>The last adjustment to optometry's scope of practice in Washington State was nearly two decades ago, in 2002. Many changes in technology and treatments have occurred in the nearly two decades since then. With a rapidly changing health care field like optometry, this kind of delay in updating scope of practice makes no sense, as it means that our patients cannot benefit from the latest developments in the field.</p> <p>My appeal to you is not only as a Doctor of Optometry wishing to fully serve my patients, but also as an employer. I graduated from Pacific University College of Optometry in Forest Grove, Oregon in 1983. Over the past 38 years, I have grown a practice in Olympia to include 7 associate doctors.</p> <p>Over the course of my career, it has been easy to find doctors to work with me, as the Pacific Northwest is a very desirable place to call home. However, in recent years, it has increasingly become a struggle to recruit doctors here as our scope of practice is not appealing to them.</p> <p>Because no college or university in the State of Washington offers a graduate program in optometry, the closest optometric program is my alma mater in Oregon. But students see that optometry's approved scope of practice in Oregon is much more robust than here in Washington. New graduates are drawn to that broader scope, as it complements the level of training that they receive and creates better career opportunities for them.</p> <p>It's also important to grant the Board of Optometry authority to adjust optometry's scope of practice moving forward. I think we have all grown weary of the time-consuming and divisive "eye wars" that occur each time optometry seeks any updates to our scope of practice. Having the Board regulate scope in Washington state would be consistent with the regulatory structure governing many other professions, and would allow our legislative body to focus on issues they are better prepared to decide.</p> <p>For these reasons, I urge you and your Department to provide a favorable recommendation to the Legislature regarding the proposal to update the scope of practice and regulatory framework for optometry in our state. This will certainly keep us more competitive in employing the best and the brightest doctors to better care for our patients.</p>
Dr. Katherine Burke	Self	Support	Psychologist	<p>Please consider supporting improving our state's scope language for optometric physicians. I see a variety of our Washington State residents for psychotherapy services. Locating providers can often be a stressful navigation for people, especially when struggling with things like anxiety and depression. Having to add in more providers to their healthcare team, when perhaps would not happen if they resided in a different state with different scope laws, is not only an inconvenience, but can also lead to increased stress negatively impacting mental health. Therefore, from my perspective, allowing optometrists to practice to their full training and education level is a benefit to my clients. I think it makes sense to have the state board of optometry, similar to dental and medical boards do, help determine what training our optometrists need to provide the best primary eye care for Washingtonians. I urge you to consider the recommendations for modifications to their current scope language.</p>
Dr. Linda R. Medeski	Self	Support	Optometrist	<p>My name is Linda R Medeski, OD. I am a diplomate of the American Board of Optometry and I have been practicing for 31 years. I take between 75-100 hours of continuing education annually; nearly 3 times the amount required by the board of Optometry to maintain my licensure. I have been actively involved in our association for decades and I have previously served as the grass roots/legislative co-chair for 6 years. I am writing today in support of increasing the scope of Optometric Physicians in the state of WA.</p> <p>When I began practice in the state of WA in 1990, our state was in the top 5 % of scope laws in the United states. We currently sit at the bottom 5% nationwide. This is very bad for the citizens of our state for a couple of reasons. Firstly, unnecessary referrals for procedures that can be performed by Optometrists cost patients in time off work for additional visits and increased medical expenses. These referrals can often delay the care needed for the patient as well. Optometrists perform more than 75-80% of eye care visits in the United States and we deliver medical care very effectively. There are numerous studies that support this, and more recently, during the COVID pandemic, optometrists saved many thousands of dollars for the healthcare system by providing care to patients and keeping them out of the emergency rooms. By expanding optometry's scope, you will also be increasing access to health care for Washington residents. Optometrists currently practice in all but three Washington counties, while 15 counties (nearly 40%) have no ophthalmologists in practice.</p> <p>Additionally, WA state is not attracting the best and brightest Optometric Physicians to our state. When a student looks around at the current state laws, they want to be able to practice in a state that allows them to utilize the skills they were trained for. If we continue to lag behind in this area, not only will we lose well-trained physicians, our quality of healthcare will suffer.</p> <p>There is a projected shortfall of Ophthalmologists nationwide by the year 2025. Optometric physicians are uniquely qualified and well trained to help resolve this physician shortage.</p> <p>We are asking to be allowed to practice as we are trained and authorize the State Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within the scope of practice.</p> <p>I fully support the expansion of scope of practice for Optometrists in WA State.</p>

				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a board certified practicing optometric physician for 34 years, and I currently practice in an ocular and refractive surgery co-management center in Yakima, Washington. I also am licensed to practice in Idaho, Oregon, Montana, Colorado and Utah.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>For example, when working in one of our Oregon centers I may routinely remove eyelid lesions (lumps and bumps) and administer ophthalmic medications via periocular injection. In Washington however, I am unable to provide similar care which needlessly delays treatment for patients – many of whom travel great distances in need of care.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p>
Dr. Robert Gibbs	Self	Support	Optometrist	In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.
Dr. Corey Hansen	Self	Support	Optometrist	<p>I am writing to voice my agreement to move scope expansion forward for OD's in Washington State. We as Optometrist's are currently limited and not practicing to the full extent of our training in this state. If you take a look at our curriculum in Optometry school you will quickly see that we are trained beyond what current legislation allows. In addition, OD's and MD's both currently receive training for procedures that one may not have performed while in school. This common practice allows both types of doctors to perform new techniques that arise following graduation from one's various optometry/medical school. I assure you that OD's are well trained in Optometry schools. Furthermore, for those OD's interested in increasing their scope, we will have access to excellent proctors which will facilitate new scope expansion procedures and medication prescribing.</p> <p>Thank you for your time.consideration.</p>
Dr. Gary Bumgarner	Self	Support	Optometrist	I fully support the valuable public ophthalmic services of the optometry law.
Duke Yoon	Self	Support	Public/Patient	<p>I don't know that how long we suppress a certain group of people to do what they are good at or be what they want to be in history like woman' vote, blacks and Asian, etc.</p> <p>Eye doctors, as known as doctor of optometry, like to help to treat more Washingtonian with more and better medicines and tools to heal to see better for visually difficult Washingtonian.</p> <p>I congratulate those senators and representatives for these efforts!</p> <p>Thank you for your honest and sincere effort .</p> <p>JOB WELL DONE!</p>
Jeannette Wake	Self	Support	Occupational therapist	<p>I am writing you in support of modifying Washington State's scope for optometric physicians. As a pediatric occupational therapist who sees those with special needs including neurodevelopmental difficulties and sensory processing disorders, I see how challenging it is for our families to find healthcare providers who are understanding and knowledgeable of this population. Relatively simple tasks for other families, like selecting a new dentist or eye care provider for their child, can become a much longer process to find the right fit, and even more challenging if a specialist referral is required.</p> <p>This is in my opinion a key reason to modify the scope language and allow for the state board of optometry to determine at what level of care optometrists can practice and what training and education will be required to do so as technology continues to improve. Making easier access to high quality care to our Washington families is crucial.</p>
Dr. Len V. Koh	Self	Support	Optometrist	<p>Healthcare is of crucial concern to most residents in Washington. Sadly, many of us are finding it harder to get the care we need. Not only is healthcare becoming more unaffordable, it is also harder to gain access to the healthcare professionals we trust. I'm asking for your support for optometrist scope of practice expansion to alleviate both affordability and access problems.</p> <p>Up to 16 million Americans struggle with undiagnosed and untreated vision impairments[1].</p> <p>In Washington alone, the number of residents with impaired vision, including blindness, is expected to double over the next three decades. Combined with the fact that eye diseases, vision loss, and eye disorders create an estimated \$139 billion economic burden[1], our country is facing a significant public health crisis that must be addressed.</p> <p>Eighty-five percent of primary eye care is provided by a doctor of optometry. With the aging population, the number of vision related problems are projected to increase by an astounding 65% in the coming years. Legislation allowing doctors of optometry to practice to the full extent of their training would provide patients greater access to the latest procedures and more immediate care since there are more doctors of optometry, particularly in underserved areas.</p> <p>Yet, the law governing optometric practice has not been updated since 2006. Thus, the 99.9% of the population with direct access to optometric vision care is denied access to routine high-quality care in their communities and must incur the added expense of referrals to specialists whose offices are often significant distances away. This results in unnecessary duplication of care and lost time from work.</p> <p>Doctors of optometry don't just examine vision acuity. During an in-person, comprehensive eye exam, they can diagnose and manage eye diseases and treat systemic diseases, including diabetes, high blood pressure and even cancer. Doctors of optometry can prescribe medication to treat eye diseases, treat glaucoma, perform pre- and post-operative evaluations, perform follow-up care or refer patients to other health care professionals, if advanced treatment is required.</p> <p>It is long past time to allow doctors of optometry to provide the comprehensive eye care they are trained to provide. Doctors of optometry throughout Washington State stand ready to support your efforts to ensure residents receive the best vision care. I would be happy to discuss this issue further.</p>
Dr. Ian Cheslock	Self	Support	Optometrist	<p>My name is Ian Cheslock and I just graduated from Pacific University in May. While on rotations this last year I had the pleasure of working with Dr. Bret Seamons in Ochelata Oklahoma. During my time there I was able to take an advanced procedures course offered by NSUCO in order to learn how to properly use local anaesthesia and radiofrequency for lid lesions, as well as laser procedures of the anterior segment including YAG capsulotomy, SLT, and LPI. I find it interesting that just 3 months ago I was able to safely and effectively provide care to patients using these procedures but now coming home to Washington State that all of these procedures must be referred out costing patients time and money. It would be great to be able to offer these services to patients in the future.</p>

Dr. Heavin Maier	Self	Support	Optometrist	I am an optometric physician practicing in Spokane, WA. It is appropriate and in patients' best interest for the Board of Optometry to determine optometry's scope of practice rather than legislators. Frequently I am referring patient out for simple procedures regarding lesions on the lids that I have learned how to perform in online continuing education. I would like the opportunity to care more fully for my patients. I would be happy to attend more continuing education to prove knowledge and skills.
Dr. Nils Ohlsen	Self	Support	Optometrist	I'm writing in strong support of the expansion of scope of practice for optometry. One of the things that COVID has taught everyone is that health care needs the ability to adapt to changes. Patients should be given the opportunity to receive care from trained professionals without the added time, travel and expense to see an ophthalmologist or other M.D. for a procedure that an O.D. can easily handle. This adjustment will help keep WA State health care system efficient and low-cost. Please support optometry scope of practice expansion to improve access to care for Washington state residents.
Dr. Carolyn Grout	Self	Support	Optometrist	I am Carolyn Grout, and I am an optometrist practicing in Spokane. I am strongly in favor of expanding Optometrist's scope of practice. The schooling and the training for these procedures is top notch and the optometrist doing these procedures have the training to safely provide care for our Washington patients. I have many patients who have Medicaid State Insurance, and one of the largest Ophthalmology groups in town, only takes 2 of the state insurances. These patients have often had to go to the Tri-cities or Seattle for treatment. Ophthalmology offices are booked out for appointments, and these patients are not getting the timely care they deserve. I am also thinking of my colleagues in towns outside Spokane like Chewelah and Colville, who have limited referral Ophthalmologists in their area. This bill will allow Optometrist to help the patients they are equipped and trained to help. Surgical and other specialty care, of course, will still be referred to the Ophthalmologists in town we so closely work with. Thank you for your consideration and please pass the expanded scope for Optometrist bill.
Dr. Paul Austin Eckel	Self	Support	Resident-Optometrist	I am a resident optometrist in Louisville, Kentucky. Currently, I'm finishing my residency training in ocular disease at Bennett and Bloom Eye Centers. When searching for jobs, I was seriously considering joining a practice in Kennewick, Washington. It was very evident that the optometrists at that practice were providing excellent care. Unfortunately, the limited scope of practice for optometrists in Washington ultimately held me back from moving to Washington with my family and starting a lifelong career there. When I received an offer to stay in Kentucky, where I would be able to continue practicing to the full extent and scope of my training, I couldn't justify moving to Washington and losing the ability to use my experience and skill set. As part of my training in optometry school and my residency, I was trained to perform laser and minor surgical procedures. In the last year alone, I have performed hundreds of YAG laser procedures, SLT's, and lump/bump removal around the eyelids. Being able to provide these services to patients as an optometrist has saved my patients wait time, additional office visits, and money. It has also reduced the overwhelming burden on our local ophthalmologists to perform these procedures. This, in turn, has allowed the ophthalmologists to perform more of the other surgeries that optometrists are not trained to do, like cataract surgery, LASIK, glaucoma tubes, and retinal surgeries. When it's all said and done, having trained optometrists performing YAG Capsulotomy, Peripheral Iridotomy, Selective Laser Trabeculoplasty, and minor lid lesion removal results in patients having more access to care. I have seen, first hand, how appreciative patients are to have increased access to these procedures. Please don't hesitate to contact me if you have any additional questions.
Ed LaBissoniere	Self	Support	Public/Patient	Would you please vote in favor of our enhanced scope of practice. It makes good sense, will save extra visits to the eye doc, and will save money for all involved.
Dr. Leah Ray	Self	Support	Optometrist	I am writing to encourage you to support updating Washington state's scope of practice for optometric physicians to that of similar states around us. I am a lifelong Washington resident and I care deeply about my fellow Washingtonians. I have been practicing primary care optometry in Washington since completing my doctorate training in Oregon in 2006. I chose to complete a residency in this state at the America Lake VA in Tacoma. During the 15 years I have been practicing optometry in this state, scope laws have not caught up to my training in optometry school. In the past, Washington has led the way for optometric scope of practice in this country. It is currently near the bottom. This situation does not help to attract the most gifted and qualified doctors to practice in our state. Helping my patients gain the best access to the highest quality care is extremely important to me. This depends on the ability for me to get them timely and appropriate access, whether being able to complete the procedures that I have been trained to do, and would be able to do in other states, or refer to someone who could see them in a timely manner. The challenge with the state's current framework and scope wording for optometry is that it does not allow for streamlined updating as technology and procedures continue to improve and grow. As you know, technology is improving at a rapid rate, and healthcare is not exempt from being affected by this. If we allow the state board of optometry to determine how our state's optometric physicians can practice and what education and training requirements will be needed, a more streamlined process will result. This is how many other states approach optometric scope of practice. Ultimately, this will allow us to provide the most timely and quality care to our patients. Thank you for considering support of this overdue and greatly needed update to our scope laws. I truly believe this is in the best interest of the eye and vision health of all Washingtonians.
Dr. Everett Boborth	Self	Support	Optometrist	My name is Everett Boborth, and I am a part owner and optometrist at Boborth Vision Clinic in Grandview, WA. I wanted to write to you in support of Optometric Physicians of Washington's proposal for expanded scope of practice. Washington's scope of practice laws currently prevent me from caring for my patients to the full extent of my training. Since I practice in a rural area, these scope of practice restrictions force me to refer patients for treatments that I am fully trained to perform. It results in delays in care and increased costs to those patients who then must travel 45 minutes to either Yakima or Tri Cities. I also know that in Yakima there is currently a severe shortage of ophthalmologists. The ones there are having difficulty keeping up with the patient care demand placed on them. Expanding optometry's scope of practice would ease their burden, as well as lower the wait times and associated costs for patients to be seen when referred. I also support scope of practice decisions being made by those with the appropriate medical training to understand the issues, such as the Washington State Board of Optometry, in our state. In a rapidly evolving profession like optometry, scope of practice and training requirements should be constantly evaluated, which the Board of Optometry is better equipped to do than the Legislature. While the OPW proposal allows optometrists to perform some advanced procedures if they have the requisite training, it also specifically excludes several procedures that ophthalmologists are better prepared to perform. Thank you for your time and consideration.

Dr. Brian Silverman	Self	Support	Optometrist	<p>I support the proposed revisions to the scope of practice for optometric physicians in Washington.</p> <p>I have been a practicing optometrist for 11 years and I have practiced in a large hospital group, private practice, and in commercial settings. I have provided care by traveling to Olympia, Yelm, Seattle, Burien, Everett, Tacoma, Bellevue, Redmond, and Renton.</p> <p>I was trained locally at Whitman College for pre-medicine and University of Washington for engineering. I furthered my training by getting a doctor of optometry degree (4 year post-graduate doctorate). I have done a further additional year training during residency under medical doctors and optometric physicians to provide both laser and surgical management of patients. Washington's current legislation prevents me from caring for my patients to my level of training. I am also licensed in Oregon where I can treat eyelid bumps, provide injections, and provide better and more efficient outcomes. The scope of practice in Washington delays access to care, leads to more cost to the patients, and decreases the patients quality of life.</p> <p>The current scope restrictions on optometry in Washington state are not the same as my colleagues and classmates. For example, one of my classmate trains optometric physicians daily on the proper technique for sterile surgical techniques and laser techniques for glaucoma and secondary cataracts. My classmate has saved hundreds of eyes from sight threatening glaucoma where every hour of delay can have long term complications. In another common issue patients may have secondary cataracts that limit quality of life and ability to work until they are seen by another provider, which can take multiple weeks or months for access to care.</p> <p>Washington optometric physicians need to evolve. We have the technology, training, and ability to provide our patients thorough and exceptional patient outcomes. Especially in this time of the COVID-19 pandemic, access to care is an enormous issue. If you authorize the Board of Optometry to decide the scope of practice it expedites the best patient outcomes. Other states have changed their laws including Oklahoma, Kentucky, Louisiana, Alaska, Idaho, Indiana, and Oregon.</p> <p>Please recommend that the Legislature support the proposed changes in the scope of practice.</p>
Dr. William Prothero	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometric physician for thirty-four years. I currently practice alongside ophthalmologists, performing pre and post-operative care as well as general medical eye care in Bellevue and Kirkland. I have previously practiced in an academic setting as a clinical instructor at The Ohio State University, College of Optometry.</p> <p>During my four years of post-graduate training for my doctorate of optometry and in my ongoing continuing education, I have been trained to do many procedures beyond the scope of Washington's current practice regulations. Washington's current scope prevents me from caring for my patients as I have been trained and are inconsistent with other states and national standards. The current scope restrictions on optometry in Washington state make it challenging for me and my colleagues to provide expedited care, increasing the cost of care to patients and delaying sight-saving care.</p> <p>Washington's regulatory framework must keep up with changing technology and standards in the delivery of quality eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to regulate the scope of practice of optometry, as is the case in many other states. Please consider recommending that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p> <p>Thank you for your time and consideration.</p>
Dr. Sam Hamblet	Self	Support	Optometrist	<p>Thank you for allowing me the moment to share my experience with you regarding the limit to my scope of practice as an Optometrist, and its effect on my patients.</p> <p>I have a young girl that has suffered for years from painful, large and unsightly lid "styes" (hordeolum and chalazion). She has had to take many trips from her home in Elma up to North Tacoma (over an hour without traffic) to have these lesions treated by the only doctor in our area that WILL treat these. My hands have been tied in terms of being able to help her for years, we do our best to prevent them, but she still gets them, and it is so difficult as her eye care provider not to be ALLOWED to help her despite being trained to do so.</p> <p>In my area, Olympia/Tumwater, the access to care for patients with lid lesions, styes, and small laser procedures (particularly for glaucoma) is non-existent. It's not that Ophthalmologists aren't able to do these, but they are so booked with more complex procedures that they are not willing to do them, and pass the buck on to other providers farther away. This reality really only hurts the patient, in a time when access to care for general purposes is so great, then to have to wait months and drive an hour for something small seems so archaic.</p> <p>I fully support the move towards having a Board of Optometry that will maintain, consider, and have authority over the scope of practice in a profession that has been ever evolving since I became an OD in 2008. Having been taught rigorously myself to perform multiple procedures that Washington state scope of practice does not allow, I would be confident in the level of excellence that a board would expect of our profession, particularly on matters of expansion of scope.</p> <p>I appreciate you taking the time to consider my thoughts and experiences on such an important matter. I truly look forward to being able to FULLY care for my patients in a timely manner and preventing them from being passed around for small procedures that I am fully trained to perform (and would be more than willing to be re-trained on if necessary).</p>
Dr. George Sisson	Self	Support	Optometrist	<p>I am an optometrist in Ephrata Wa. I am also licensed to practice in Oregon and previously did practice there. I am unable to practice to the same level in Washington due to our limited scope.</p> <p>Most patients have to be referred at least 45 miles to Wenatchee to receive treatment I could provide them if I practiced in Oregon.</p> <p>Thank you for considering this matter.</p>

				<p>I support the expansion of Washington state optometric scope of practice laws to meet the current level of education being taught in Optometry schools and being practiced in other states in the Pacific Northwest. The current optometry scope law is old, out-of-date and a dis-service to the citizens of Washington state.</p> <p>An example of this is a patient I saw yesterday. A 42 year old woman presented to my clinic concerned about a new 'bump' on her left lower eyelid. Her medical history included the removal of a malignant melanoma from her ankle 2 years ago.</p> <p>I found this lid lesion to exhibit several characteristics of a malignant melanoma and advised the patient a biopsy is needed. Because Washington state's limited optometric scope I could not do this simple biopsy procedure even though I have been trained in eyelid biopsy and completed an optometry school certification course on eyelid biopsy. If Washington state laws allowed biopsies, I would have done the biopsy that same day and have lab results back in a few days.</p> <p>But because of this patient's medical insurance, she had to be referred to another clinic which will likely take many weeks, if not a few months, to schedule an appointment. The patient was anxious about the delay in care because she knew if this were malignant melanoma it could spread to other parts of her body.</p> <p>I see these delays in health care occurring every week because of our outdated optometry scope laws.</p>
Dr. Glen Owen	Self	Support	Optometrist	Please help expediate health care for Washington state citizens and reduce costs from duplicate services by updating the optometric scope of practice law.
				<p>I am writing to show my support for expanding the scope of practice for Optometrist in Washington State. I currently hold a license in a state that has a more robust scope of practice and would like to be able to practice the same scope to improve the quality of care my patients receive in WA where I reside. Updating Washington's scope of practice laws would bring them into closer alignment with laws in other states, which have seen no increase in adverse patient outcomes from scope expansion.</p> <p>Expanding optometry's scope increases access to health care for Washington residents. Optometrists currently practice in all but three Washington counties, while 15 counties (nearly 40%) have no ophthalmologists.</p> <p>The proposed changes would authorize the State Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within the scope of practice. The changes would also align optometrists' approved scope of practice consistent with national standards including expanding the types of medications optometrists may prescribe, including oral steroids. An expansion of the range of therapeutic procedures an optometrist may perform including injections, eyelid lesion removals, and board-approved laser procedures is also proposed. Please note that the proposed changes exclude many surgical procedures including cataract extraction, LASIK procedures, and posterior segment lasers and injections that require more training than an optometrist receives.</p>
Dr. Sara Low	Self	Support	Optometrist	
				<p>I have been a practicing optometrist in Clark County, WA for the past 16 years, and I am writing in support of an expansion of the scope of practice for my profession. Prior to moving to Washington, I practiced optometry in Tennessee and Oregon. Those states have broader scopes of optometric licensure, which I believe translates to greater clinical efficiency, a reduction in unnecessary referrals, significantly reduced health care costs, and better clinical outcomes.</p>
Dr. Derek McTyier	Self	Support	Optometrist	Please consider expanding the relatively restrictive scope of practice for Washington optometrists to include services that optometrists are fully trained and qualified to perform.
				<p>I live in Ellensburg, WA where we have limited availability with medical specialists. Many of them come from Yakima and Seattle and are only available a few days a month. Recently, I saw my optometrist and complained about a growth on my eyelid which is growing and interfering with my ability to blink. He informed me that optometrists in Washington State are not allowed to perform the needed simple procedure, whereas they are allowed in other States. The optometrist could have removed the lesion on my upper eyelid during my routine visit, potentially saving me from an additional visit with additional copay charges as well as the inconvenience of waiting until the ophthalmologist has availability to treat me. This also takes up time from the ophthalmologist's schedule that could be better used for more complex surgeries such as cataract and LASIK surgery and extends the wait time for both minor and major procedures.</p>
Teresa Ann Sloan	Self	Support	Public/Patient	Please consider allowing Washington optometrists the ability to perform the less complicated procedures for which they are trained.

Dr. K. David Epley	Self	Opposed	Ophthalmologist	<p>I am writing with grave concerns about the proposed changes to optometric privileges submitted to the Sunrise review on behalf of the Optometric Physicians of Washington. As a Board-Certified ophthalmologist, I believe the 8 years of medical and surgical training we receive to be able to safely operate on the eye and its surrounding structures is a bare minimum level needed to achieve competence. I am concerned for the citizens of Washington State should we allow the Board of Optometry, whose self-interest it is to expand its own profession's scope, single-handedly determine this scope: this can only result in harm to Washingtonians as hundreds of optometrists with little to no training are suddenly allowed to perform surgery, start IVs, give narcotics and anesthetics, inject patients around and in the eye, all without a rigorous process of clinical training to teach them the intricacies of ophthalmic surgery, and with ZERO experience doing so on live patients.</p> <p>I would like to keep this letter brief, so I am summarizing the aspects of their proposal that are the most dangerous in my opinion, and I'd be happy to discuss these and other issues with you at length if you'd like.</p> <ul style="list-style-type: none"> ·Their petition Asserts incorrectly that adding more surgeons will reduce health care costs. It is well established that providers with less training order more tests, do more procedures, and see patients more often than providers with more extensive training. Adding surgical privileges for optometrists will actually increase health care costs in Washington state. ·Their petition fails to recognize that in Washington 96.2% of residents are within 30 miles of a board-certified ophthalmologist or ophthalmic surgeon. ·The petition incorrectly states that new "national standards" allow optometrists to perform procedures. No such standards exist as individual states are responsible for determining optometric scope. ·Their proposal removes from statute the current definition of "ophthalmic surgery" (and the prohibition of optometrists performing eye surgery), recognized nationwide as providing the highest quality standards for surgical eye care. ·The proposal fails to understand that expanding the number of practitioners who can perform these procedures runs the risk of reducing the number of procedures any one practitioner will perform per year, which may reduce the overall skill level of those performing the procedures as there is a direct correlation between frequency of performing procedures and complications/morbidity: low volume surgeons have higher complication rates. <p>Twenty four states have rejected almost 60 similar scope expansions by optometrists over the past six years. The state of Vermont was faced with a similar request for expansion of privileges in 2019. They assigned the Office of Professional Regulation (OPR), a non-partisan, non-elected entity, to research of the optometrists' claims of access, education, training, cost, etc. The OPR consulted all stakeholders and conducted extensive research for nearly a year and they came to the conclusion that the "OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures. Further, OPR finds that there is little need for, and minimal cost savings associated with, expanding the optometric scope of practice to include advanced procedures. For these reasons, OPR recommends against expanding the optometric scope of practice to include the proposed advanced procedures."</p> <p>I would recommend that Washington State follow Vermont's lead, and for the safety and vision of the residents of Washington State, reject self-regulation of scope and the expansion of privileges like scalpel and intraocular surgery, lasers, injections via skin or into the eye, and all other surgical interventions appropriate only to the properly trained ophthalmic surgeon.</p>
Kathryn Kolan	WA State Medical Oncology Society	Opposed	Association	<p>On behalf of the Washington State Medical Oncology Society (WSMOS), we are writing to express our organization's opposition for increasing the scope of practice for optometrists practicing in Washington state. WSMOS is the professional organization representing medical oncologists in the state. Our aims are to identify and work to improve oncology practice issues that adversely affect patient access to cancer care and to support and encourage clinical research against cancer.</p> <p>We also fully stand behind the Washington State Medical Association's comments submitted and position taken. We are generally concerned with the scope of practice increases related to surgical procedures. We are also concerned about the lack of appropriate education and training. Specifically regarding the increase in prescriptive authority, we are concerned about the scope increase to allow for the administration of general anesthesia. Our concerns are deeply rooted in patient safety and are wary of any proposal where there is a lack of education and training underpinning a scope proposal wherein patients' lives will be impacted.</p> <p>Lastly, we find that arguments addressing access to care or, said otherwise, a dearth of ophthalmologists in practice could and should be best addressed by increasing the number of physicians with appropriate training and education. We request that the Department continue to partner with medical societies and other stakeholders to build on policies intended to improve access and increase the health care workforce, rather than supporting an inappropriate scope of practice increase.</p> <p>Thank you so much for considering our comments.</p>
Dr. Joe Pfeifer and Dr. Cynthia A. Murrill	Self	Support	Optometrist	<p>We urge your support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>These revisions enable Optometric Physicians in the state of Washington to practice to the highest level of their training, which we believe should be a goal of the Department of Health.</p> <p>Access to care is the point! Please support this proposed legislation.</p>

Dr. Roderick Beazer	Self	Support	Optometrist	<p>My name is Rod Beazer and I am in my 10th year of optometric practice. I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington. I believe that Washington state's current limited scope of practice for optometrists has prevented myself and other optometric physicians in our state from delivering the full care to our patients that we have been educated and trained to do. There are now several states that have granted our profession a broader scope of care within the past decade and optometrists within those states continue to provide excellent quality care outcomes within those expanded parameters.</p> <p>Allow me to turn the clock back roughly 10 years ago. I was a student intern in Memphis, Tennessee where their state has had an expanded scope of practice for over a decade now. Under the supervision of my preceptor, I was able to remove a common eyelid lesion known as a chalazion. Multiple other student interns were afforded the same opportunity while I was there. We have the knowledge and ability to provide procedures such as this in Washington, but up to this point have never been granted the opportunity. Several of my brightest classmates ruled out practicing optometry in Washington state due to the more limited scope compared to other states. Chalazion removal is just one example of a common condition that we could potentially treat, but currently must be referred out. As you are likely aware, each referral like this is an added cost to our patients in the form of time off, travel and office visit co-pays. In addition to this, patients often must wait a number of weeks to be seen. Optometric physicians in Washington state are willing and ready to fill this need for our patients. Allowing the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational and additional training requirements must be met for an optometrist to provide them is paramount in achieving a scope that more closely reflects our education and training. This is essentially the authority granted to other health care professional boards within our state and has proven to serve their respective patients well.</p> <p>In summary, I would please ask that you and your staff recommend that our Legislature enact the proposed changes outlined in this Sunrise Review for the optometric profession.</p>
Dr. Kendal Piatt	Self	Support	Optometrist	<p>It has been brought to my attention that Washington State is in the process of changing the scope of practice for Optometry. As an optometric business owner who is affected by these potential changes, I believe this would expand access to quality eye care in our state. It will assist in keeping healthcare costs in check. Washington state will become a more appealing location for future Optometrists to want to work.</p> <p>The Optometric Physicians of Washington (OPW) are proposing changes in optometric scope of practice that would align with those already in effect and benefitting states like Oregon, Idaho, Alaska and others. It is difficult to recruit optometrists to come work in this state when they must limit their ability to use the skills they learned in school. They often choose to work in our surrounding states because they have more freedom in their practice. We are asking that Optometrists be allowed to fully utilize their training to the benefit of their patients in Washington state. It is vital to allow the Washington State Board of Optometry the authority to determine scope of practice based on education and training. By doing this, it will improve access to eye care and diminish the delay that happens with unnecessary referrals. It also cuts patient travel costs, inconvenience, time-loss from work, and reduces multiple co-pays for the patient.</p> <p>Thank you for your attention.</p>
Dr. Loren S. Seery	Self	Support	Ophthalmologist	<p>I have been practicing Ophthalmology for over 10 years, and have been in private practice in Washington for the past six years. Since completing my training, I have worked closely within the same office with a number of Optometrists.</p> <p>In my observation, Optometrists are conservative, responsible professionals who are dedicated to providing the best possible care for their patients. In my opinion, they have taken an appropriately conservative approach to proposing changes to their scope of practice in Washington state. As an Ophthalmologist, it gives me comfort to know that the proposed legislation excludes many surgical procedures that I believe should remain limited to ophthalmologists.</p> <p>When I look at caring for my patients, I know what procedures I am trained and capable of performing and what procedures are best referred to other specialists. I work with enough optometrists to know that they take the same approach, with the same level of professionalism and commitment to their patients that I have. So, expanding their scope to include some procedures that they are trained to perform and their peers in other states routinely perform doesn't bother me.</p> <p>This is a reasonable approach to updating Optometry's scope of practice laws, and I hope you will support it.</p>
Dr. Sayge Heintzelman	Self	Support	Optometrist	<p>I practice in the state of Washington and I am in favor of the bill for scope expansion. As an optometrist, we are trained to provide a much wider range of care than what Washington State licensure allows. Optometrists should be allowed to practice their full scope of practice if they have the desire to do so. This allows more people to reach proper care quickly and effectively.</p>
Dr. Kathleen Buhler	Self	Support	Optometrist	<p>This letter is in support of legislation being considered for Optometric Physicians' scope expansion in Washington.</p> <p>I have been licensed in a few other states, and it's my hope that WA will keep up with states like Colorado and Oregon, allowing optometrists to practice to the fullest extent of their abilities.</p> <p>Thank you for your consideration on this important matter!</p>

				<p>I am an ophthalmologist licensed in Washington and owner of Pacific Cataract and Laser Institute, an MD/OD practice with ten clinics and surgery centers in this state. The purpose of my communication is to request that you and the DOH Sunrise Committee provide a positive review of the optometry scope bill.</p> <p>Optometric physicians are primary care experts serving on the front lines of eye care. Over more than three decades, ophthalmologists within our organization have had the privilege of working alongside community optometric physicians caring for hundreds of thousands of referred surgery patients throughout Washington and the Pacific Northwest. We have also worked with these providers to assist in the care of acute and chronic eye diseases, and I have had the opportunity to observe their clinical skills on many occasions. With this experience, I can attest to the competence and caution optometric physicians use when approaching complex problems.</p> <p>As health care practitioners, I believe our overall benefit to society is maximized when each provider is utilized to the fullest extent of his or her training and competency. I am in favor of a law that gives the Board of Optometry authority to write regulations commensurate with what is taught at accredited schools and colleges of optometry. This will enable optometric physicians to practice at their highest level of education—consistent with how other health care professions are regulated in Washington.</p> <p>By empowering optometric physicians in their role as primary care experts, ophthalmologists will be better able to focus their skills on secondary and tertiary eye care. This is important as the needs of our aging population are projected to outpace the current supply of ophthalmologists.</p>
Dr. Robert O. Ford	Self	Support	Ophthalmologist	Thank you for your leadership in this advancement. It will increase access to quality eye care for all Washingtonian's—especially those in rural communities.
				<p>I support revising the scope of practice for Washington state optometric physicians.</p> <p>I have been practicing in WA since 1994, first in a group practice in Kitsap County with three locations, three ophthalmologists and three optometrists and, in 1999, I purchased a solo practice in Milton, WA (Pierce County). My current associate and I have both completed ocular disease residency training through the Veteran's Affairs. We provide primary and medical eye care to patients and their families living in Milton-Edgewood-Fife-Federal Way-Puyallup and surrounding areas.</p> <p>I came to practice in WA in 1994 because it was one of a handful of states that allowed optometrists to practice as they were taught. Sadly, WA has fallen severely behind other states in its scope of practice/ ability to provide the same standard of care: technology and optometric training continues to advance but legislators (not optometrists who understand optometry and are committed to protecting public health, safety, and welfare) are burdened with the task of regulating the optometric profession. This may have made sense at one time, but not today. As a result, our patients suffer: patients are diagnosed by optometrists and must wait to see an ophthalmologist. This places a burden on the healthcare system, requiring multiple visits, added costs and delays in care for patients.</p> <p>In a rapidly evolving profession like optometry, streamlining the process of regulating optometric scope of practice so the WA State Board of Optometry, not the WA state legislature determines scope expansion will facilitate safe and effective technological and procedural advancements reaching the patients in our chairs (access to care). This is good for patients and decreases the burden on both our legislature and the health care system.</p>
Dr. Teresa A. Erickson	Self	Support	Optometrist	I respectfully request your support in modifying the scope of optometry practice authorizing the WA State Board of Optometry to regulate its scope as other health care professional boards in WA do.
				<p>I am writing you today about an issue that has come to my attention. I have become aware of a request by Optometrists in Washington State to expand the type of care that can be provided to their patients. I served eight years in the United States Marine Corp starting in 1987. Upon leaving the Marines I have needed the use of the VA hospital for what I would call normal medical including eye care. However, using the VA is not always convenient for me as I live a distance from the nearest clinic. I have learned that the Optometrist I needed to visit at the VA is not allowed to do the same procedures outside the VA system. It does not make much sense to me that I'd have to drive an hour and a half round trip to have eye work done by a doctor that isn't allowed to do the very same work at a local office. Moving to another building doesn't seem to make a doctor unqualified to do something.</p>
Phil Erickson	Self	Support	Public/Patient	I support the efforts to allow all of Washington's Optometrists to perform the procedures they are trained to do whether they are working at the VA or a neighborhood clinic.
				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 30 ears, and I currently practice in Tacoma, where I have a practice emphasizing diabetes eye care and education. As you know, diabetes remains the leading cause of severe vision loss and blindness in Americans under the age of 70.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>For example, I frequently see patients with diabetes after cataract surgery who develop posterior capsule opacity (PCO) and who require a very simple laser procedure to substantially improve vision. These patients often must wait several weeks or longer to be seen by ophthalmologists in my community, posing additional cost and delay in treatment for a procedure I was taught to safely perform in my optometry school training nearly 30 years ago. For patients living in rural Washington communities without easy access to ophthalmologists, delays in treatment and transportation barriers pose even more substantial impediments to timely treatment.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p>
Dr. A. Paul Chous	Self	Support	Optometrist	In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Dr. Ben A. Jaramillo	Self	Support	Optometrist	<p>I am a practicing optometrist, here in the state of Washington, since 2004. The intent of this letter is to ask for your consideration in support of the proposed changes to the scope of practice for our profession. Also, to give the board of optometry the ability to be the governing body in determining any appropriate future modifications.</p> <p>The proposed changes would bring optometry in this state up to level practicing procedures with many other states, including all of our neighboring states. Washington state currently lacks allowed procedures that Doctors of Optometry are taught in schools to perform. As a new graduate of optometry, many doctors are electing to practice in other states, as Washington state does not allow them to practice within the full scope of their education.</p> <p>I have been practicing in an ophthalmology setting now for 16 years and have recently witnessed first-hand, the limitations placed on patients ability to get into our clinic for treatment. The Yakima Valley has recently seen a drastic decrease in ophthalmology clinics. Our clinic, being one of only two full-time ophthalmology clinics in the valley, is having to make the tough decision of changing the way we practice. Allowing optometry to increase their scope would take a big burden off the many referrals we get at our clinic and allow us to efficiently serve our community. At the same time, it would allow me as an optometrist, to perform procedures in our clinic that my MD's are currently having to perform.</p> <p>Thank you for your consideration of these proposed changes.</p>
Dr. Lindsay M. Hendricks	Self	Support	Optometrist	<p>I am writing to encourage you to support the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for nine years and am currently in private practice with offices serving both the Kitsap and Olympic peninsulas. I work alongside ophthalmologists and perform post-operative and medical eye care in these communities. I have previously practiced in a Department of Veterans' Affairs Hospital in Hampton, Virginia.</p> <p>During my four years of post-graduate training in Ohio for my doctorate of optometry, I was trained to do many procedures and prescribe medications beyond the scope of Washington's current practice regulations. Washington's current scope prevents me from caring for my patients as I have been trained and are inconsistent with other states and national standards.</p> <p>The current scope restrictions on optometry in Washington state make it challenging for my colleagues and I to provide expedited care, which increases the cost of care to patients and delays sight-saving treatments. For example, I am unable to perform procedures to treat post-surgery complications (such as secondary cataracts formed after cataract surgery) even when I am often the first person to diagnose the complication. I work in an interdisciplinary setting and have access to the equipment needed to treat the patient immediately and have also been trained to do so, but Washington's restrictive scope of practice laws inhibits me in doing this. These patients are forced to delay treatment and return for a second visit with one of my ophthalmologist colleagues within the same practice. Given that my ophthalmology colleagues split their time between surgery and clinic, they have less availability, and the patient may be forced to wait weeks before being seen for treatment that I could have provided the same day. I see this scenario weekly in my practice. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the cost of care.</p> <p>The major challenge with the state's current framework and scope wording for optometry is that it does not allow for streamlined updating as technology and procedures continue to improve and grow. Washington needs to keep up with changing technology and standards in order to provide the best eye care for patients. If we allow the state board of optometry to facilitate this piece, to determine how our state's optometrists can practice and what education and training requirements are needed as other state health care boards do, it will allow us to provide the timeliest and highest quality care to our patients.</p> <p>The patients are protected by ensuring that a state sanctioned optometry board is approving what is in the best interest of patient care rather than legislative action. The Board's Mission Statement clearly states this: "The mission of the Board of Optometry is to protect the public health, safety, and welfare, and to provide for the state administrative control, supervision, licensure, and regulation of the practice of optometry." By allowing them to regulate scope, it would allow for better access for patients across Washington state to get the care that they need and result in an overall reduction in costs.</p> <p>Please recommend that the Legislature support the proposed changes in the optometry scope of practice for Washington. I truly believe this is in the best interest of all Washingtonians.</p>
Dr. Mark J. Cannon	Self	Support	Optometrist	<p>I am Mark J. Cannon, OD, the practice manager of Cannon EyeCare, one of Seattle's highest rated optometry clinics.</p> <p>We practice full scope medical optometry in order to better serve our patients. Still, sometimes our (Washington's) scope is not broad enough. I'm not allowed to lance an oil-filled cyst to drain the contents despite very low risk to the patient.</p> <p>Optometrists who work in ophthalmology clinics (and the ophthalmologists who employ them) would benefit more than our practice would from scope expansion. Still our doctors wholeheartedly support expanding the Washington State OD license scope.</p> <p>When minor procedures are needed but now allowed in my clinic, it slows care significantly to make a referral. Streamlining serves patients better.</p> <p>These challenging decisions related to scope should be made by those with the medical training required to understand the issues, such as the Washington State Board of Optometry. The board is also able to adjust rules more quickly than the Legislature.</p> <p>We (optometrists) accept that ophthalmologists are better equipped to perform a number of procedures, which is why these are not included in our scope bill.</p>

Dr. Michael Steiner	Self	Opposed	Ophthalmologist	In my three decades of ophthalmology practice, I have routinely corrected erroneous advice that had been provided to people who had visited an optometrist who was pretending to be a physician. The suggestion that these technically trained individuals should wield a scalpel or perform laser surgery within the eye is outrageous. I personally know many honest optometrists who agree with my perspective.
Dr. Agnes Huang	Self	Opposed	MD	I am opposed to increasing optometry scope of practice to include injections and lasers, essentially, surgery. Optometry schools have varying standards in teaching their students and optometrists are not required to do residencies. In my opinion, anyone who does surgery (including lasers and injections) need to be able to treat their own complications. Optometrist are not trained or equipped to do this. In addition, if this were to be implemented, they would need to carry malpractice insurance as physicians are required to do. It is not ethical or economical to expand scope of practice to someone who is not trained to do so. Thank you very much for your consideration in this
Dr. Jason Barnes	Self	Support	Optometrist	I want to send a note your way showing my support of scope expansion for optometrists in the state of Washington. The scope laws for WA state are far behind the majority of other states and limit our ability to care for our patients at the full level of our expertise and training. These scope of practice restrictions force me to refer patients for treatments that I am fully able to perform, which therefore delays care and increases costs to my patients. Patients are having to travel from our Wenatchee and Leavenworth, WA offices to surgeons in other cities (sometimes as far as Yakima, WA) to obtain care that I could do in the office. This is causing them to have to take additional time off of work that isn't necessary. I'm fully in support of scope expansion and further management of scope of practice decisions being made by those with appropriate medical training that understand the issues, such as the Washington State Board of Optometry. While the OPW proposal allows optometrists such as myself to perform some advanced procedures if they have the requisite training, it also specifically excludes a number of procedures that ophthalmologists are better prepared to perform. Our profession is rapidly evolving as technology evolves and training requirements should be constantly evaluated. I feel that the Board of Optometry is better equipped to do this than the Legislature. In summary, I'm in full support of this scope expansion proposal and I feel that it will allow improved and quicker access to the patients in the state of Washington and also decrease health care costs. Please consider these thoughts in your decision making process. Thanks!
Dr. Paul Y. Chung	Self	Support	Ophthalmologist	I am writing in support of the optometry scope bill. I am an ophthalmologist in practice for 25 years and have worked with many optometrists in Washington state for the past 20 years. I work closely with optometrists in our practice and many optometrists who refer patients to our practice. In general, optometrists are very knowledgeable and yet cautious. They try to do what's best for their patients but are sometimes limited in what they can do. I don't understand why our state has placed so many restrictions on what optometrists can and cannot do. Legislators should not be the ones charged with establishing the scope of practice for a complex health care field like optometry. Most lawmakers don't have the medical training to fully weigh the arguments for or against a change, so the update process is unpredictable, inefficient, time-consuming, and generally frustrating. Updates are often delayed to the detriment of patient care. The way to fix this is to vest that authority in the State Board of Optometry, whose members have the training to evaluate the latest developments in the field and determine what's in the best interests of patients. That's why other sectors of the healthcare field are overseen by their own professional boards. It's ironic that ER doctors and family practice doctors can "legally" treat more eye conditions than optometrists can, even though most of those MDs don't even know how to properly use a slit lamp to accurately diagnose certain eye conditions. Optometrists know a lot more about eye diseases and their proper treatment than primary care MDs, and yet their hands are tied because of our current legal restrictions. I believe the State Board of Optometry should be given the authority to determine their own scope of practice and monitor the proper training necessary to provide eye care services.
Dr. Paul Kremer	Self	Opposed	MD	Some Washingtonians will lose their vision if undertrained optometrists are permitted to perform eye surgery. Simple as that.

Dr. Salisa K. Williams	Self	Support	Optometrist	<p>I am writing in support of expansion of scope of optometric practice in Washington and improvement to quality eyecare. I have been practicing optometry for 35 years, and have been employed at Pacific Cataract and Laser Institute in Vancouver for over 10 years. PCLI is a large (seventeen clinics in six states) ophthalmology referral center for cataract surgery, laser procedures, and other secondary and tertiary ophthalmic procedures.</p> <p>I am licensed to practice optometry in four states (Washington, Oregon, Oklahoma and Nevada).</p> <p>Over the years, I can't begin to count the times a patient has been referred to the Vancouver clinic for a simple eyelid lesion removal. Since eyelid lesion removal is not currently within the scope of optometry practice in Washington, I have to send them across the river, to our clinic in Portland, where optometrists can perform this procedure. This results in a delay in care, decreased access to care, as well as additional expense and inconvenience of travel for patients. This also prevents me from caring for my patients as I have been trained to do.</p> <p>As of April 2021, there are currently 24 states which allow optometrists to remove eyelid lesions (including biopsy), inject therapeutic medications and prescribe oral steroids.</p> <p>Additionally, there are 8 states which allow optometrists to perform some laser procedures: Oklahoma, Louisiana, Kentucky, Alaska, Arkansas, Wyoming, Indiana and Mississippi.</p> <p>I grew up in Oklahoma, attended optometry college in Oklahoma, and hold an active Oklahoma license. I have personally performed YAG laser capsulotomy, laser peripheral iridotomy and trabeculoplasty. In my home state of Oklahoma, after 30 years and an estimated 50,000+ laser procedures performed by optometrists, there have been NO complaints filed against any optometrist performing these laser procedures (source: Oklahoma Board of Optometry).</p> <p>Prior to joining Pacific Cataract and Laser Institute, I was a full tenured Professor of Optometry and Chief of Ocular Disease Clinic at Pacific University College of Optometry for 20 years. During my tenure, I taught laser procedures. All optometry colleges teach these procedures in their curriculum. Optometric physicians are highly trained. Current restrictions on optometric scope of practice in Washington prohibit procedures for which optometrists have been trained and may have performed in other states where they are licensed.</p> <p>Optometric physicians are on the front line of eye health and vision care, managing the entire spectrum of ocular diseases and conditions. We are also often the first to diagnose serious systemic health conditions. Our ability to manage these conditions appropriately, to optimize patient access to care and decrease cost to patients, requires occasional modifications to the scope of practice.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you very much for your time and consideration of this issue.</p>
Dr. Daniel Evans	Self	Support	Optometrist	<p>I am writing in support of the proposed revision to the optometry scope of practice in Washington State. I have two optometry practices located in Spokane and Chewelah. I have been in practice since 2006.</p> <p>In my 15 years of practice, Washington's scope has not caught up to what I was taught in graduate school. My four year post graduate doctoral program in Oregon trained me to do many things that are not allowed under the scope of my practice in Washington State. Many of our colleagues around the country can care for their patients in ways that I am not able to, and this does not match up with other states and national standards.</p> <p>The current scope of practice places restrictions on my care for my patients. Both myself and my colleagues all over Washington are not able to provide expedited care for patients who need our help. This also increases the cost of care to patients and delays some sight-saving care that we are trained to provide. When optometrists work in multi-disciplinary settings with access to instruments that they have been trained on, efficiency would allow them to care for their patients at a level that they are taught. Instead, the practitioner is forced to reschedule the patient to another provider. This is exactly the sort of inefficiency that is increasing health care costs across our country, while preventing some patients from getting the care that they need.</p> <p>This unnecessary cost is especially evident with my Practice located in Chewelah, WA. We routinely have to refer patients to another county to be seen by an ophthalmologist for simple procedures that I was trained to do while in school but cannot perform due to our state's limitations. This once again adds to the cost, inconvenience and delay of patient care.</p> <p>The board's Mission Statement clearly states this: The mission of the Board of Optometry is to protect the public health, safety, and welfare, and to provide for state administrative control, supervision, licensure, and regulation of the practice of optometry. By providing them the guidance to regulate scope, it would allow for cost saving and better access for patients across Washington State to get the care that they need.</p> <p>Please recommend that the Legislature support the proposed changes in the Optometry Scope of practice for Washington.</p>
Dr. Tiffany Hollenbeck	Self	Support	MD	<p>Thank you for your consideration of expanding scope of practice for optometrists. I work in a hospital setting with aging patients that have multiple comorbidities. Being able to perform minor procedures in office would decrease the need for referrals to other offices. Transportation from assisted living facilities and dependents are often an issue for my patients and they tend to skip office visits due to the inability to get to their destination. I would love to see my patients receiving the care that they deserve without the hassle.</p>
Valerie Loidhamer	Self	Support	Public/Patient	<p>I am messaging you from a Vision Practice in Wenatchee Washington to let you know I support scope expansion for Washington Optometrists. I feel they are perfectly equipped with the training and expertise needed to perform these procedures.</p> <p>We are having to refer our patients out anytime they might need any minor surgery whether its to remove a Yag by a laser or and eyelid lumps/bumps that may need removing.</p> <p>This is turn will be more accommodating for our patients. They will not have to wait before being seen in a timely manner by going to another clinic and will save them time and money in the long run.</p>

Dr. Ali Heaton	Self	Support	Optometrist	<p>My name is Ali Heaton and I am an optometric physician with licenses in Washington and Idaho. I work for Empire Eye Physicians. As a past board member and president of the Idaho Optometric Physicians (2017) I am well versed in the legislative process it takes to expand the scope of practice to what is currently taught to optometrists. Like Idaho, Washington has large areas that are covered by optometry and not ophthalmology. This can severely disrupt patient care and force great burdens on a patient to travel for services that are often time sensitive. Also, this causes insurance to be billed multiple times. It is an unnecessary fiscal burden on insurance carriers and the patient. Not to mention that sight can be lost while referrals are coordinated. Optometrists that have received the proper training should be allowed to provide care at the highest level of training. Who is better qualified to govern what optometrists can do other than our peers? The Washington Board of Optometry should have the autonomy to govern what procedures are allowed. Our community only wants to provide what we can safely provide within the parameters of our training.</p> <p>New graduates that have received the latest training are choosing states they want to practice in based on what they can perform. Washington will attract the best of the best when an individual can use their training to the highest level. Thank you for your consideration. If you have any questions I would be happy to discuss.</p>
Debbie Babst	Self	Support	Public/Patient	<p>I work for Vision Source Of Wenatchee and I support Scope Expansion For Washington Optometrists.</p> <p>I feel their capabilities and expertise to expand their scope of practice by performing minor procedures is beneficial to their patients as it will save them time by not going to another practice and money.</p>
Dr. Joyce Choe	Self	Support	Ophthalmologist	<p>My name is Joyce Choe. I am a board certified ophthalmologist practicing in the state of Washington. I work in a group made up of ophthalmologists and optometrists. I work closely with the optometric physicians every day and have found them to be very well-trained professionals who share my commitment to providing the best possible patient care.</p> <p>We have a problem with access to healthcare in our state, including high-quality eyecare. Judiciously expanding the scope of optometric practice will help address this access problem—especially in some rural areas of the state. I am confident that, even with an expanded scope of practice, optometrists will only provide those procedures they are sufficiently trained to perform. And I believe they will continue to work closely with ophthalmologists like me when their patients require our care.</p> <p>I believe that Optometrists should be allowed to practice as they have been trained and I support the proposal to expand their scope of practice accordingly while clearly excluding those procedures that require an ophthalmologist to perform.</p> <p>Please approve this improvement to the healthcare practice laws of our state.</p> <p>Thank you for your attention to this email.</p>
Denee Schiller	Self	Support	Public/Patient	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I believe it is important for Washington's regulatory framework to keep up with the rapidly changing delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the same authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Heidi B. Bennett	Self	Support	Public/Patient	<p>I have been a patient of NW Eye Surgeons in Seattle for several years and I understand there's a "Sunset Review" of what procedures can be done by optometrists in Washington.</p> <p>I have to tell you that the wait times for procedures are horrendous. After my cataract surgery I required SLT for both eyes - a 15 second procedure.</p> <p>I waited for months for an opening and had to endure very blurry vision, unable to read a newspaper, a book or even to drive at night. This is highly problematic for me as I'm the driver and caretaker for my disabled spouse.</p> <p>The US suffers from a lack of medical professionals, we need to allow qualified, professions to expand their abilities not restrict them. Patient wait times are intolerable. This includes eye care doctors and professionals.</p> <p>It seems like more and more decision are rationing patient care, driving up costs, creating huge backlogs and not serving the needs of patients.</p> <p>Please expand care options for qualified optometrists and improve patient care.</p>

Dr. Marc Reiswig	Self	Opposed	MD	<p>Thank you for the opportunity to comment on the Sunrise Review related to optometrists' scope of practice.</p> <p>As an emergency physician working in an emergency department, I have appreciated my interactions with optometrists who have sent their patients to the Emergency Department due to eye complications. This has given me a first-person opportunity to observe those issues for which optometrists have been adequately trained and those that they are not. Most of the complications I have seen are related to optometrists not recognizing when a patient's issues are getting beyond their scope of knowledge/practice until it has become very serious. Other times their patients are sent to the Emergency Department for problems which they recognize as out of their scope early on.</p> <p>Specifically, the proposal, as written, is overly broad. It lacks adequately defined prescribing limits, does not have reasonable safeguards in place, and is unusually vague. In short, it is excessively permissive both in scope and breadth of privileges. In addition, the proposal does not have adequate initial and continuing education requirements related to this prescriptive authority. It allows for highly invasive procedures, which would never be attempted by trained surgeons, unless without ophthalmology level of surgical training in the area of the eye.</p> <p>If an optometrist has a complication associated with one of the new privileges, there is no ophthalmologist that will follow-up with that patient and incur the added liability risk. This problem cannot be alleviated by admitting patients to hospitals, because most hospitals do not have ophthalmologist that practice within the hospital. They tend to practice in their offices and in specialized surgery clinics. Ophthalmologists have no obligation to accept patients who have suffered harm, side effects, or complications whether anticipated or not. On the other hand, if these issues are left to the surgically trained ophthalmologists, they will always handle their own complications. This proposal increases the risk to patients' health and does not serve to alleviate any problems. This is not an access to care issue. Getting a patient into an ophthalmology office is relatively easy, even from rural areas where I primarily practice. A wise ophthalmologist will avoid accepting patients with complications from people who are suboptimally trained so as not to put their practice and themselves at increased liability risk. Therefore, the current increased privilege proposal does not improve access, but rather will significantly decrease access to ophthalmologist level of care.</p> <p>I believe the Washington State Medical Association (WSMA) will likely have similar patient safety concerns, and I recommend carefully considering any thoughts they might have on this issue.</p>
Dr. Michael Brush	Self	Opposed	Ophthalmologist	<p>I am writing to express my opposition to the proposed expansion of optometry scope of practice in the state of Washington. I am an ophthalmologist who completed residency at the University of Washington in 2004 and has worked in the state serving our patients for 17 years.</p> <p>The OPW proposal:</p> <ul style="list-style-type: none"> • Jeopardizes the public health and safety of Washingtonians by allowing optometrists, without adequate training, to perform surgeries. • Allows optometrists to administer additional drugs including steroids, chemotherapy agents, anesthesia medications, immune modulating medications, and all other classes of medications by all routes. • Allows optometrists to perform additional injections as well as intravenous infusions. • Allows treatment of cancer by radiation, chemotherapy, and any other means. • Permits the Board of Optometry to determine optometrists' scope of practice, making it the only Washington medical practitioner board to have such broad powers, whereas only one other state in the nation, Alaska, has given its Board of Optometry such broad external authority. • Alleges, without justification, that there is inadequate access to surgical eye care across the state. • Fails to recognize that in Washington 96.2% of residents are within 30 miles of a board-certified ophthalmologist or ophthalmic surgeon. • Removes from statute the current definition of "ophthalmic surgery" (and the prohibition of optometrists performing eye surgery), recognized nationwide as providing the highest quality standards for surgical eye care. • Does not acknowledge that 24 states have rejected 58 similar proposals in the past six years. • Incorrectly states that new "national standards" allow optometrists to perform procedures. No such standards exist as individual states are responsible for determining optometric scope. • Does not recognize that ophthalmologists, after completing undergraduate studies, go to medical school for four years, and then do a one-year internship followed by three years of residency training in eye disease diagnosis, treatment, and surgery, followed in some cases by one or two additional fellowship years, in stark contrast with optometrists' basic 4 years of optometry school (12,000- 16,000 mentored clinical hours for ophthalmologists compared to less than 2,000 for optometrists). • Implies, by virtue of its proposal, that optometrists' training is adequate to justify their being able to perform surgical procedures. In fact, since Oklahoma enacted its laser surgical privileges they have been, for all intents and purposes, THE ONLY optometric training program using live patients. • Misstates that the Veterans Administration allows optometrists to perform eye surgery, whereas the VA maintains its longstanding policy that only ophthalmologists may perform therapeutic laser eye procedures in its health care facilities. • Asserts incorrectly that adding more surgeons will reduce health care costs. It is well established that providers with less training order more tests, do more procedures, and see patients more often than providers with more extensive training. Adding surgical privileges for optometrists will actually increase health care costs in Washington state.

Dr. Richard E. Castillo	Self	Support	Ophthalmologist	<p>I am writing in support of the modernization of Washington’s optometry statutes, in order to align them with the advancing scope of practice observed in at least 24 other states in the past decade. I am a practicing ophthalmologist and optometric physician from Oklahoma. I am also a professor at the Oklahoma College of Optometry, and have personally taught medical and surgical optometry to hundreds of optometry students and residents, and literally thousands of optometric physicians across the nation over the past two decades. I can verify that I have personally taught all procedures included in S-3085.2/21, and that these office-based procedures are performed under the supervision of a qualified instructor, MD/DO/OD.</p> <p>As stated above, I am an ophthalmologist/optometrist from rural America who co-manages patients and the full spectrum of ocular disease and visual dysfunction, within my community along with local optometric physicians. From my perspective, important considerations in your review include the ability for the Washington State Board of Optometry to define the scope of practice based on what is currently taught at the nations schools and colleges of optometry. This will assure timely and efficient eye care for the citizens of Washington State as it will empower the regulatory board which oversees the profession to keep practitioners current given the rapid turnover of technology and the ever-changing medical/optometric knowledge base. As with all regulatory boards it is their responsibility to employ whatever credentialing mechanisms are relevant to ensure competency and public safety. Unfortunately, out-dated optometry statutes in many states prevent practitioners from practicing even up to the recognized standard of care in many communities. I respectfully recommend that you do not allow this to happen to the citizens of Washington. Allow your constituents to benefit from all that modern optometric physicians have to offer.</p> <p>Finally I may point out a phenomenon which I have observed over the years, and that is “doctor” drift from home state to other states with more modern scope of practice. Optometry students and residents trained in the current era are looking to employ the full spectrum of services and skills which they have been trained to deliver. Perhaps just as Important, they are looking to service their educational debt. Optometry, actually has one of the highest debt to earnings ratios of any health profession, so this is an important factor to consider. To this we couple the fact that the decreased earnings and practice growth potential in states with outdated practice statutes creates a less than desirable opportunity for new graduates, and one can begin to understand why some states are having difficulties in attracting and retaining optometric physicians.</p> <p>In closing I would like to emphasize that in my almost three decades of experience as an ophthalmologist practicing in a very rural part of our great nation, I have personally observed the enormous impact and benefit that our nations optometric physicians extend to their communities. Again I say this as someone who works with optometrists daily, in real world situations, not as a member of the house of medicine attempting to follow a political agenda. I have absolutely no hesitation whatsoever in encouraging the modernization of optometric services in the great state of Washington, as a more robust and comprehensive optometric scope of practice will certainly serve the public welfare within your communities.</p>
Sonya Casarrubias	Self	Support	Public/Patient	<p>I believe there is a huge support for the scope expansion for Washington Optometrists. I know that Optometrist have the training/expertise needed to perform additional procedures such as a YAG procedure and or taking care of chalazions, infected stys. With letting our Optometrist take on more of these procedures that would be beneficial for the patient, who at this time are taking extra time and money to see a Ophthalmologist when they could just have the procedure done by an OD. I believe that OD's are completely capable to take care of this extra work. This would also benefit surgeons to focus on more severe cases, procedures and/or surgeries of the eye and to provide more one on one care for patients that need their expertise.</p>
Dr. Alex Grigalunas	Self	Opposed	Ophthalmologist	<p>I am writing to express my opposition to the proposed expansion of optometry scope of practice in the state of Washington. I am an ophthalmologist who completed residency at Rush University Medical Center in Chicago in 2016 and a glaucoma fellowship at the University of British Columbia in Vancouver, BC in 2017. I have worked in the state serving our patients for 4 years.</p> <p>The OPW proposal:</p> <ul style="list-style-type: none"> • Jeopardizes the public health and safety of Washingtonians by allowing optometrists, without adequate training, to perform surgeries. • Allows optometrists to administer additional drugs including steroids, chemotherapy agents, anesthesia medications, immune modulating medications, and all other classes of medications by all routes. • Allows optometrists to perform additional injections as well as intravenous infusions. • Allows treatment of cancer by radiation, chemotherapy, and any other means. • Permits the Board of Optometry to determine optometrists’ scope of practice, making it the only Washington medical practitioner board to have such broad powers, whereas only one other state in the nation, Alaska, has given its Board of Optometry such broad external authority. • Alleges, without justification, that there is inadequate access to surgical eye care across the state. • Fails to recognize that in Washington 96.2% of residents are within 30 miles of a board-certified ophthalmologist or ophthalmic surgeon. • Removes from statute the current definition of “ophthalmic surgery” (and the prohibition of optometrists performing eye surgery), recognized nationwide as providing the highest quality standards for surgical eye care. • Does not acknowledge that 24 states have rejected 58 similar proposals in the past six years. • Incorrectly states that new “national standards” allow optometrists to perform procedures. No such standards exist as individual states are responsible for determining optometric scope. • Does not recognize that ophthalmologists, after completing undergraduate studies, go to medical school for four years, and then do a one-year internship followed by three years of residency training in eye disease diagnosis, treatment, and surgery, followed in some cases by one or two additional fellowship years, in stark contrast with optometrists’ basic 4 years of optometry school (12,000- 16,000 mentored clinical hours for ophthalmologists compared to less than 2,000 for optometrists). • Misstates that the Veterans Administration allows optometrists to perform eye surgery, whereas the VA maintains its longstanding policy that only ophthalmologists may perform therapeutic laser eye procedures in its health care facilities. • Asserts incorrectly that adding more surgeons will reduce health care costs. It is well established that providers with less training order more tests, do more procedures, and see patients more often than providers with more extensive training. Additionally, optometrists will need to secure additional medical malpractice insurance, which with little training, will likely be very costly. This added cost of business will likely be passed on to all patients, not just those requiring lasers, injections, and or surgery. Adding surgical privileges for optometrists will actually increase health care costs in Washington state. <p>Please reach out to me if you have any further questions or concerns.</p>

Dr. Timothy McDonald	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for a couple months, and I currently practice primary care optometry at Emerald Eyecare in Union Gap, WA.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>During optometry school in Memphis I was taught to practice optometry to a higher scope of practice than is currently permitted in Washington. This includes oral steroids, periocular injections, removal of neoplasms and chalazion, and minor laser procedures.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Brandon Furness	Self	Support	Optometrist	<p>I would like to encourage the state of Washington to expand Optometric Physician's scope of practice as has been recently proposed. I have been practicing Optometry in the Tri-Cities of Washington (Kennewick and Richland) for 12 years with over 40,000 patient encounters. I received my degree and was trained in Tennessee which has a larger scope of practice than Washington. In fact, most states now have a larger scope of practice than Washington. I would like to be able to provide eye care for my patients to the full extent of my training. This proposed expansion would allow me to do that.</p> <p>It is time for Washington state to step up and make the changes necessary to allow it's Optometric Physicians to practice to the same extent as their peers in other states and to the extent of their training. This would also be in the best interest of the public who would have easier access to a larger scope of eye care from their Optometric Physician.</p>
Dr. Mark G. Everett	Self	Support	Optometrist	<p>I am an Optometrist with thirty years of clinical experience. My education consists of four years undergraduate college, four years of optometry school, a one year residency and a one year Fellowship. I have practiced my entire career in a practice where Ophthalmologists and Optometrists work side by side in caring for medical and surgical patients. Our practice is one of tertiary care where patients are referred for more difficult medical eye issues and eye surgery.</p> <p>There are many procedures for which I received training to perform that are safe and effective that I am not able to perform due to the limited scope of practice in Washington State. Most other states have laws that allow optometrists to perform these procedures or prescribe certain medications. It is at a point where new Optometry graduates are choosing to not come to Washington or stay in Washington because our laws do not allow them to do what they have been trained to do. No one wants to spend a minimum of 8 years post high school education and obtain training that they cannot use to the fullest, especially when that education has cost you over \$100,000.00.</p> <p>I know from my thirty years of experience in working with at least one hundred optometrists that optometrists are capable clinicians with good clinical judgement. They know when to refer patients out for specialty care and surgery. They know when something is outside of their skill set and training and when it is not. Optometrists as a group are conservative. They would never want to cause harm to a patient by prescribing something of performing a procedure they were not trained and competent to provide. We all practice with the "do no harm" mindset.</p> <p>Ophthalmologist do not have an extra layer of cerebral cortex that optometrists do not. They received education and training. Optometrists receive education and training. Medical care continues to progress and education continues to progress. The practice of medicine is governed by the medical board. The practice of optometry should be governed by the Optometry Board. Optometry as a profession should be allowed to progress as our education both in and out of school progresses just like any other profession. The practice of optometry should not be managed by a legislative body that knows not the issues or time to spend on the practice of optometry.</p> <p>I ask you to support the scope of practice and board authority that is being requested so that we can provide the care we are trained to provide. This will be of great benefit to the residents of Washington and save money for all involved. Washington does not have the medical manpower to deal with the care that is needed, especially as the Baby Boomers continue to age. Now is the time to bring Washington optometry up to the proper standard of care and allow us to continue to serve the state at the highest level of our training and education.</p>
Dr. Marshall Ford	Self	Support	Ophthalmologist	<p>I am writing to request that you provide a positive review of the optometry scope of practice bill.</p> <p>As an ophthalmologist practicing in Washington state, I enjoy working in close association with many optometric physicians. I fully support the proposal to authorize the State Board of Optometry to determine optometrists' scope of practice. This is how other healthcare professional boards oversee their respective professions. It will ensure that medical professionals rather than elected officials make patient-care decisions.</p> <p>I am in favor of optometry's continued advancement. As health care practitioners, our benefit to society is maximized when each provider is utilized to the fullest extent of his or her training and competency. And I trust that the Board of Optometry will establish education standards required to perform procedures they declare to be within that scope.</p> <p>Thank you for your consideration. Please feel free to contact me if you have any questions.</p>

Dr. Kyle Crance	Self	Support	Optometrist	<p>I am writing in support of scope expansion for Optometric Physicians in Washington State. I currently practice in rural Northeastern Washington in Newport and Colville. In our communities we are the main source of eye care for 50-80 miles for our patients, and we serve a heavily medicare and medicaid patient base. With our current scope of practice we often have to refer patients into Spokane, for minor procedures for which we are fully trained and capable to safely perform. A high percentage of patients do not have transportation to make it into Spokane, especially in the winter, to get the care they need, and providing them with unnecessary hardships.</p> <p>For example: this past week I had a patient with an eyelid lesion I suspected to be a form of skin cancer. This patient was home taking care of her elderly mother after a back surgery and could not get into Spokane to have the lesion biopsied for several weeks. The lesion is growing on follow up and she is on a waitlist to see a specialist just to get a biopsy to confirm if the lesion is malignant. She will likely then need a seperate visit to get the lesion removed. If I could biopsy this lesion in the office and send it to a lab I could save my patient extra trips and get her in for lesion removal in a more timely manner, minimizing lesion growth and surgical complexity. Performing a lesion biopsy is well within our training through schooling and continuing education. This is just one of many examples of the benefits I could provide my rural patients with if we had a broader scope for our profession.</p>
Dr. Brad Bearden	Self	Support	Optometrist	<p>I am writing a letter to support scope expansion for optometry in the state of Washington</p> <p>As a state that I have practiced in since 2002, Washington State is seen as a state with poor practice scope, behind most of the United States. This is a frustration with attracting top talent in the upcoming professional Doctorate of Optometry School classes. Two common situations exist on a daily occurrence for my practice:</p> <p>1)Inability to provide SLT (Selective Laser Trabeculoplasty), which is considered a front line treatment for eye pressure in glaucoma patients in Europe and becoming a trend in the United States. This noninvasive procedure provides a very cost effective non pharmaceutical treatment, or used as an adjunct to existing pharmaceutical therapy. Daily I am dealing with active glaucoma patients and suspects I am monitoring for conversion into disease. It would be helpful to offer that treatment in lieu of beginning medicated eye drops, instead of waiting for referral for SLT that usually takes 2 months. Optometrists are qualified for these procedures as taught in schools and evidenced by more states are adding these privileges</p> <p>2)Inability to perform YAG capsulotomies. This is a frustration as this is a noninvasive use of laser for the treatment of secondary cataracts, a common situation after cataract surgery. Referrals take time for the patient and this simple procedure could be done conveniently and efficiently by a qualified optometrist.</p> <p>These are two examples of noninvasive procedures that are currently taught in schools and continuing education, and performed safely by optometric physicians in Alaska, Louisiana, Arkansas, Mississippi, Kentucky, Okalahoma. In addition to laser priveleges, lump/bump removal has been done and currently taught by schools would be helpful in the hands of qualified optometrists. Whether a rural area that lacks providers/surgeons or an urban area, laser privileges by optometrists would reduce the need for extra referrals, and would ultimately reduce cost to the health care system, extra expense for the patient from taking time off of work/travel, and reduce wait times as many of our surgical colleagues are booked for 2 months.</p> <p>In addition we are requesting that optometrists are regulated by their own regulatory boards, just like MD/DO, dentists, podiatrists, and other health professionals are regulated, rather than by state legislative. I am sure these lobbying wars are frustrating to our state legislatures, as they have more important issues to address than regulating healthcare.</p>
Dr. Irene Lee	Self	Opposed	Ophthalmologist	<p>I am writing to express my opposition to the proposed expansion of optometry scope of practice in the state of Washington. I am an ophthalmologist who practices at Kaiser Permanente in Seattle, Washington.</p> <p>The OPW proposal:</p> <ul style="list-style-type: none"> • Jeopardizes the public health and safety of Washingtonians by allowing optometrists, without adequate training, to perform surgeries. • Allows optometrists to administer additional drugs including steroids, chemotherapy agents, anesthesia medications, immune modulating medications, and all other classes of medications by all routes. • Allows optometrists to perform additional injections as well as intravenous infusions. • Allows treatment of cancer by radiation, chemotherapy, and any other means. • Permits the Board of Optometry to determine optometrists' scope of practice, making it the only Washington medical practitioner board to have such broad powers, whereas only one other state in the nation, Alaska, has given its Board of Optometry such broad external authority. • Alleges, without justification, that there is inadequate access to surgical eye care across the state. • Fails to recognize that in Washington 96.2% of residents are within 30 miles of a board-certified ophthalmologist or ophthalmic surgeon. • Removes from statute the current definition of "ophthalmic surgery" (and the prohibition of optometrists performing eye surgery), recognized nationwide as providing the highest quality standards for surgical eye care. • Does not acknowledge that 24 states have rejected 58 similar proposals in the past six years. • Incorrectly states that new "national standards" allow optometrists to perform procedures. No such standards exist as individual states are responsible for determining optometric scope. • Does not recognize that ophthalmologists, after completing undergraduate studies, go to medical school for four years, and then do a one-year internship followed by three years of residency training in eye disease diagnosis, treatment, and surgery, followed in some cases by one or two additional fellowship years, in stark contrast with optometrists' basic 4 years of optometry school (12,000- 16,000 mentored clinical hours for ophthalmologists compared to less than 2,000 for optometrists). • Implies, by virtue of its proposal, that optometrists' training is adequate to justify their being able to perform surgical procedures. In fact, since Oklahoma enacted its laser surgical privileges they have been, for all intents and purposes, THE ONLY optometric training program using live patients. • Misstates that the Veterans Administration allows optometrists to perform eye surgery, whereas the VA maintains its longstanding policy that only ophthalmologists may perform therapeutic laser eye procedures in its health care facilities. • Asserts incorrectly that adding more surgeons will reduce health care costs. It is well established that providers with less training order more tests, do more procedures, and see patients more often than providers with more extensive training. Adding surgical privileges for optometrists will actually increase health care costs in Washington state. <p>Please consider these points and stop the proposal to expand optometry scope of practice in Washington State. You will help to protect our patients by doing this.</p>

Dr. Amy Bearden	Self	Support	Optometrist	<p>This letter is in regard to evaluating the scope of optometrists in the state of Washington.</p> <p>As you may know, optometrists in the state of Washington face some frustrating challenges in the areas of restrictions on our scope. Not only is this tremendously frustrating for us (to not be able to do what we are fully trained to do!) but more so, it is frustrating and costly to our patients and to the health care system.</p> <p>What we ask for (expanded scope) has already occurred in many other states.</p> <p>Let me provide a brief example:</p> <p>I had a patient the other day with a hordeolum (clogged oil gland on the lid). These are ugly and painful bumps! My patient was rightfully frustrated with me when told that she needed to be sent to a surgeon for either a steroid injection to shrink the lesion or removal. She asked why it couldn't be done in my office, and wasn't pleased when I told her this wasn't allowed for me to do in this state. I then told the patient that while she waited for her surgery appointment, she needed to use warm compresses and topical treatment on the lid to attempt to heal/soften the bump. I explained if she didn't do this, these lesions can harden into a chalazion, which is more complicated and requires excision. Long story short, this patient had to wait 1 month to be seen, and in doing so, things worsened for her, the hordeolum hardened, and thus had to be surgically removed. This was costly for her (had the expense of calling off work, getting another appointment with the surgeon, and then the cost of a surgery that could have been prevented), and could have easily been handled in my office with a simple procedure that I have been well trained to do.</p> <p>Again, optometrists in other states have expanded scope in many minor surgical procedures like the one described above, and we ask that Washington allow the same expansion. I would guess a lot of legislatures question (and may even feel uncomfortable) making scope decisions for optometrists in the first place. We simply ask that our scope guidelines be left to our board similar to how MD's, dentists, podiatrists and other health care providers are governed.</p> <p>I appreciate your time in reviewing these matters. Thank you!</p>
Dr. Sherri Egashira	Self	Support	Optometrist	<p>I am an optometric physician who has been in private practice on Bainbridge Island for 29 years. I dreamed of becoming an optometrist as a student in high school, and I eventually purchased the practice of my childhood optometrist. I am a highly trained doctor with an undergraduate degree from Stanford University and an optometry degree from the University of California Berkeley School of Optometry.</p> <p>I never dreamed that what I was trained to do in school would be something that I would not legally be allowed to do in practice. I did not know that my chosen profession was a legislated profession. Upon graduating from optometry school and returning home to Bainbridge Island, I was so proud to practice in the State of Washington. In 1992, while still limiting, Washington had progressive laws for optometry compared to other states. But as the years have passed, other states have advanced their optometry laws to align with optometric education and training. Washington has been left behind. What a shame and a disservice to the residents of our great state. Washingtonians deserve easy access to complete eye care. Washingtonians should not have to make extra trips for extra appointments elsewhere to have eye problems fixed which could have been treated by their primary eyecare doctors. That is also not a good use of healthcare dollars. On Bainbridge Island, we have only one ophthalmologist and there is only one ophthalmology group in Poulsbo, the next nearest town. Many Washington towns do not have an ophthalmologist, but they do have an optometrist.</p> <p>Patients are busy, some patients are reluctant to be referred to a doctor they do not know for a procedure that they might need. For some patients, Silverdale, where many of our Kitsap county ophthalmology specialist practice, seems too inconvenient to get to so patients will just manage with blurry vision or will put up with coming in every two weeks to have an eyelash plucked to keep it from sticking in their eye. These patients are putting off minor procedures that would improve their quality of life. Some of these procedures could be done by me if the law allowed it.</p> <p>I look forward to helping my patients to the extent of my training and education. Please recommend that the Legislature support the proposed changes in the optometry scope of practice for Washington.</p>
Dezarae DeWitz	Self	Support	Public/Patient	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I believe it's important for Washington's regulatory framework to keep up with the rapidly changing delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the same authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. B.J. Lightfoot	Self	Support	Optometrist	<p>I am writing in support of optometric scope expansion for WA state optometrists. I have been practicing in a multidisciplinary ophthalmology/optometry clinic for 21 years after 4 years of optometry school and 1 year of residency training at the Portland VA. I have been on the front line caring for a wide variety of patients all this time and have amassed a great deal of experience. All the while, I've increased my knowledge base through actively lecturing to peers, writing articles in scientific journals, regularly attending world class continuing education events, and obtaining board certification. Even with all of this experience treating patients and expanding my clinical knowledge, Washington's scope of practice laws prevent me from caring for my patients to the full extent of my training. Not only is this a direct hardship for my patients, but it also limits access for so many other Washington residents. A specific example is the case of YAG laser capsulotomy. I work in a surgery center where our ophthalmologists perform cataract and refractive surgery. The simple and safe procedure of laser YAG capsulotomy is being performed regularly in other states by optometrists with excellent outcomes. In Washington, as an optometrist I am restricted from performing this procedure. Not only are patients forced to endure visual dysfunction while waiting to be able to schedule weeks or potentially months with my partner ophthalmologist, it also pulls him away from doing the work he is best trained to do (cataract and refractive surgery). This unintended consequence of further delaying care for the many patients requiring cataract surgery could easily be remedied by allowing a qualified optometrist to perform the laser procedure, thereby freeing up the ophthalmologist to do the more skilled surgical procedures such as cataract, glaucoma, retina and corneal surgeries. These scope of practice restrictions force me to refer patients for treatment that I am fully trained to perform, resulting in delays in care and a significant increase in cost to the patient.</p> <p>A solution to this problem, would be to grant the Washington State Board of Optometry the authority to define scope for its practitioners. Optometry is a rapidly evolving profession and it is far more appropriate for scope of practice decisions to be made by those with the appropriate medical training to understand the issues. The Board of Optometry is better equipped to do this than the legislature. The OPW proposal shows a conservative and judicious stance on scope expansion with the goal being to increase patient access while utilizing patient's financial resources responsibly. While the proposal allows optometrists to perform some advanced procedures if they have obtained the requisite training, it also specifically excludes a number of procedures that ophthalmologists are better prepared to perform.</p> <p>Thank you for taking the time to read this email and consider our proposal.</p>

Dr. Mary Baker	Self	Support	Optometrist	<p>Hello! I am writing to ask you to support the scope expansion for optometrists in the State of Washington for the following reasons:</p> <ul style="list-style-type: none"> •When optometrists are forced to refer patients to other providers for procedures they are trained to safely provide, it does not serve the patient well: <ul style="list-style-type: none"> oCare may be delayed while waiting for an appointment oThe patient may have to travel a long distance and miss work to see a new provider oBecause of the inconvenience, the patient may fail to follow through on the referral to a new provider oThe patient may incur multiple co-pay expenses or incur expenses for multiple diagnostic tests oWithin their scope of care, research shows that optometric physicians provide equal care at lower costs compared to ophthalmologists •The proposed changes are necessary to eliminate ambiguity regarding what is and what is not included in the scope of practice of optometry. •The proposed changes would authorize the State Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within the scope of practice.
Dr. Stephanie Stamoolis	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometrists in the state of Washington.</p> <p>I am a practicing optometrist in Sequim, WA with 10 years experience. Eye care for our community and surrounding area on the Olympic Peninsula is supported by 18 optometrists and 2 ophthalmologists, only one of which is a full time practicing ophthalmologist. As you know, Sequim is a growing retirement community and the demand for eye care is high. With the limited number of ophthalmologists in the area, scope expansion is necessary to provide adequate care for our community.</p> <p>Washington State's current scope of practice regulations prevent me from caring for patients as I have been trained and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions decrease access to quality eye care, incur additional unnecessary costs to patients, and delay vision saving treatments for patients who need it. For example, a patient of mine from Forks was in angle closure, a condition in which the drain of the eye becomes blocked causing a rapid, severe increase in eye pressure resulting in blindness if not treated immediately. One of the least invasive and lowest risk treatments for angle closure is a laser peripheral iridotomy. In this procedure, of which is taught in optometry school, a laser is used to make a hole in the iris relieving the pressure. Unfortunately, due to Washington State legislation, she was unable to get the treatment she needed right away. Instead, the patient had to drive at least 2 hours to Harborview Medical Center on the way crossing the Hood Canal floating bridge that can close in an instant and taking a ferry that may not be departing right away, only to arrive at Harborview just to wait to see an on-call resident who then finally confirms the diagnosis with the attending provider before proceeding with the laser treatment with a new ophthalmologist resident who has less experience in eye care as I do. She now has permanent vision loss in the left eye as a result of the delay in care. If optometrists were able to perform this easy, low risk procedure the patient would still have full vision in her left eye.</p> <p>I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. I appreciate your attention and consideration.</p>
Dr. Kimberly Lust Rueb	Self	Support	Optometrist	<p>I am writing in support of the proposed revision to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 7 years. I currently practice in a tertiary co-management cataract and laser surgery center alongside many ophthalmologists. Other than WA, I also am licensed in Montana and Idaho.</p> <p>Washington's current scope of practice regulations prevent optometrists from caring for their patients as they have been trained in school and are inconsistent with both the regulatory structure of other states and national standards in optometry. The restrictions, also, do not serve patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>An example of this, a patient has to travel 1-2 hours for an evaluation of a procedure taught within Optometry schools. Currently in WA, optometrists are unable to perform such procedures and the patient must be seen also by an ophthalmologist to have the procedure performed, often at a later date. These type procedures are being performed by optometrists in many other states, including at some of our own facilities in other states.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Scott Campbell	Self	Support	Optometrist	<p>Like many optometric physicians, my first job in 1989 was working in the ophthalmology department of a Los Angeles hospital doing most everything a general ophthalmologist does. I then assisted glaucoma surgery in Bellevue with Howard Barnebey MD for five years. I routinely performed procedures and made diagnosis's, legally, under others licenses taught to me more than 30 years ago in optometry school. Yet nurses and, often, pharmacists have larger scope of practice than an optometrist.</p> <p>It's long past time for optometrists to be able to practice to the fullest scope of there training.</p>

Dr. Nathan James	Self	Support	Optometrist	<p>My name is Nathan James, and I am an optometrist practicing in Spokane, WA. I would like to voice my support for expanding optometry's scope of practice.</p> <p>Currently, the laws here prevent me from practicing to the full extent of my training. Therefore I have to refer patients out, which delays their care, and places an extra financial burden on the patient.</p> <p>I also believe that scope of practice decisions should be made, and reviewed, by people who know optometry, namely the Washington State Board of Optometry. Scope of practice should be constantly evaluated, and the Board of Optometry is better equipped to handle this than the legislature.</p> <p>I do recognize the need for some advanced procedures to be referred to ophthalmology. The OPW proposal specifically excludes some procedures that ophthalmologists are better equipped to perform. I also recognize the need for specific training for some procedures, and I believe the proposal addresses that as well.</p> <p>In conclusion, I am in favor of scope expansion for optometry in Washington.</p>
Dr. Jeremy Beam	Self	Support	Optometrist	<p>First I would like to thank-you for your giving of your time and energy to serve on our Washington State Dept. of Health. I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington. I have been a practicing optometrist for 17 years, all of which have been in the great state of WA. For the last 14 years I have been a part owner/practitioner of Valley Vision Clinic in Walla Walla, WA. We are a private practice group with 5 optometrists and are proud to have been providing full scope optometric care for patients of the Walla Walla Valley for over 70 years.</p> <p>The optometrists in Washington have known for many years that an update of the scope of optometry is overdue. It is very important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served our patients well.</p> <p>When I graduated in 2004 from optometry school, the scope of practice for optometry in WA State was on the leading edge compared to most states in the US. Unfortunately 17 years later, Washington's scope has now lagged behind other states, not keeping up to date with the every changing field of optometry. Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions hamper my efforts to serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>Another concern I have for patients in WA is the recruitment of future optometry graduates. Optometry schools educate and train their students to the fullest extent of optometry practiced in the United States. The demand for access to eyecare is continuing to grow across the US. When the new grads look out at their options of where to practice I don't want our state to retain less new graduates than other states due to outdated scope of practice regulations.</p> <p>Washington is a large state with a variety of communities, some large urban settings with access to many different specialized doctors and some remote areas where Optometrists are on the front lines of eye care. We owe it to patients both in urban setting, as well as remote rural communities, to provide a modern scope of practice that allows optometrists to provide eye care to the fullest of their training.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Melissa Dacumos	Self	Support	Optometrist	<p>My name is Melissa Dacumos. I have been practicing optometry in Washington since 2005. I currently work in a large cataract and laser surgical co-management center in Tacoma called Pacific Cataract and Laser Institute. I am writing in support of the proposed changes to the scope of optometry in Washington state.</p> <p>When I first moved to Washington, soon after completing my optometry residency, I recall feeling very fortunate and excited to move to a state that was considered in the top 25% of all states to practice optometry. This was based on our relatively wide scope of practice at the time. I had opportunities to work in other states but chose to settle in Washington, in part, due to its wide scope of practice.</p> <p>As time has passed, Washington is now certainly in the bottom half of all states in terms of scope, and possibly in the bottom third. We are 1 of 12 states where optometrists cannot prescribe oral steroids. As you know the timing of oral steroids is of particular importance in patients where we suspect giant cell arteritis and in whom are at risk of blindness in one or both eyes from arteritic ischemic optic neuropathy.</p> <p>We are also 1 of 19 states unable to perform injections (except in the case of anaphylaxis). There are currently 8 states that have authority to perform laser procedures such as yttrium-aluminum-garnet, or YAG, laser capsulotomy. We routinely have a 2 to 3-month backlog of patients needing YAG capsulotomies in our office. The main reason we cannot accommodate a shorter wait time is that our surgeons are also busy reducing our cataract surgery backlog. Access to care would significantly improve if optometrists could perform YAG capsulotomies.</p> <p>Many of the restrictions on the scope of practice of optometrists in Washington prohibit procedures for which optometrists have been trained, such as injections and YAG capsulotomies. Access to care would significantly improve with an increase in our scope and we would certainly attract more talented young optometrists to our state as well.</p> <p>In summary, please consider supporting the proposed changes to the scope of practice for optometrists in Washington.</p>

Dr. Robert Davis	Self	Support	Optometrist	<p>My name is Robert Davis. I practice Optometry in Ellensburg, Washington. We are a rural area, with the only hospital being a critical access hospital. All primary care clinics have rural health clinic status.</p> <p>I was trained in Optometry at Oklahoma College of Optometry in Tahlequah, Oklahoma. During my undergraduate and graduate work, I served for 6 years in the Army National Guard. During my 3.5 years post-graduation, I served as a Captain in the US Air Force. In 1998, I honorably separated from active duty in the US Air Force and moved to Ellensburg.</p> <p>During my first 10 years of practicing in Ellensburg, I worked in the Yakima Tribal Clinic two times a month, as the diabetic retinopathy program director.</p> <p>I graduated with my Doctor of Optometry in 1995. During this Doctorate program, we were trained and provided all the procedures and prescribing medications that are being requested in this current Washington State expansion of privileges for Optometrists.</p> <p>During my time in the military, I was able to do all the procedures and prescribe all the medications being requested in the expansion of privileges. During my time of serving the Yakima Tribal Clinic, I was also able to perform the procedures being requested.</p> <p>I always found it interesting that while working at the Yakima Tribal Clinic, I could prescribe and perform procedures under my Oklahoma license, and that when I was off the Tribal lands, I could not do the same prescribing or procedures with my Washington license.</p> <p>Both in the Air Force and the Yakima Tribal clinic, I would prescribe and do certain procedures under my Oklahoma license, that my Washington license would not allow.</p> <p>I respectfully request that we update Washington Optometry privileges to be current with Optometry school trainings and what surrounding states allow and expect. It is all about allowing access to standardized, full-scope eye care without excessive and unnecessary travel.</p> <p>In Ellensburg, there is no full-time Ophthalmologist. My clinic and I provide evening and weekend call, just to be able to provide as much care as possible to Kittitas County.</p> <p>I find it interesting that in order to get a Tattoo license, it only requires a \$250.00 license fee and one-time blood born pathogens education. And with that, one can use ink needles around the eye. But my Washington Optometry License, which requires 25 hours per year of certified medical education, does not allow me to remove a skin tag on the eyelid.</p> <p>Please consider making Washington Optometry scope of practice current. Please consider allowing Optometrists to practice how they are trained. Please help rural citizens access to eye care, and help Optometrists be able to do procedures that our neighboring states practice. This will widen local treatment, which will increase eye care access to Washington State residents.</p> <p>Thank You!</p>
Dr. Harry Wiessner	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been in practice for 38 years and I support the efforts to authorize the Board of Optometry to regulate the scope of optometry ---essentially the authority granted to other health care professional boards in the state, and a system that has served patients well.</p> <p>This is the best way to ensure that the proper educational requirements are met for procedures under ones scope of practice, and it also allows easier patient access to doctors already trained in these procedures.</p> <p>Thank you for your consideration on this review.</p>
Dr. Bradlet Jansen	Self	Support	Optometrist	<p>I am a practicing optometric physician in the state of Washington. I graduated from optometry school in 2017 and completed an ocular disease residency before working in Oregon and finally settling in Washington.</p> <p>It can be frustrating for myself and for patients when I needlessly have to refer to an ophthalmologist for certain procedures that I was trained to do in school and residency. These particular procedures, such as the removal of eyelid skin tags, are relatively straightforward and absolutely should be within the scope of properly trained optometric physicians. There are more advanced medical procedures that should not be within optometry's scope, and they are purposefully not included in the proposed scope expansion.</p> <p>The goal of optometry's scope expansion is to appropriately use our training to allow improved access, convenience, and cost for patients. Also allowing appropriate oversight of these matters by the Washington State Board of Optometry is a slam dunk. Legislature simply cannot keep up with rapidly evolving medicine. Modern optometrists who treat a wide variety of medical eye conditions are not the same as your grandfather's optometrists who may have only checked someone's glasses prescriptions.</p>

Dr. Michael Noble	Self	Support	Optometrist	<p>My name is Michael Noble, I am an optometrist in the State of Washington. This email is in reference to the support the proposed scope expansion for optometrists here in Washington.</p> <p>Optometrists, to include myself, across Washington are finding that the state's outdated scope of practice laws are unduly restricting our ability to provide quality eye care to their patients even though they already have the proper training.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care, increases the costs of that care, and results in delays in care.</p> <p>In order to be able to properly and more effectively manage the scope of practice in optometry those with the appropriate medical training to understand the issues, such as the Washington State Board of Optometry, should be the ones to make those determinations. Given the rapidly evolving profession of optometry, scope of practice and training requirements should be constantly evaluated, which the Board of Optometry is better equipped to do than the Legislature</p> <p>While the OPW proposal allows optometrists to perform some advanced procedures if they have the requisite training and is already largely taught in current optometry school's curriculum, it also specifically excludes a number of procedures that ophthalmologists are better prepared to perform</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Benjamin G. Nielson	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I graduated from optometry school in Memphis, Tennessee in 2017 and immediately completed a one-year residency in ocular disease finishing in 2018. I have been practicing in Spokane ever since. I am also licensed to practice in the State of Idaho. Both Tennessee and Idaho have a broader scope of practice than Washington. This means that I have been trained to perform all the procedures that would be allowed under the proposed revisions, and yet for the past three years I have been unable to offer them to my patients because they are restricted in Washington. This leads to poor patient outcomes by leading to delay of care for patients who must wait for referrals, and in some cases it can require significantly more travel time for patients as they go to see a specialist. It absolutely leads to higher healthcare costs with additional visits, copays, and associated fees. Also, in addition to costing patients more, it requires them to miss more time from work.</p> <p>I urge you to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington and to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This would make optometry an "as taught" profession like the professions of other healthcare professional boards in the state—as it should be, instead of a "legislated" profession like it is now.</p>
Derek L. Scott	Self	Support	Public/Patient	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I am currently serving in the United States Air Force and I am a proud Washington State resident and will continue to be one until my military career ends. That being said, I want to advocate for my family members who currently live in Washington and for my immediate family members who will have eye care needs when I return to my home state of Washington after my service to the United States is over. I and many others will need their eye care needs met by doctors and optometric professionals who are not stunted by regulations that do not add value to their ability to conduct full, high-quality care at the correct levels. Additionally, I will continue to need increased access to private practice optometry offices so that my family can see Optometrists regularly with a reduced cost of high-quality eye care. To this end, I know it's important for Washington's regulatory framework to keep up with the rapidly changing delivery of eye care.</p> <p>The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the same authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, and on behalf of my family and other service members from Washington State who may not know of upcoming regulatory changes or have time to make their voice heard, I strongly encourage you and your staff to recommend the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. George Ko	Self	Opposed	MD	<p>I would like to express my sincere concern about any expansion of scope of practice for optometry in the state of Washington at this point in time. I strongly believe we need to have more due diligence from all providers, patients and appropriate officials particularly the American Academy of Ophthalmology and AMA.</p>
Dr. Jamison R. Ridgeley	Self	Opposed	Ophthalmologist	<p>The Optometric Physicians of Washington have proposed to the Department of Health and the Legislature that they be granted an expanded scope of practice to include surgical procedures—including lasers and injections—and the authority to prescribe virtually any drug by any route.</p> <p>As a board certified ophthalmologist and practicing surgical/medical retina specialist, I vehemently oppose the expansion of these privileges sought after by practicing optometrists. These treatments/procedures require the knowledge and experience of medically/surgically trained medical doctors in the best interest of our patients. Without extensive experience in applying these treatments, I fear the outcomes will lead to potentially disastrous consequences for our patient population.</p> <p>Please feel free to call me or contact me with any questions/concerns.</p>
Dr. Leslie A. Linares-Hengen	Self	Opposed	MD	<p>With regards to current sunrise proposals, I do not support broad prescription authority for midwives nor optometrists. Furthermore, I do not support the optometry board being the sole determinant in defining their scope of practice.</p>
Kalin Kluth	Self	Support	Public/Patient	<p>My name is Kalin and I live and work in Washington. I fully support my optometrist being able to perform the procedures in the bill and believe their board should be allowed to decide what they can and cant do, just like other medical professionals in Washington.</p>
Dr. Shawn Nash	Self	Opposed	Ophthalmologist	<p>My name is Dr. Shawn Nash and I am a board-certified Ophthalmologist who works at Kaiser Permanente in Washington and Portland; I strongly oppose the proposed optometry expansion of scope of practice including lasers, injections, and chemotherapy administration. I have been privileged with receiving over a decade of medical training which includes attending medical school, Ophthalmology residency which includes 4 years of very intensive surgical, clinical, and research training. I cannot condone a proposal which would allow optometrists without proper training to begin utilizing invasive procedures to potentially endanger patient safety and care.</p> <p>In Washington 96.2% of residents are within 30 miles of a board-certified ophthalmologist or ophthalmic surgeon who is capable of treating our patients with lasers, injections, and chemotherapy administration.</p> <p>The reality is that optometrists' basic 4 years of optometry school does not provide any type of training for their proposal for expanded scope of practice. In essence optometrists are stating they would like to learn how to care for patients "on-the-job" which can endanger patient health. For Ophthalmologists 12,000- 16,000 mentored clinical hours are required for competent practice for patient care, compared to less than 2,000 hours for optometrists. Most of the 2,000 hours for optometry training does not include procedure-based care such as those proposed by their legislation.</p> <p>I am so fortunate to be an Ophthalmologist and provide patients with safe and competent care, but my training has been extensive and earned through medical and residency training. I am highly concerned if optometrists obtain the right to provide invasive care without proper training.</p>

				<p>I am writing in support of the proposed revision to the optometry scope of practice in Washington State.</p> <p>I have practiced optometry in Washington State since 1997. In my 24 years of practice, Washington's scope has not caught up with other states and national standards.</p> <p>The current scope of practice places restrictions on my care for my patients. As highly trained physicians, optometrists in Washington are, oftentimes, unable to provide timely care for many of our patients who need our help. This increases the cost of care to patients and also delays some sight-saving care that we are trained to provide.</p>
Dr. Tracy Dodd	Self	Support	Optometrist	<p>Please recommend that the Legislature support the proposed changes in the Optometry Scope of practice for Washington.</p>
Dr. Stephanie Cramer	Self	Opposed	Ophthalmologist	<p>My name is Stephanie Cramer MD and I am one of three ophthalmologists that practice in Cowlitz County in Longview, Washington at the Columbia River Eye Clinic.</p> <p>I am writing to implore you to oppose the optometrist scope of practice expansion bill that would permit them to do surgical procedures and administer medications for which they have not had adequate training or education. I am writing on behalf of my patients and with their safety and health in mind.</p> <p>Despite the similarities in their names, Optometrists and Ophthalmologists are vastly different in training and scope. Ophthalmologists are medical doctors who have completed medical school, an intern year in either general surgery or internal medicine and then 3-5 years of subspecialty surgical training in ophthalmology at a ACGME accredited United States ophthalmology residency. This equates to 12,000-16,000 HOURS of mentored surgical expertise. Optometrists go to optometry school after college for 4 years. Their education is in the medical aspects of eye care and does not have ANY surgical mentoring/teaching as this has never been a part of their profession. Their equivalent schooling is 4,000 hours in medical eyecare.</p> <p>There is simply no substitution for training in surgery. With regards to prescribing chemotherapeutics, steroids, and immunosuppression - these practitioners did not even go to medical school! To suggest this is ludicrous and endangers patients safety and health.</p> <p>Please do the right thing and oppose this bill. I will do everything in my power to protect patient's and their sight; I hope you will too.</p>
LeeAnne Scott	Self	Support	Public/Patient	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I believe it's important for Washington's regulatory framework to keep up with the rapidly changing delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the same authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>I strongly encourage you and your staff to recommend the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
DeAndra Soehren	Self	Support	Public/Patient	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I believe it's important for Washington's regulatory framework to keep up with the rapidly changing delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the same authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend the Legislature enact the proposed changes in the optometry scope of practice for Washington.</p>
Dr. Luther O. Ness	Self	Support	Optometrist	<p>I am writing to express support for expanded scope of practice for optometrists in the State of Washington. I have practiced optometry for 33 years in rural Washington and have many experiences that have limited my ability to offer comprehensive care to my patients. Frequently I have been required to refer these patients to other health care providers from 45 to 245 miles away to obtain needed care. In some of these cases, it was care that I could have provided had our scope of practice allowed it.</p> <p>When optometrists are forced to refer patients to other providers for procedures they are trained to safely provide, it does not serve the patient well:</p> <ul style="list-style-type: none"> o Care may be delayed while waiting for an appointment o The patient may have to travel a long distance and miss work to see a new provider o Because of the inconvenience, the patient may fail to follow through on the referral to a new provider o The patient may incur multiple co-pay expenses or incur expenses for multiple diagnostic tests o Within their scope of care, research shows that optometric physicians provide equal care at lower costs compared to ophthalmologists. <p>The proposed changes would authorize the State Board of Optometry to determine scope of practice and outline education standards which would be required and would exclude many surgical procedures including cataract extraction.</p> <p>In short, optometrists are highly trained and competent eye care providers who should be practicing according to the highest levels of their education.</p> <p>Thank you for counting me among those who support this change in optometry's scope of practice.</p>
Dr. Cole Boboth, Dr. Everett Boboth, Dr. Cameron Boboth, and Dr. Fred Boboth	Self	Support	Optometrist	<p>We are a family of practicing optometrists from Washington state. Our eye clinic has been established since the late 1980s. The intent of this letter is to ask for your consideration in support of the proposed changes to the scope of practice for our profession. Also, to give the board of optometry the ability to be the governing body in determining any appropriate future modifications.</p> <p>The proposed changes would bring optometry in this state up to level practicing procedures with many other states, including all of our neighboring states. Washington state currently lacks allowed procedures that Doctors of Optometry are taught in schools to perform. As a new graduate of optometry, many doctors are electing to practice in other states, as Washington state does not allow them to practice within the full scope of their education.</p> <p>We have been practicing in a primary eyecare setting now for 30 years and have recently witnessed the limitations placed on patients' abilities to get into ophthalmology clinics for treatment. The Yakima Valley has recently seen a drastic decrease in ophthalmology clinics. Allowing optometry to increase their scope would take a big burden off the decreasing amounts of ophthalmologists in the area and allow us to efficiently serve our community by allowing us to perform some procedures in our clinic that MD's and DO's are currently having to schedule farther and farther out.</p> <p>Thank you for your consideration of these proposed changes.</p>

Dr. Suzanne T. Poppema	Self	Opposed	MD	<p>As a family physician who certainly supports advanced level practitioners, I am absolutely opposed to SR3085.2. The medical training needed to perform surgery on eyes , inject medications and even to know which meds and when to use is simply NOT there in optometrists at this time. Please do not allow this bill to go forward at the risk of our patients' health.</p>
				<p>I am writing to you as a third year student at Pacific University College of Optometry. I am at the point where I am really starting to narrow down where I would like to practice. Washington is a beautiful state and a great place to live, but I am concerned about the current scope of practice.</p> <p>We are currently learning or have learned how to prescribe oral steroids, perform eyelid lesion removals, perform superficial injections for infections and lesions in the eyelid, and board approved laser procedures. I will be doing a rotation in Oklahoma where I will be allowed to become certified in laser surgery including but limited to YAG capsulotomy, argon laser trabeculoplasty, and PRK.</p> <p>I would like to practice in a state where I am allowed to fully care for my patients, and not have to inconvenience them with having to see a new provider. It does not serve patients well having to deal with delays in getting another appointment with a different provider, multiple copays and expenses, long travel times, and not following through with referrals because of the inconvenience. Expanding optometrists' scope of practice would increase access to health care for Washington residents and bring Washington into closer alignment with laws in other states, which have seen no increase in adverse patient outcomes from scope expansion.</p> <p>As a student at Pacific, we are being trained in the latest technology at one of the top schools in the nation. We have the ability and knowledge to perform these procedures and take great care of our patients. We are the people patients see first, and if needed we can refer them to specialists, just like a PCP sees a patient and refers them to a specialist when needed. By allowing us to practice as we have been trained and board certified to do, we will be able to take better care of every patient we see.</p>
Shane Hager	Self	Support	Student-Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for three years, and I currently practice in Vancouver, WA.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p>
Dr. Kim Forgione	Self	Support	Optometrist	<p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you.</p>
				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for three years, and I currently practice at the Toppenish location of Yakima Valley Farm Workers Clinic.</p> <p>Being a recent graduate, Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>For example, I often have patients that require a simple laser procedure to remove a secondary cataract. Having been trained in this during my education I know that it is straightforward and fast with negligible risk involved. Unfortunately, it is a procedure that I am forced to refer out for. There are other procedures that I have to refer out for that an optometrist is more than capable of performing. For example, chalazion removal. Here in the Yakima Valley ophthalmologists are scarce. There are only 3-4 of them to serve all the towns in the Yakima Valley; from Yakima to Prosser. They are so busy and back-logged that some of them have decided to stop routine eye care and focus solely on operation room surgical procedures in an effort to catch up. Practicing in a very rural setting, where I serve mostly migrant farmworkers and members of the Yakama Nation Indian Reservation, I have seen firsthand the hardships that people in this region go through to see eye surgeons for advanced procedures. Costs, waiting time, and travelling distance are all factors that are often associated with being referred to an eye surgeon. It would be cost effective and waiting times would improve if optometrists did not have to refer to ophthalmologists for simple laser procedures and lesion excisions. Additionally, it would allow the ophthalmologists to be able to do those more urgent surgical procedures in a timelier manner.</p> <p>Furthermore, it's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. I was very excited to graduate optometry school and return to my home state to provide eye care in under-privileged areas. However, the current state of our scope of practice is preventing me from doing the most good for those in my community. I hope you will strongly consider the proposed changes so that we can provide the best care for our people of Washington.</p>
Dr. Gustavo Rodriguez	Self	Support	Optometrist	

Dr. Jeffrey Mattson	Self	Support	Optometrist	<p>I am writing to extend my support for the Optometric Physicians of Washington’s proposal to update the state of Washington’s scope of practice laws.</p> <p>I have been in practice for 8 years and currently work in a large surgical group practice where I perform surgical evaluations and provide medical eye care. I currently work in Washington but am also licensed to practice in Oregon, Idaho, and Alaska.</p> <p>The restrictive scope has direct health and financial consequences for my patients. In the state of Alaska, they have updated their scope of practice laws. Without these updated scope laws, patients in remote areas and villages would have to fly to Anchorage or Juneau in order to receive quality care that we as optometrists are trained to do. Washington likewise has a large portion of the state that is rural. My patients often have to travel long distances to my clinic for simple procedures that could have been performed by a trained optometrist in their hometown. This is often a financial hardship for my patient’s and also delays their care.</p> <p>It is important for Washington to update the regulatory framework as the technology in health care rapidly changes and improves. Without these updates, patients will be put at a disadvantage not only financially, but also in terms of ease and efficiency of the care delivered.</p> <p>The most efficient way to update this framework is to authorize the Washington Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements are to be met in order to provide them. This authority has already been granted to other health care professional boards in the state and has shown to be very beneficial for patients.</p> <p>In closing, I ask that you and your staff make a recommendation to the Legislature to approve changes in the optometry scope of practice for Washington. Thank you.</p>
Dr. Daniel D. Schremp	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for almost 10 years now. I currently practice primarily in Lewiston, Idaho and Spokane, Washington. Over the last decade I have had the great pleasure of conscientiously serving thousands of medical and surgical patients alongside both optometrists and ophthalmologists.</p> <p>I am currently licensed in Washington, Idaho, New Mexico, and Alaska.</p> <p>Out of all the states I am licensed in, Washington is the most restrictive. It has a truly antiquated scope of practice that prevents optometrists, like me, from fully caring for the patients we have vowed to serve. These restrictions are inconsistent with national standards in optometry and they increase health care costs and decrease access to quality eye care for Washingtonians.</p> <p>Dr. Shah, our opponents will tell you these changes will harm patients because our training is not enough, but this has nothing to do with patient safety or training. This is an unjustified turf battle. I took the same oath “to do no harm” as all my ophthalmology colleagues and I have spent the last 10 years in the eye care trenches doing just that. Washington optometric physicians want what is best for our patients, our neighbors, our friends, and our families. Please allow us to serve them better.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you.</p>
Dr. Jason Leng	Self	Support	Ophthalmologist	<p>I’m an ophthalmologist in private practice in Washington state. I have worked side by side with optometrists in our practice for over 10 years, and have found them to be knowledgeable, conscientious, and eager to expand their learning. In ophthalmology residency, we are trained with the basic competencies in our field which provide us with the tools necessary to start to take care of patients safely and independently. We start off doing procedures with an attending or mentor until we are deemed competent and signed off. While some skills like intraocular surgery do indeed necessitate 3 years of residency training (and perhaps a lifetime to master), other skills like minor procedures and YAG lasers are learned quickly.</p> <p>Optometrists are well trained health-care professionals that are familiar with the health and pathology of the eye. I feel they are more prepared to learn minor procedures such as YAG lasers compared to physician assistants. They examine and navigate around eyes on a daily basis, and minor procedures can be trained in a short period of time.</p> <p>I have reviewed the proposal to expand optometry’s scope of practice. I find it to be reasonable as it includes safeguards to exclude procedures like intraocular surgery, LASIK, oculoplastics etc... that would need a full 3 years of residency of training to be competent. New procedures are being learned every day, and in the practice of medicine, these new skills are passed onto the next with the proper training. Optometrist have an underlying fundamental knowledge of the eye, and if they are trained with the same standards as ophthalmologists for specific minor procedures, they should be competent and able to treat patients safely. I feel the proposed limited expansion of the scope of practice in optometry is appropriate and will benefit patients especially in rural communities.</p> <p>Thank you for your consideration.</p>
Dr. John F. Cramer III	Self	Opposed	Public/Patient	<p>Dear Sirs: I am an internist retired from patient care but still active in the education of medical students. In recent years I have been teaching students about the excessive cost of medical care in our country. I have recently become aware of a bill to allow optometrists to perform more eye surgery, and I am alarmed by it.</p> <p>Ophthalmologists go through a lengthy difficult training process which gives them a comprehensive understanding of medical diseases of the eye, including local eye manifestations of systemic disease. This is an enormous body of knowledge to master, something that is simply not possible in training of optometrists, which is only 1/8 as long. As part of their rigorous training, ophthalmologists have a clear understanding of indications for eye procedures. I have learned over the years that lesser trained providers, such as optometrists, tend to order more tests and do more inappropriate procedures than more highly trained providers.</p> <p>We spend almost twice as much of our GDP in this country than other developed nations. We need to be much more mindful of the cost crisis of medicine, and take steps to improve the situation. This includes not allowing providers with substantially inferior training to do eye procedures.</p>

				<p>As a practicing Optometric Physician in Washington state for the last 6 years, I am proud of the progress our profession has taken in both meeting and delivering the expanding medical eyecare service needs of this state. I am personally reaching out to you to discuss the current legislative limitations to our profession in our state. Washington unfortunately has now fallen behind many other states in terms of the scope of practice available for its practicing Optometric Physicians. While I am a current license holder in our state, my optometric education allowed me the opportunity to practice in multiple states such as California, New Mexico, and Alaska. During my training I found that other states had a broader scope of practice and allowed me to utilize my skill set to a fuller extent of my training. Regrettably, I find that my home, Washington state, has now become one of the most restrictive states in terms of both clinical procedures and pharmaceutical privileges. An example of a greater scope of practice in neighboring states is the ability to prescribe oral steroids in the case of emergent/emergency ocular conditions where delay in treatment may result in permanent damage. Despite my training, in our state I am unable to perform this vital and timely service due to the lack of prescribing privileges, thus requiring referral before treatment can even begin.</p> <p>As a practitioner who is relatively early in my career, I can appreciate the attractiveness of the greater scope of practice offered by other states. If our scope remains limited, it may result in Washington losing out on the possibility of attracting new, talented doctors. Additionally, with the influx of new residents and the aging of our current population, the medical eyecare demands of Washington state will continue to grow, requiring greater medical eyecare coverage and delivery. I firmly believe that an expanded scope of practice will not only allow Optometric Physicians of Washington State to better meet the needs of our patients as technology and pharmaceutical agents advance over time, but it will keep us competitive with other states in our region.</p>
Dr. Alexander Shepherd	Self	Support	Optometrist	Thank you for your time and consideration of this issue.
				<p>I would like to express my opposition to the proposed expansion of the optometric scope of practice. As you know well, ophthalmologists undergo thorough education and training in medicine and surgery during medical school and medical or surgical internship. This is followed by rigorous training in the diagnosis and medical and surgical management of ophthalmic disease during ophthalmology residency, and, in many cases, additional training in subspecialty fellowship programs. This level of training is necessary to safely administer systemic medications, perform laser procedures, and perform any surgical procedure. All of these interventions do occasionally result in serious complications, which are well described in the medical literature and are likely outlined in the responses from the various medical societies. Ophthalmologists are thoroughly trained in the accurate diagnosis of ophthalmic pathology, the proper use of these treatments, the safe performance of these procedures, and the proper management of complications that can result from them. In contrast, optometric training is largely observational, generally in clinical settings will less pathology, and typically involves little or no surgical experience. Washingtonians deserve to be evaluated and treated by doctors who are thoroughly trained and have the requisite experience to safely perform these procedures and manage any complications that may result, and optometric training is not adequate to meet this standard.</p> <p>It is also important to recognize that the demographic of patients who would potentially be treated under the proposed scope expansion is mostly an elderly population with a high prevalence of comorbid conditions, such as serious cardiac and cerebrovascular disease and diabetes. The safe performance of any procedure, no matter how minor it may seem, requires an understanding of the systemic health of the patient and any impact the treatment may have on their comorbid conditions. It is necessary that the doctor possess the requisite training and experience to safely monitor the systemic condition of the patient during the procedure and throughout recovery. When performing even minimally invasive procedures on elderly patients who have comorbid conditions, which is common in the demographic of patients requiring the procedures included in the proposed scope expansion, the stress and anxiety of the procedure often produces significant changes in blood pressure and sometimes also heart rhythm and oxygen saturation. These changes present risks of more serious cardiac and cerebrovascular complications, which do sometimes occur during seemingly minor ophthalmic procedures. Performing invasive procedures on or around the eye, whether performed with a needle, a laser, or a scalpel, presents inherent risks to the vision and overall health of the patient. For these reasons, the much more thorough and rigorous training of a medical doctor and ophthalmologist should be required, and I believe the proposed expansion of scope should be denied.</p>
Dr. Stephen Reck	Self	Opposed	Ophthalmologist	
				<p>I am writing this letter in support of my optometric colleagues to encourage revisions to the scope of practice for optometrists in our state. I have actively practiced optometry for the past 21 years in Bremerton, WA. My clinic is a group practice, where comprehensive ophthalmologists and optometrists work side by side to deliver quality eyecare to our community.</p> <p>Although there may be some points in the scope of practice revision that affect me less than some of my colleagues, I strongly believe that the WA state board of Optometry should have the authority to define the scope of our profession, including appropriate clinic procedures. Clearly, the educational and training requirements to perform procedures must be documented and met, as is the case with any healthcare professional boards.</p> <p>Many of my colleagues have already received the appropriate training associated with certain scope expansion procedures, however, they are unable to fully utilize this training, in our state, to provide care for their patients. This certainly decreases access to eyecare, especially for those that live in more rural areas of our state. In addition, the time delay and increased costs associated with an ophthalmology referral does not benefit patients and drives up healthcare costs. For example, in my practice, should a patient have reduced vision due to a posterior capsular opacity after cataract surgery, I need to refer them to an ophthalmologist colleague, in my clinic, for a YAG capsulotomy. They will be forced to wait for this procedure – one which optometrists in many other states already perform. This delays their care and forces them to tolerate reduced vision until an appointment is available. Furthermore, another office visit generally entails another co-pay or co-insurance payment. Streamlining the process to benefit patients is a clear advantage. Anything we can do to tame the healthcare hardships in our state should be considered. And in my profession, many colleagues already have the training, expertise and experience of performing the procedures that our profession is trying to incorporate into our scope of practice. There is a real possibility that Washington will be unable to attract optometric physicians when the scope of practice lags behind other states, leading to a shortage of providers.</p>
Dr. Jason Gagnon	Self	Support	Optometrist	I do hope that you and your staff strongly recommend that the legislature enacts the proposed changes to the optometry scope of practice in Washington.
Jeanne Dykgraaf	Self	Support	Public/Patient	I am a citizen of Washington and I support the proposed increase for optometrist and I think the department of health should give it a positive review.

Dr. Dale Heaston	Self	Support	Optometrist	<p>I am writing in support of the proposed revision to the scope of practice for optometric physicians in the state of Washington. I have enjoyed serving patients in the city of Richland for over 45 years.</p> <p>Many of the restrictions in our optometrist's scope of practice prohibits us from using our training and knowledge to benefit patients. Our antiquated scope of practice laws effectively reduce access to and increase costs of quality eyecare for our citizens in Washington State.</p> <p>Serving on the Washington State Board expanded my understanding of the challenges the state and optometry face to do their best to serve and care for the people of Washington State. While a member we reviewed the qualifications and training for licensure in our state to other states and it became evident most other states were better utilizing the training and expertise of Optometrist to serve the public. Also, expanding optometry's scope of practice will increase access to health care across our state. Optometrist currently practice in all but three of the counties in Washington.</p> <p>Please approve the changes to the regulatory framework of the optometric scope of practice. These changes will allow increased eyecare access and allow our Washington optometrists to practice at levels consistent with national standards.</p>
Dr. Anna Wells	Self	Support	Optometrist	<p>I am an optometrist licensed in Washington state. I am also licensed in other states, and the scope of practice in these states can be quite different from each other. Washington has one of the most restricted scopes of practice of the licenses that I hold. With my other licenses, I have performed minor procedures including ocular lesion removals. These are procedures optometrists have been trained to perform during optometry school. I also teach these procedures to optometry students and residents. Most trainees are rather disappointed to learn Washington does not allow for these procedures to be performed by a licensed optometrist.</p> <p>I believe it is important to allow optometrists to practice to the fullest extent of their training. Expanding the scope of practice will increase access to health care within our state. I support the proposal to expand the scope of practice for optometrists in Washington state.</p>
Linda A. van Hoff	ARNPs United of WA State	Support	Association	<p>ARNPs United of Washington State (AUWS), who represents over 9,000 Advanced Practice Nurses (Nurse Practitioners, Nurse Anesthetists, Nurse Midwives, and Clinical Nurse Specialists) urges you to support the sunrise review application regarding Optometrists.</p> <p>There is a shortage of qualified eye care providers based on the current scope of practice in the state of Washington. When looking at access to eye care beyond routine examinations, preventive care and screening of eye disease it only makes sense to utilize all provider groups and ancillary staff to their highest and most trained level, including training obtained post graduate; as medical knowledge, techniques, procedures and treatments continue to advance.</p> <p>We agree that optometrists are uniquely positioned to answer this need for Washington patients.</p>
Dr. Penny Reck	Self	Opposed	Ophthalmologist	<p>I am a practicing ophthalmologist in the state of Washington writing to you to communicate my opposition to the Sunrise Review concerning optometry's scope of practice as I believe the draft proposal threatens the health and safety of Washingtonians, including increasing risk of blindness and loss of the eye in granting optometric physicians permission to perform invasive procedures without having the same level of rigorous training that ophthalmologists do. It is a disservice to Washingtonians to allow less qualified providers to perform invasive procedures on their eyes.</p> <p>Ophthalmologists undergo extensive training beyond college, including 4 years of medical school, an internship in internal medicine/surgery or a program (transitional program) that combines both internal medicine and surgery in order to understand how to manage systemic illnesses medically and surgically; followed by three years of specialty training in ophthalmology. This extensive training is what produces a high quality medical provider who is well-informed of what medical pathology is, how it is manifested in the eye(s) and may relate to the body and the many considerations (risks, benefits, alternatives) involved in recommending an invasive procedure, performing an invasive procedure and also how to manage potential complications of such procedures. It is not enough from a patient-safety standpoint to permit another provider to perform the same procedures without the same level of training. Without the same in-depth and breadth of education, those ophthalmic procedures that are meant to be performed to save vision can ultimately be blinding and disfiguring if performed by a provider who is not educated and trained appropriately.</p> <p>Public health safety is at risk with this proposal. I strongly urge the Department of Health to not support the proposal.</p> <p>Thank you for this opportunity to comment.</p>
Dr. Christopher J. Babin	Self	Support	Optometrist	<p>I have been a practicing optometric physician in Yakima Washington since 1997. I am writing to urge you to support the proposed changes to optometry's scope of practice.</p> <p>One reason I think this is needed is because younger doctors of optometry are being taught at a higher level and are not able to practice to the fullest level of their knowledge base when they are practicing in Washington State. For this reason, many of our younger colleagues are choosing to practice in surrounding states that allow them to practice to the fullest extent of their knowledge and abilities. These proposed changes would allow Washington optometric physicians to practice to the fullest extent of their education.</p> <p>Secondly, these proposed changes would give the board of optometry the authority to be the governing body in determining future scope changes. This would be similar to how some other health professions are governed in the state of Washington.</p> <p>Third, in the Yakima Valley we have lost three ophthalmologists to retirement in the past year. This has created a delay in our patients gaining access to ophthalmological care. With the proposed scope of practice changes I will be better able to provide more timely treatment of ophthalmic conditions and at the same time take some of the burden off my ophthalmology colleagues.</p> <p>Thank you for your consideration in reviewing optometry's proposal and feel free to contact me if you have any questions.</p>

Dr. Chris T. White	Self	Support	Optometrist	<p>As the sole full-time eye care provider in San Juan County, WA, I wanted to reach out with my support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington. I have been in Optometry for over 30 years, practicing in San Juan County since 1993. The nature of healthcare on the islands makes my locations in Friday Harbor and Eastsound the only feasible option for many island residents to seek help for their eye health. The unreliability of the current Washington State Ferry system has created a lapse in care for patients who require injections or laser procedures performed but are unable to travel to ophthalmology off island. Medical priority loading does not account for non-life-threatening health conditions and cannot be counted on in a transportation system that is regularly running late or having sailings cancelled. Yesterday my patient Bill, 92, was in my Eastsound office for continued monitoring of his secondary cataract. Bill now suffers dizziness in part due to the advanced secondary cataract. I made the decision to refer him to ophthalmology for Yag Laser treatment. This referral was not made lightly as he will be spending the next few weeks trying to arrange a caregiver to take him off island. He will likely have to schedule the appointment out a few months given the lack of ferry reservations available to and from the islands. He will spend hours in ferry lines, driving, and making these arrangements for a procedure that could have been completed in a few minutes in my office. This story is not new for my patients. MJ, 72; James, 74; Brook, 71; Jean, 74; Leon, 73; these are just a handful of examples of this story repeating for my patients in the last few months. Furthermore, If I encounter a closed angle crisis, the Yag laser would provide immediate px access to peripheral iridotomy care, once again a short procedure, that prevents permanent loss of sight. After undergraduate school and postgraduate school, I have made it my mission to provide state of the art diagnostic testing while providing mobile and remote access to emergency and routine eye care in San Juan County. The antiquated laws around optometry's current scope of practices have thus far limited my ability to provide timely treatments for my aging patient population only aggravated by WSF transportation instability. I strongly encourage you to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington and please support the growing health care needs in San Juan County. Please feel free to contact me on my cell or by email.</p>
Dr. Brett Hagen	Self	Support	Optometrist	<p>Please consider this my support for expanded scope for optometry in the state of Washington.</p> <p>Our current law prevents me from providing care for my patients to full extent of my training. And with health care providers of all designations becoming increasingly scarce, these limitations not only cost our state in multiple visits for the same problem, they also increase the backlog of demand for physician time.</p> <p>Scope of practice decisions are best made by those with the medical background: the WA State Board of Optometry. This board should be allowed to continuously review that scope as our health care system is changing rapidly.</p> <p>This proposal does not simply expand scope, it provides safeguards so that procedures best performed by ophthalmologists will continue under their care.</p>
Dr. Shu-Hong Chang	Self	Opposed	Ophthalmologist	<p>I am writing to express my opposition to the proposed expansion of optometry scope of practice in the state of Washington. I have been a University of Washington clinical associate professor of Ophthalmology since 2011 and serve patients at the Puget Sound VA Hospital, Harborview, Kaiser Permanente, as well as in my private practice in Bellevue. I have managed countless complications arising from poor optometric care at all of those locations, and am now vehemently opposed to expansion of optometry scope.</p> <p>The OPW proposal:</p> <ul style="list-style-type: none"> • Jeopardizes the public health and safety of Washingtonians by allowing optometrists, without adequate training, to perform surgeries. • Allows optometrists to administer additional drugs including steroids, chemotherapy agents, anesthesia medications, immune modulating medications, and all other classes of medications by all routes. • Allows optometrists to perform additional injections as well as intravenous infusions. • Allows treatment of cancer by radiation, chemotherapy, and any other means. • Permits the Board of Optometry to determine optometrists' scope of practice, making it the only Washington medical practitioner board to have such broad powers, whereas only one other state in the nation, Alaska, has given its Board of Optometry such broad external authority. • Alleges, without justification, that there is inadequate access to surgical eye care across the state. • Fails to recognize that in Washington 96.2% of residents are within 30 miles of a board-certified ophthalmologist or ophthalmic surgeon. • Removes from statute the current definition of "ophthalmic surgery" (and the prohibition of optometrists performing eye surgery), recognized nationwide as providing the highest quality standards for surgical eye care. • Does not acknowledge that 24 states have rejected 58 similar proposals in the past six years. • Incorrectly states that new "national standards" allow optometrists to perform procedures. No such standards exist as individual states are responsible for determining optometric scope. • Does not recognize that ophthalmologists, after completing undergraduate studies, go to medical school for four years, and then do a one-year internship followed by three years of residency training in eye disease diagnosis, treatment, and surgery, followed in some cases by one or two additional fellowship years, in stark contrast with optometrists' basic 4 years of optometry school (12,000- 16,000 mentored clinical hours for ophthalmologists compared to less than 2,000 for optometrists). • Implies, by virtue of its proposal, that optometrists' training is adequate to justify their being able to perform surgical procedures. In fact, since Oklahoma enacted its laser surgical privileges they have been, for all intents and purposes, THE ONLY optometric training program using live patients. • Misstates that the Veterans Administration allows optometrists to perform eye surgery, whereas the VA maintains its longstanding policy that only ophthalmologists may perform therapeutic laser eye procedures in its health care facilities. • Asserts incorrectly that adding more surgeons will reduce health care costs. It is well established that providers with less training order more tests, do more procedures, and see patients more often than providers with more extensive training. Adding surgical privileges for optometrists will actually increase health care costs in Washington state.
Dr. Chris Johnson	Self	Support	Optometrist	<p>I support the Board of Optometry being given authority to make decisions regarding scope of practice, consistent with our education and training.</p>
Dr. Greg Barcus	Self	Support	Optometrist	<p>I support the board of optometry to make decisions regarding scope for practice consistent with education and training. I was licensed in Alaska to provide additional care but could not use this training in Washington. Practicing in a rural area many of my patients had to travel 2-3 hours one way to get treatment I could have done in Alaska.</p>

				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I am an optometric physician with 8.5 years experience practicing in a medical/surgical referral center in Clallam county. I work with the only cataract/glaucoma surgeon in our county of 77,331 people. We also serve Jefferson county of 31,285 people. The aforementioned surgeon is out on medical leave at this time. Due to Washington state's restrictive scope of practice laws, patients are having to delay care and/or incur extra expense to travel an hour away for procedures that I am trained to provide. The proposed scope expansion would allow me to fully care for my patients to the level of my training. It would also bring Washington state in line with national standards in optometry and the regulatory structure of other healthcare professions within our state. It will allow better access to care for patients in Clallam county as well as other rural counties within the state - there are only 3 counties in Washington state without an optometrist (for comparison, there are 15 counties with no ophthalmologist).</p> <p>The scope of the optometric profession in Washington state has fallen behind the national optometric standard. Many other Washington state professional boards have regulatory authority to expand the scope of their respective professions as improvements in training and technology dictate. Having a similar system in place for optometry, that may be more responsive to advancements in training and technology, will help recruit new providers to Washington state. This will ensure patients have greater access to reliable, quality, affordable eye care in the future.</p> <p>The proposed scope expansion will allow optometric physicians in Washington state to provide sight saving procedures and treatments that we are trained to provide. It will also allow the Board of Optometry to be the regulatory authority over the scope of the profession which is consistent with other healthcare regulatory boards in the state. We are not asking to set a new precedent, this model has been in place in other states without any increase in adverse events following scope expansion. This is particularly important in counties where patients may not have access to care by other providers.</p>
Dr. Davina Kuhnline	Self	Support	Optometrist	Please recommend the legislature enact the proposed scope of optometry revisions. Thank you for your time and consideration of this issue.
Dr. Eric S. Hussey	Self	Support	Optometrist	As a learned profession, it is absurd that the board of optometry doesn't control optometric scope of practice based on current education.
				<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>The current scope of practice regulations in Washington have not kept pace with professional training or technology. The laws are inconsistent with other states and national standards in optometry. Because of the current state of law, I have had difficulty recruiting a new optometrist to join my practice in rural Washington. Many new optometric physicians want to serve in states that allow them to practice to the full extent of their training. The environment of our beautiful state is not enough to keep new optometric physicians professionally satisfied.</p> <p>Updates to the scope of optometric practice will allow me to care for my patients at the level I was trained. This is more convenient and cost effective for my patients in a rural community where referrals mean travel in most cases.</p>
Dr. Suzanne D. Scott	Self	Support	Optometrist	I encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.
				<p>I am writing to request that you provide a positive review of the optometry scope bill.</p> <p>As a board-certified ophthalmologist at Pacific Cataract and Laser Institute, I have the privilege of working closely with numerous optometrists physicians on our staff as well as interacting with ODs in the community. Through daily experiences, I have learned to appreciate my optometric colleagues. I've also developed immense respect for their extensive medical training in eye care and their commitment to providing the best, most up-to-date treatment. Furthermore, I have seen the incredible benefits of ophthalmologists and optometrists working together to provide top-quality, accessible medical care.</p> <p>I fully support granting qualified and trained ODs the authority to perform a limited number of critical therapeutic procedures, including injections, removal of eyelid lesions, and some laser procedures authorized by the State Board of Optometry. I also support expanding the types of medications optometrists may prescribe, including oral steroids. These changes are in keeping with the education and training of optometrists and national optometric standards, and Washington law should reflect that.</p> <p>I also support granting the State Board of Optometry authority to update scope of practice laws and define the necessary training required for any procedure or treatment included within the designated scope. This will ensure that our state's laws remain timely and medically based. As a result, people across our great state will have improved access to safe, high-quality, and affordable medical eye care.</p>
Dr. Eden Yoon	Self	Support	MD	I appreciate your leadership and consideration of this important advancement.
				<p>I wish to explain my support for scope of optometry expansion in WA State. My perspective is that I first obtained a license to practice optometry in 1991. At the time it allowed general optometry, and allowed me to treat glaucoma patients, which was a big part of my training. I met with doctors from around the country whose states had not yet updated their state's scope of practice to include glaucoma and were jealous that we could treat that group of patients according to our training. We became some of the best and most experienced in the country.</p> <p>Since that time, all the other states have update their scopes of practice to the then current state of the progression and WA state essentially has stood still in that regard. Now optometric physicians from other states are in disbelief that we have to refer out patients they routinely care for in other states. These excluded categories of patients include those who need eyelid lesions removed, those glaucoma patients who would benefit from SLT (laser), YAG capsulotomy (laser), dry eye patients who need IPL (similar to laser), and on and on. Some of these technologies have been safely been available for decades, others for just a few years. And it is totally unnecessary, inconvenient and costly to the patient to seek these services outside our office when it simply could be done, except for an outdated law. And, it is a bit ridiculous to expect the legislators to study the literature in our profession, attend our schools and conferences to see what is the state of affairs in diagnosis and treatments in the profession. It is proposed that the WA State Board of Optometry be tasked with ruling what is and what is not an appropriate scope of practice. I totally agree.</p>
Dr. Brett Ulrich	Self	Support	Optometrist	I'm happy to discuss with anyone, though I am totally not political, just more practical on this issue.

Dr. Myung Jung	Self	Support	Optometrist	<p>I am writing a letter in support of the scope expansion proposal for optometrists in Washington state.</p> <p>My desire to provide eye care in Washington state started as an undergraduate student at the University of Washington. I started the Unite For Sight chapter at UW, which is a nonprofit organization focused on providing eye care for those who are in need. As a group of volunteers, we would provide vision screenings at public health fairs and events in various areas around Washington state. Those who failed screenings would receive vouchers to receive eye exams by eye care providers in Washington. Many of these patients lived in rural areas, away from the city. It was here that I first realized how much optometrists can be of service in rural communities in the state of Washington.</p> <p>I have since completed optometry school and residency in ocular disease at a tertiary care surgery center in New York and New Jersey. During residency, I put into practice everything that I was trained to do as an optometrist, but was ultimately limited by each state's restrictions on scope. I believe we should be able to perform everything we have been trained to do in order to deliver the best care for our patients. I have since been practicing optometry for 8 years, and have been employed at Pacific Cataract & Laser Institute in Chehalis, WA for 5 years. We serve patients from the surrounding rural towns of Grays Harbor, Pacific, Mason, Lewis, Wahkiakum, and Cowlitz counties. The access to tertiary eye care in these rural towns is very limited. Opening scope of practice for optometrists would increase access to medical eye care, including advanced procedures, for patients in these rural towns.</p> <p>In my years of practice, I have witnessed urgent cases like angle closure glaucoma which could have been treated immediately by the patient's primary optometrist using laser peripheral iridotomy. This could have prevented permanent loss of nerve fibers, leading to irreversible sight loss. However, due to long travel time to the nearest surgery center, and additional costs, patients delayed care. Allowing scope expansion for optometrists would allow prompt care for patients and lead to a decrease in health care dollars.</p> <p>Optometrists spend four years with intense focus on the eyes, the visual system, and related systemic health. Many like myself have received further training in residency for a year thereafter, where we increase our experience in the area of specialty we desire. I believe that optometrists are well-equipped with the background and knowledge that is necessary to deliver advanced procedures that our patients need.</p> <p>I ask that you consider scope expansion for optometrists to provide access to timely and necessary eye care for all Washingtonians.</p>
Dr. David A. Stanfield	Optometric Physicians of Washington	Support	Association	<p>As the President of the Optometric Physicians of Washington, I urge you and your Department of Health colleagues to provide a positive review of our proposal to expand optometry's scope of practice in the state.</p> <p>Washington state's scope of practice is more restrictive than many other states. These restrictions elevate my concern that Washington is losing quality students to other states that allow a broader scope of practice, a trend that does not serve the citizens of our state well. Reversing that trend by expanding optometry's scope of practice will enhance patients' access to care, ensure timelier treatments, and reduce patients' travel and cost to receive care. I have been a licensed optometrist practicing in Washington since 1988 and during that time have worked in collaboration with many ophthalmologists. Although they may quietly support the proposed scope of practice expansion for optometry, many are reluctant to speak out for fear of criticism from their peers.</p> <p>Over the years, optometrists have gone to the Legislature for a series of modest expansions to our scope of practice including authority to use diagnostic drugs to dilate the pupil, then later to prescribe eye drops to treat infections and glaucoma, and finally to prescribe oral medications. Each of these proposals was met with strong opposition by a vocal minority within the medical profession. But a review of the record will clearly show that our profession has a good track record of being cautious and conservative in our approach to patient care. We have taken the same careful approach in our scope expansion proposals, keeping our patients' interests our top priority. Accordingly, each time we have improved our scope, we have done so safely and with high quality, a result that will again be true with our current proposal.</p> <p>Our bill would give the Washington State Board of Optometry the authority to determine optometrists' scope of practice based on our education and training. This approach is consistent with how other health care professional boards determine the approved scope of practice for their respective professions. Not only will this approach benefit patients by ensuring that Washington's scope of practice remains current with technology trends and nationwide standards, but it also will significantly reduce the amount of attention DOH staff and legislators have to devote to scope expansion, freeing up time for them to spend on other important issues. My peers and I look forward to a future in which our profession no longer has to go to the Legislature to adjust our scope of practice every time a new procedure is developed. Finally, I want to emphasize that our bill responsibly limits optometrists to procedures they have or will be trained to perform and prohibits procedures they are not trained to perform. The bill includes a variety of specific exclusions, including prohibitions against optometrists performing cataract extraction, LASIK, retinal surgery and laser procedures, any surgery that requires a general anesthetic as well as many other procedures. In summary, there is a strong case to be made for the Department of Health to provide a positive review of the proposed optometry scope bill. By aligning Washington's scope of practice with that in many other states, it removes some current restrictions that serve neither the health nor the interests of our patients. It also establishes a new regulatory framework that will ensure optometry's scope of practice in Washington continues to serve those interests in the future. Thank you for your thoughtful consideration of this proposal.</p>
Dr. Matthew Polster	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for five years, and I currently practice in two private practices in Lacey and Lakewood. I also have been licensed to practice in Idaho while served in the US Air Force.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>As a federal practice optometrist in the military, I was able to prescribe oral steroids to treat conditions such as autoimmune or zoster-related uveitis. Often I would consult with my colleagues in ophthalmology if I had concerns before prescribing, but being able to send patients away with the treatment they needed provided more efficient and timely care. Under the current scope of practice in Washington I am restricted from doing so.</p> <p>It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,</p>

Dr. Eric Areiter	Self	Support	MD	<p>I support the Board of Optometry being given authority to make decisions regarding scope of practice, consistent with their education and training. This is the way most other health care professions are governed, and it's the best way to ensure that Washington's scope of practice laws reflect national best practices in technologies and treatments for all patients. Please support and forward the proposed legislation with your strongest recommendation.</p>
				<p>I am writing to you regarding the sunrise review for the Washington State optometry scope of practice. I would like to encourage you to highly consider the proposed revisions to the scope of practice for the optometric physicians of the state of Washington.</p> <p>As a former engineer who had a career change, I wanted to choose a career where I could provide a difference to my community. I found that my passion was being with patients and providing care to those patients. Luckily when I moved to Washington State in 2016, I found a community of optometric physicians who felt the exact same as me. We are highly educated and highly trained and just trying to strive to bring the best care to our patients possible.</p> <p>Unfortunately, Washington is behind in terms of the scope of practice for optometric physicians when compared to its neighboring states. What is allowed in Oregon, Idaho, Alaska in terms of prescription authority and procedures is not allowed here in Washington for practicing optometrists. Patients in our surrounding states can receive more affordable and timely care when compared to our citizens due to these limitations. With that, we are encouraging you to review our proposed revisions to our scope of practice.</p> <p>Thank you for reading my request and all the other requests from my fellow colleagues. We look forward to continuing to provide the citizens of Washington with the best and affordable eyecare. Together we can all strive for a brighter tomorrow.</p>
Jessica Kennedy	Self	Support	Optometrist	
				<p>I writing in support of legislation to allow Optometry Board Autonomy in the regulation of the scope of practice for the profession of Optometry. Current legislation curtails the incorporation of medical best practices by limiting the scope of practice to antiquated and outdated technology and techniques. The last significant change to the optometric scope of practice was in 2003. When was the last time a medical practitioner limited their journal review and therapy to only documents published before 2003? The field of medicine and practice of medicine is changing at an ever increasing rapid pace broadening our knowledge base, diagnostic testing and treating paradigms. We are required to keep abreast of current standards through ongoing CE but are restricted in applying much of the knowledge by our current legislation. Optometry must have the ability to keep pace with current best practices. We are one of the very few medical professions in the state that does not have board autonomy and must approach the legislature each time there is an update in medical best practices if it falls outside the current scope of practice. We are not asking for privileges to perform any procedures that we are not trained to perform.</p> <p>Optometry provides primary medical care for vision related illnesses and disease for the majority of the population in the state of Washington and in many counties are the sole provider of vision services. Optometrists are even consulting physicians for some small community hospitals where there is no or insufficient ophthalmology coverage. However, we are not permitted to perform basic procedures that we have been trained to perform. I practice in a referral center that provides emergency and surgical care for multiple counties extending from the Cascades to the Pacific Coast. We have patients traveling upwards of 2 hours to our clinic because we are one of only a few subspecialty clinics in these areas. Many of these patients could be treated by their local optometrist if only the scope of practice in WA reflective the standards of optometric education. Instead they are charged a second copay, deductible and have the burden of lost wages and travel expenses.</p> <p>I hold licenses in 3 states in the Northwest and Washington is by far the most restrictive scope of practice. There are many time I lament to patients that if only they could meet me on the Oregon side of the I-5 bridge, I could treat their condition. Instead I have to schedule the patient back for a second evaluation (a financial and economic burden for the patient which also contributes to rising medical costs) with one of my ophthalmology colleagues.</p> <p>As the population demographics change in the next decade, projections for qualified eye health providers will have difficulty keeping up with the aging population. It is well documented that the number of ophthalmologists will be insufficient to provide general eye care services and will need to focus their training and skill set on surgical eye care. Optometry will need to provide the primary eye care necessary to ensure our most vital sense, our vision, is well provided for. The state of Washington will and is already starting to be passed over by new optometry graduates and residence because of its restrictive scope of practice. Washington will not be able to compete in the future with neighboring states for talent as graduating optometrists will prefer to work in less restrictive states.</p> <p>I strongly encourage consideration of a positive review of the proposed legislation. It will bring optometry in line with the other health professions in the state of Washington. It will allow for standard of care and allow for flexibility over the coming decades to incorporate advances in technology and therapy to reflect best practices. It will allow Washington to compete for new providers and avoid service gaps to the people across the entire state. It will save tax payers money in helping to reduce growing medical care costs by reducing duplicate care and unnecessary hardships on patients who need to take time off work and travel expenses in rural Washington to seek care when it could have been provided locally by an optometrist.</p>
Dr. Brian Arvidson	Self	Support	Optometrist	

Dr. Grant Hardan	Self	Support	Optometrist	<p>My name is Grant Hardan and I am a practicing Optometrist in Spokane. I own a private practice and I have one other associate doctor who works with me. We practice full-scope optometry and serve both city and rural populations given our location on the far north-side of Spokane. Many of our patients drive more than an hour for care, as their eye care needs are limited by providers in eastern Washington.</p> <p>I graduated from Optometry school in 2010 and then did my residency training in geriatric/ocular disease at the Spokane VAMC. During my education, I was trained on many basic procedures such as skin lesion removal, YAG capsulotomy, and much more. However, after my residency training I am unfortunately not able to practice to the full extent of my education.</p> <p>This problem is three-fold: 1.I am not able to practice to a level currently taught in school 2.Reduced access to care in rural communities 3.Increased burden and cost to our healthcare system</p> <p>My first point is clear; Washington state limits my professional capabilities and it is not based on my educational training. This should be based on ongoing reviews of educational training such as by the Washington State Board of Optometry. Furthermore, about 30 minutes away in Idaho I am able to perform much more broadly under the same professional license level (Alaska, Oregon are also included in a broader scope level). My second point is that Optometrists greatly cover our state's territory at a much higher percentage than Ophthalmology. Access to care is important and Optometry is ready to provide that care closer to local resident's homes. My third point is that expanding our professional privileges will reduce repeat appointments with other providers for the same care. This in turn reduces duplicated payments for appointments and will provide more appointment availability for an already stressed healthcare system.</p> <p>Please take a moment and carefully consider Optometry's scope change, as this will allow us to provide care to the level we are taught, provide better access to care especially in Washington's rural areas, and help reduce duplicated costs and appointments in our already stressed healthcare system. If you have any questions, please feel free to reach out to me at any time</p>
Will Callicoat	Self	Support	Hospital Administrator	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I am the President of MultiCare Capital Medical Center in Olympia and have spent the past 18 years in hospital administration, surrounded by health care professionals, specialists and sub-specialists. With many of those specialties, the standard is tied to board-certification. Prior to hospital administration — from 1993 to 2003 — I was a para-optometric and optician. However, I have not been in-tune with the field of optometry since that time. I was perplexed to learn that, after nearly 20 years, the scope of Optometry is still not tied to a state-board standard.</p> <p>Ensuring Washingtonians have adequate access to health care is an essential goal for health professionals. In fact, access to care is associated with many societal benefits, including closing the health equity gap, and catching diseases early before they progress. If the Legislature were to enact the proposed changes in the optometry scope of practice, it would expand access to high quality care in Washington. It would also ensure that the Optometric scope of practice can adapt, so that for the next 20 years, the scope of practice remains contemporary with standards of eye care, and changes in technology.</p> <p>Please let me know if you have any questions.</p>
Luke Boran	Self	Support	Student-Optometrist	<p>I am writing to you as a third year optometry student at Pacific University College of Optometry. As a third year student I am exploring every state to decide where I would like to practice once I graduate. When I graduate I will have to make a choice as to where I want to live and work. I would love to stay in the area and Washington is a beautiful state where I would be able to help the local communities and citizens.</p> <p>At Pacific University I am being trained in the latest technology through the full scope of optometry at one of the top schools in the nation. It would be an easy decision if the state of Washington were to allow me to practice to the full extent of my license and to the full extent to which I will be trained including: prescribing oral steroids, eyelid lesion removals, superficial injections for infections and lesions of the eyelid, and board approved laser procedures.</p> <p>I am planning on taking an externship rotation site in Oklahoma where I will be trained and certified in board approved laser surgeries such as: YAG capsulotomy, argon laser trabeculoplasty, and photorefractive keratectomy. If the state of Washington were to allow board certified laser surgeries this would again make the decision to work in Washington local communities much easier because I would be able to practice to the level at which I will be trained to provide proper care. I sincerely hope that this is the case by the time I graduate and the laws for optometry in Washington are more expansive.</p>
Dr. Michael G. Harris	Self	Supoort	Public/Patient	<p>I am a Professor emeritus and longtime faculty member of the University of California Berkeley. In addition, I am an attorney at law and a member of the California state bar, now retired. I've also served as a member of the food and drug administration's ophthalmic devices panel and a consultant to both CALIFORNIA OPTOMETRIC ASSOCIATION and the American optometric Association.</p> <p>This background put me in a unique position to comment On the increase in scope of practice legislation for Washington optometric physicians to allow them to perform lump and bump removal, As well as YAG Capsulotomy's And PIS.</p> <p>Optometric training has expanded significantly since I first became a practitioner in 1965. I believe Washington optometrist and optometrists in other states are now well-trained to perform the procedures mentioned above.</p> <p>This increase in scope of practice would be in the best interest of the Citizens of the state of Washington as it will allow them More convenient and less expensive vision care.</p> <p>Please do not hesitate to contact me if I can be of any further help in this matter. Thank you for your kind attention to this message</p>

Symone Tran	Self	Support	Ophthalmic technician	<p>As you are in the middle of a scope of practice expansion initiative called the "Sunset Review", I would like to vouch for the optometrists in Washington State.</p> <p>I have been an ophthalmic technician for two years, and have worked closely with my three optometrists and one ophthalmologist in the area of speciality of cataracts and glaucoma. Not only do I work directly with patients who need these superficial laser treatments: yag capsulotomies (after cataract procedure), laser trabeculoplasties (for glaucoma control), and LPs; and with the providers who deem them necessary, I am also the only one who schedules these procedures on our ophthalmologist's time. With that being said, there are several reasons as to why I believe the scope of practice for optometrists in Washington State should be expanded to cover these superficial laser treatments.</p> <p>1. Continuity of care. At Northwest Eye Surgeons, our clinic runs on a model of an ophthalmologist and optometrist partnership team. With this, as well as any other optometrist who is referring to an ophthalmologist for these procedures, you end up having patients who are bouncing back and forth between their optometrist and ophthalmologist. There also is the notion that most of the time the patient is only meeting the surgeon on the same day of the procedure, to then never see them again unless deemed surgically necessary. As a technician and the one to schedule patients, I get complaints and hesitations of these "same-day" procedures because the patient has never met the surgeon prior to. If optometrists would gain access to do these straightforward procedures in-clinic, I believe our patients would be more at ease and have more confidence in their laser treatment because the provider doing the laser would be the provider who has been following their history.</p> <p>2. Access to care. Being the person to schedule these procedures for our ophthalmologist, I have seen the long wait times due simply to the limit of procedure spots. A surgeon can only do so many surgeries! I would say a majority of our patients are at least waiting 8+ weeks for their procedures, unless deemed urgent. An example of this limiting care is if a patient is waiting 8+ weeks for their selective laser trabeculoplasty, which then takes 8 weeks to take full effect, a patient is then waiting 4+ months for complete treatment. And the fact that all of these superficial laser treatments are straightforward and can be completed within 2-3 minutes is another reason why opening up the authority for optometrists to perform them would give patients more access to care. Taking these anterior segment laser treatments done in a clinical setting off of the surgeon's schedule also opens up time for more invasive procedures, giving those patients more access to care as well.</p> <p>I am confident in all of the optometrists that I work with and believe they are more than qualified to perform these superficial laser treatments. Not only have I seen their expertise and training in the work that they currently do, they are constantly learning and developing new knowledge to be able to provide the best possible care to our patients. Ultimately, if we take a step back to remember why we are in the medical field, we are reminded of our passion to serve those around us. I believe that the next step into best serving our community is to expand the scope of practice into giving authority for optometrists in Washington State to perform superficial laser treatments.</p>
Dr. Linda Brown	Self	Opposed	MD	<p>Dear WSMA committee on scope of practice issues. I would like to thank you for your hard work to protect the safety of our patients. As a rural board certified ophthalmologist with almost 31 years in private practice I believe that Washington residents are able to access high level care from ophthalmologist in most areas. Rural physicians do not have inferior training to those from large cities. They have simply chosen a different patient base to serve and can often offer treatment in many areas of ophthalmic care without the need to refer to distant subspecialists. We always seek to have state of the art care for patients and if we cannot give it we have the training to know when it is more appropriate to refer outside our area. I take care of a large patient base from the San Juan Islands as well as Skagit and Island counties and these patients do have more travel barriers to care than other patients as some are dependent on an expensive and over strained state ferry system for transportation. There is optometric care on the islands but the knowledge base of an optometrist is not adequate to handle the diagnostic and therapeutic needs of a predominately elderly population with high pathology. Although optometry can screen many eye conditions for the appropriateness of referral they do not have the training to treat most of these conditions either medically or surgically. The ritual of See one, Do one, Teach one is not adequate to have an optometrist say I am now qualified to perform surgery and injections. Previous optometric schooling to get a dispensing drug license was a weekend course, totally inadequate. This low education requirement is now eliminated in the new proposal which puts patients at risk. I find that optometric training varies wildly by the state and school attended. I know that as my husband, an optometrist trained at a well respected school, does not feel he is qualified to treat with systemic medications, injections, lasers and incisions and as a spouse I have listened to the educational seminars he attends and can compare them with my own training. These training sessions while well intentioned do not replace medical school and residency. No other specialty society in the state is their own oversier to say that we trained ourselves and we are now experienced enough to perform surgery and systemic medical care. This is a dangerous precedent for healthcare and puts our patients at risk. Even in rural areas optometrists have offices near ophthalmologists. There is one a quarter mile from me. They can choose to refer locally or out of town. Patients should have choices on health care but not with the perception that this care is equal between ophthalmologist and optometrist. Optometrists are not held to the same standards as we are for outcomes in the malpractice system. Delayed care and inadequate or inappropriate care are also concerns.</p>
Dr. Paul G. Krabill	Self	Support	Optometrist	<p>My name is Dr. Krabill and I am reaching out regarding proposed legislation to empower qualified Optometric Physicians (i.e Doctors of Optometry) to perform various eyelid procedures.</p> <p>I currently practice in both Oregon and Washington. In Oregon Optometrists with the proper training are licensed to removed various eyelid lumps and bumps. Many patients in rural areas of the state without access to an ophthalmologist would not be able to get these important procedures had legislation not been passed years ago allowing it.</p> <p>I encourage you to increase Washington's Optometry scope of practice to the level of our training and equal to that of other states.</p>
Dr. Seth Thomas Copeland	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in Washington state. I have been practicing in Yakima for 19 years, returning to my hometown to provide comprehensive eye care services to the community that raised me.</p> <p>Washington's current scope regulations prevent me from caring for my patients as I have been trained, and are lagging behind that of other neighboring states and national standards in optometry. The restrictions do not serve my patients well by decreasing access to quality care and increasing the costs of that care.</p> <p>We are currently in an ophthalmology shortage in Yakima County. We have lost four eye surgeons in the past few years that have not been replaced, putting our current ophthalmology groups behind in their ability to cover care needed for our patients. Weekly I have patients that have to get scheduled with my local ophthalmology groups for services that I am trained to perform but unable to due to scope restrictions. Not only is this an inconvenience to our patients, but it increases costs and takes time from the surgeons for minor procedures that optometrist are trained to perform. The proposed changes to optometrist scope of practice would have a significant and needed impact (decrease travel time for patients, costs savings on co-pays for extra visits, and quicker access for surgical patients to the eye surgeon when needed) on our local delivery of eye care.</p> <p>It's important that Washington's regulatory framework keep up with the rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met I order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>I encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you for your service to the citizens our our beautiful state!</p>

Dr. Courtney E. Francis	Self	Opposed	Ophthalmologist	<p>I am writing to express my concerns regarding the proposal from the Optometric Physicians of Washington to increase optometrist scope of practice in Washington State.</p> <p>I am writing to you as a board certified ophthalmologist who specializes in neuro-ophthalmology. I earned my medical degree at the University of Rochester, followed by an internship in internal medicine at Baystate Medical Center in Springfield MA and then completed a three year intensive residency in medical and surgical ophthalmology at the University of Alabama, Birmingham and the Callahan Eye Hospital. Following residency, I did an additional year of training as a fellow in neuro-ophthalmology at the University of Southern California and the Doheny Eye Institute.</p> <p>I have been in practice in Washington for nearly 11 years. I work at the University of Washington, seeing patients with complex neurologic and ophthalmologic conditions. I teach residents who are training to become ophthalmologists. Additionally for the past 9 years, I have been the director of medical student education for Ophthalmology at the UW School of Medicine.</p> <p>I write to you as a private citizen and acknowledge my views may not reflect those of the university.</p> <p>As you may be aware, the training difference between optometrists and ophthalmologists is striking – 4 years of optometry school (and approximately 2,000 mentored clinical hours) versus 4 years of medical school plus 4-6 years of very intensive post-graduate training (and approximately 12,000-16,000 hours) for ophthalmologists. While many patients are unable to differentiate types of “eye doctors” there are vast differences in education, training and ability to care for a complicated organ with multiple systemic disease associations. Simply put, optometrists are not medical doctors and do not have the education, training and understanding of systemic disease to perform procedures on the eye. By allowing optometrists to perform surgery, we would be jeopardizing the health and safety of our state residents. Additionally, by allowing the Board of Optometry to determine optometrists’ scope of practice, we are eliminating the necessary oversight of the medical board which all other practitioners must abide.</p> <p>Please keep our citizens safe and reject this bill.</p>
Dr. Joseph R Colella	Self	Support	Optometrist	<p>I am writing in support of the Optometric scope expansion bill. I currently practice in an under served community on Whidbey Island . The majority of my patients are elderly with many having limited access to transportation . It requires a major effort for them to travel to the mainland for services. Being able to perform more procedures at my office would not only be more convenient to my patient population but cost effective.</p> <p>It has always made sense for Optometry to determine what medications and procedures that practicing Optometrists perform in line with their training and credentialing. I am have been practicing for going on forty years and have observed expensive legislative efforts provide small changes in our scope of practice with decisions made by legislators with little or no knowledge of eyecare and how it is best performed. Having practiced in North Carolina for twenty years I participated in annual distributions of funds to various campaigns to fend off attempts by Ophthalmology to limit our scope of practice or fighting to include additional procedures we could perform. I have been credentialed through wet lab training and examination to perform many types of injections including peri- ocular injections to remove cysts or treat recalcitrant uveitis but I am currently unable to perform these procedures due to the limited scope of practice for Optometrists in Wa. It is a waste of time and expense for my patients to be referred to an Ophthalmologist who’ s time could be better spent doing necessary surgeries.</p> <p>Optometrists have an outstanding track record across the country in providing comprehensive primary vision care in an accurate safe, and highly efficient manor. We have been under the microscope for so long we practice paranoid medicine which results in good decision making and a high level of care for our patients. We routinely spend more time with our patients than other eye professionals and it is very much appreciated by my patients.</p> <p>It is well past time for optometry to determine its destiny . Please give strong consideration for this legislation . It will considerably improve overall vision care in Washington.</p>
Dr. Elizabeth Heaston Thompson	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been a practicing optometrist for 18 years, and I currently practice at the Heaston and Thompson Vision Clinic in Richland Washington.</p> <p>Washington’s current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>Because I practice in Richland about 25% of the patients I serve travel more than an hour to receive care. Routinely I have to refer the patient out to another clinic to have care like a papilloma (benign lesion on the skin, skin tag) removal or yag casulotomy (laser procedure performed after cataract surgery when the capsule clouds to obscure vision). I was trained to do these procedures 20 years ago in optometry school. At that time some already had the opportunity to treat their patients using these types of procedures. Besides having increased convenience for my patients there would be decreased cost to the health care system as the patient would not have another medical visit necessary, another facility fee and the cost of travel to incur.</p> <p>It’s important that Washington’s regulatory framework keeps up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you.</p>

Dr. Alison Jenson	Self	Support	Optometrist	<p>I am writing you today to express my support for the proposed revisions of the scope of practice for optometric physicians in the state of Washington.</p> <p>I have been practicing for one year near downtown Renton after I graduated in 2020 from the University of California, Berkeley School of Optometry. Upon graduation and the start of practice, I have been disappointed and frustrated to face challenges that my classmates and colleagues in other states do not face.</p> <p>In my four years in optometry school, I interned at an Indian Health Services hospital, Walter Reed Military Medical Center, and Jack C. Montgomery VA Medical Center, in addition to the in-school clinic we had at Berkeley. All of these places are respected sites where my knowledge and training were sincerely put to the test.</p> <p>At Jack C Montgomery VA Medical Center, I removed eyelid lesions with radio frequency devices, ensuring that my elderly patients who had travelled several hours to my office would not need to make unnecessary trips to the VA.</p> <p>At Berkeley, I practiced the technique for simple laser procedures with care and oversight such that I was given immediate feedback about form and positioning as well as troubleshooting and adverse effects of each procedure.</p> <p>The current scope restrictions in Washington not only force my patients to endure unnecessary pain and discomfort as they wait for their referred ophthalmologist, but in many cases are cause for extra copays, missed days from work, and economic strife. For many of my patients, their vision or ocular condition restricts them from driving, furthering the burden placed on them.</p> <p>It is unacceptable that Washington has not kept up with the changing technology, education, and standards available to optometrists to care for their patients. I ask that you please recommend that the legislature support the proposed changes in the scope of practice for optometric physicians.</p> <p>Thank you for your consideration,</p>
Jerry Gay	Self	Support	Public/Patient	<p>This letter is in support of expanding the procedures appropriately trained optometrists can perform in their clinical setting. This change will expand patient's access to and continuity of care, especially those with complicated cases and emergency needs.</p> <p>Several years ago, I suffered a pre-retinal hemorrhage in my left eye. I experienced symptoms of light flashes and eye floaters late in the evening. Thankfully, an optometrist friend advised me to seek care. At which point I was directed to see three different doctors in the next 14 hours to learn that I would not be able to see the specialists my case required for more than a week.</p> <p>This experience was exasperating. I can only imagine how difficult a similar situation would be for individuals who do not have the access to a vehicle, which I needed to visit multiple offices across the Seattle region, or the flexibility I had to suddenly take off work to accommodate these visits.</p> <p>Access to coherent care is important to all patients. It may well be the difference between getting care and not getting it for some.</p>
Dr. John Cheslock	Self	Support	Optometrist	<p>I am an optometrist in Cowlitz County Washington. I have been practicing here for 18 years. I support the proposed scope of practice expansion for our profession, and allowing the State Board of Optometry to be a decision maker in the future as is done in other states.</p> <p>Optometry is present in all but three of Washington's Counties. Ophthalmology is absent from 15 counties. This makes for poor care access in situations where we are educated and trained to perform tasks that we must then refer out.</p> <p>Our current scope of practice is so antiquated and behind other states, that new graduates will soon chose other states with more on trend laws. States where they can utilize more of their education.</p>

				<p>I am writing to express my STRONG OBJECTION to the request by the Washington State Optometric Board to increase the scope of practice of Washington Optometrists to allow performance of surgery and injections.</p> <p>I feel this expansion will jeopardize the health and safety of Washingtonians by permitting inadequately trained practitioners perform invasive surgical procedures. These procedures all have serious risks and should only be performed by providers with the appropriate training found in Ophthalmology residencies. We receive thousands of supervised patient care hours during residency and fellowship before we are performing these procedures on our own. Allowing optometrists, with no supervised training by surgeons, to perform said procedures will significantly increase the possibility of adverse outcomes for Washingtonians.</p> <p>I also STRONGLY OBJECT to allowing the Board of Optometry to regulate the performance of these procedures. Optometrists are not adequately trained to supervise and monitor for patient safety outcomes, nor are they qualified to regulate/police their optometrists in performing surgery. All surgical procedures should be regulated by the Washington State Quality Assurance Department.</p> <p>In addition, the claim that access to Ophthalmologists is limited does not ring true with the data. In fact, >97% of Washingtonians live within one hour of an ophthalmologist, making access very reasonable for most of our citizens.</p> <p>One final concern I have is that allowing optometrists to perform laser surgery will result in excessive and unnecessary treatments. In my practice, I am often referred individuals for evaluation for laser capsulotomy, as their vision is reduced. However, in roughly 25% of these referrals, the cause for vision loss is something other than the posterior capsule opacification. The lack of medical training and education results in over-diagnosis, and thus would result in over-treatment. This over-treatment could result in unnecessary treatments, along with additional cost to the patient and the insurers/government.</p> <p>In summary, I strongly oppose the expansion of practice that S – 3085.2/21 would allow. It would significantly jeopardize the safety of Washingtonians, while not increasing their access to care.</p>
Dr. Jay Rudd	Self	Opposed	MD	<p>My name is Daniel Nolan and I am an optometric physician practicing in the state of Washington. I am writing to add my support of the Optometric Physicians of Washington’s (OPW) proposal to expand the scope of practice amongst qualified doctors to treat patients to the highest level of their training.</p> <p>After completion of my undergraduate bachelors degree, completion of my doctorate of optometry, subsequent completion of a residency in ocular disease at Bascom Palmer Eye Institute and obtaining certification by the American Board of Optometry and Washington State Board of Optometry, I have been practicing for 5 years most recently at a busy surgical referral center alongside my ophthalmologist colleagues.</p> <p>Much has changed in my profession’s standardized education since such regulations were put to practice. My training has been rigorous and standardized and has included treatment of anterior segment eye conditions with lasers, use of oral steroid medications as well as removal of small ‘lumps and bumps’ along the eyelid margin. These are issues that are commonly seen in optometric clinics but in the current state, need to be referred out due to outdated regulatory restriction. Allowing these procedures to qualified optometrists would increase access to care. Care would be provided at the date of original consultation without needless wait times or dangerous delays. Care would be more widely available as optometrists are numerous, often practicing in rural areas. Lastly, costs to the health care system would decrease as fewer billable visits are required. Such an expansion of scope benefits patient access to care, improves measurable health outcomes at a fiscal benefit to state coffers.</p> <p>My competence is officially established through board certification with the Washington State Board of Optometry. To date, the state board of optometry has been tasked with regulating my profession and moving forward, this board is best suited to regulating an increased scope as well.</p> <p>Should you have any questions on how scope expansion is for the greater good, I am open to dialogue at any time through mail, email or telephone.</p>
Dr. Daniel Nolan	Self	Support	Optometrist	<p>I would like to send a quick note to support the expansion of optometry scope of practice.</p> <p>During my time at Pacific University College of Optometry we were trained to highest scope of practice in the country. This included removing sty, skin tags, eye warts; lid biopsy; YAG laser procedure for secondary cataract; eye lash cauterization etc. I was able to practice all those skills while in Oregon, and Oklahoma. When I returned home to Washington to practice I could not perform many of the skills I was trained for. I now have to tell my patients I can’t help or treat their ocular ailments because I am not allowed to by legislative law and I have to refer to another clinic. The scope restriction not only delays care, it also incurs extra medical costs to the patient.</p> <p>The proposed bill is to allow optometry to be regulated its own board just as doctors of medicine, dentists, podiatrists, and other health professions in our state is governed. Our board consists of optometrists who are understand the intricacies of the ocular system. They are medically trained to treat and manage eye diseases. It make sense that the board should be the ones making decisions on our scope of practice, not the politicians.</p> <p>All we ask is to allow optometrists in Washington state to perform procedures that other optometrists in other states have been safely performing for years.</p>
Dr. Van Ly	Self	Support	Optometrist	

Dr. Kelly Bui	Self	Opposed	MD	<p>I'm a practicing ophthalmologist with subspecialty training in medical retina. My years of training consisted of 4 years of medical school at the University of Washington School of Medicine, followed by a year of an internship in Medicine at the University of Michigan Health Systems. I then did my surgical training in ophthalmology for another 3 years at the University of Illinois in Chicago followed by a year of fellowship training in Medical Retina at the University of Southern California. At age 31, after going straight through without taking a hiatus, I finally finished my training to become a full-fledged ophthalmologist who is specialty-trained in ocular surgery, retinal injections, and retinal lasers. As you may be aware, optometrists train for 4 years at a college of optometry, not medical school, following college. Their training is focused on prescribing glasses with some limited teaching about medical diseases of the eye. There is no formal training in surgery or related procedures of the eye. As such, they are not equipped to perform injections or lasers to the eye. Our field is that of microsurgery. We use tiny instruments and a microscope to operate on the eye. It requires great hand-eye coordination as well as precision. As such, having an optometrist perform ocular surgery/procedures is like asking a nurse to put in a heart stent. I wouldn't want this for my family member, would you? As a matter of patient safety and optimal outcomes, I implore you to reject this bill.</p>
Dr. David F. Peck	Self	Opposed	MD	<p>Greetings: The proposed change in optometric practice to include surgery and providing medications by any route is both dangerous and unnecessary. The notion that a cursory familiarization course in these procedure ensures the competence of an MD with at least four additional years after medical school should speak for itself. There is no shortage of ophthalmologists in this state and allowing minimally trained providers to do surgery can only to increased complications and likely unnecessary procedures.</p>
Dr. Jennifer Crown	Self	Support	Optometrist	<p>I work for the Optometric Physicians of Washington (OPW) as the Grassroots Coordinator. I want to be sure to state the expressed opinions in this letter are my own, as a member of the optometry profession.</p> <p>I am writing in support of scope expansion for optometric physicians in Washington state. I began my career 15 years ago as a resident at the VA in Walla Walla. In the VA system I could practice to a higher level of care than I can now in private practice. This was important as our patients traveled from as far away as Ellensburg, Lewiston ID and La Grande OR. We often were able to save them from a second trip by doing a biopsy of a suspicious eyelid lesion or fluorescein angiography on the same day. This prevented delays in care, which could stretch for months in the winter. Despite my training, I was unable to perform these procedures when I left the VA system 3 years later.</p> <p>I worked in a private practice in Ellensburg for 5 years. The most frustrating thing about rural practice was not being able to perform procedures I was trained to do because of limitations in Washington's scope. I would refer to an ophthalmologist and often travel to Yakima was required. At that time there were more ophthalmologists than there are now. Now that I practice in the Seattle area, I find wait times and copays for extra visits still limit access to care when I refer to ophthalmologists. I hold an Oregon license and could legally perform these procedures across the border, in the VA system, and in the IHS system.</p> <p>Optometry is one of the few professions in Washington that must approach the legislature every time a new technology appears. This is time consuming and does not keep up with the pace of medical advancements. Optometry has not had a major scope change since 2003, before I graduated. A rule change could be done more often than every 18 years.</p> <p>I believe the proposed changes to optometry's scope of practice are appropriate and will benefit the citizens of Washington. It will attract optometrists to our state, and decrease wait times for patients.</p> <p>I ask you give the legislature your strongest recommendation to these proposed changes in optometry's scope of practice.</p>
Dr. Clemence Mendoza	Self	Support	Optometrist	<p>I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.</p> <p>I am a newly graduated optometrist with optometry licenses in both Washington and Oregon. I am currently completing a residency in Primary Care and Ocular Disease at the VA Portland Health Care System in Vancouver, WA and Portland, OR. Since I am born and raised in Bellevue, Washington and most of my family, friends and community is there I hope to be able to come back to Seattle area to practice optometry.</p> <p>Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.</p> <p>Since I am licensed in both Washington and Oregon, I am acutely aware of the limitations Washington state imposes on optometric physicians who have training in various procedures including intralesional injections on the eyelids or the ability to prescribe short-term oral steroids. I have received 4 years of training during optometry school in the most up-to-date procedures and evidence-based treatment and management but due to differences in legislation I would have to send patients who have entrusted me with their care to clinics across the Columbia River to be able to provide them with care I am not able to deliver in my home state should they require these procedures. In my short drive between Vancouver and Portland every week, an equally competent provider is limited merely by the need to modernize the current legislature in keeping up with our advances in eye care and best serving our patients.</p> <p>It is important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.</p> <p>In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you for your time.</p>

Dr. Landon Jones	Self	Support	Optometrist	<p>I am proud to be a Washingtonian but I am professionally limited by my state legislature and ask that our provider scope be expanded. I work in a referral practice of both optometrists and ophthalmologists and am expected to care for my patients at an extremely high level. I provide eye care for about 90 to 100 patients per week with an endless number of medical conditions from glaucoma to cataract to diabetic eye disease to corneal infections. My patients are often referred to me by other eye doctors and primary care doctors within the community so there is an automatic responsibility and expectation to provide the utmost care. This includes an accurate diagnosis, appropriate management, and timeliness to resolution so that a troubled patient can return to his or her normal life. I certainly confront obstacles to offering quality of care in Washington State due to the laws that govern my scope of practice.</p> <p>Our drug prescription authority is restrictive. I treat patients who are referred in with corneal conditions that are painful and have the potential for leading to permanent vision loss. Corneal graft rejection is an example where a patient requires immediate anti-inflammatory topicals and systemic medications that are currently off our optometry drug formulary. We as doctors understand adverse effects to medications as we already prescribe a vast array. I am in a conundrum caring for these referred patients when they present as I am restricted from treating them with an appropriate course of medications. The laws governing optometry in Washington State also negatively influence continuity of eye care. As a glaucoma eye care provider, I cannot conduct simple laser eye procedures that reduce patients' need for eye drops by lowering eye pressure despite being properly trained. These lasers are painless, quick, and non invasive. Our ability to offer these services would allow for better continuity of care and improved efficiency of care by reducing wait times and increasing patient access. Instead, I reschedule these patients with an ophthalmologist colleague which simply adds more burden to our practice and to the healthcare system.</p> <p>I chose an interesting profession where each state has various laws on how I can practice optometry. At the end of the day it is my opinion that laws limiting our professional scope lead to additional referrals and wait times for the people that suffer the most: our patients. Please consider utilizing a group of professionals that are capable and trained to do so much more for our patient population. I ask that you help us to achieve more appropriate optometry scope which enables better patient access to eye care in Washington State.</p>
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**Marshall B.
KETCHUM UNIVERSITY**
Southern California College of Optometry

Office of Dean

July 14, 2021

Washington State Department of Health
111 Israel Rd. SE
Tumwater, WA. 98501

Dear DOH Officials:

As the Dean of the Southern California College of Optometry (SCCO), I am writing to urge you to provide a favorable review of the proposed legislation updating the State of Washington's scope of practice laws for optometric physicians and bring them into closer alignment with laws in other states. I can attest optometric physicians are highly trained doctors who have completed undergraduate degrees and at least four years of specialized biomedical training at an accredited school of optometry, and must comply with strict licensing and continuing education standards. The attached "Doctor of Optometry Professional Education: A Review of Training in Ophthalmic Surgery Synopsis" accurately describes the education and training our students at SCCO receive prior to graduation.

Professional post-baccalaureate education of students pursuing a Doctor of Optometry (O.D.) degree consists of classroom, laboratory, and clinical education, including a progressive clinical experience over four years, similar to students pursuing an allopathic (M.D.) or osteopathic (D.O.) medical degree or Dental Medical Degree (D.D.S.). Optometry students focus on the eye, visual system, and associated systemic disease through classroom learning, laboratory exercises, and direct clinical care. Our curriculum includes 226 credit hours of instruction and 52% of that core is in ocular disease diagnosis, management, and pharmacology, clinical and ocular procedures included advanced techniques, and direct patient care. Our students have extensive hands-on experience with advanced procedures including the use of lasers and doing minor surgical procedures on the lids.

At the end of the four years, optometry students have the option of choosing a residency. At SCCO, nearly 30% of our graduating students complete a residency after graduation and receive additional specialized training in advanced procedures.

Admission requirements for optometric education remain consistent with U.S. pre- medical school requirements. To successfully gain admission, required pre- optometry undergraduate didactic and laboratory coursework is extensive and covers a wide variety of advanced health, science, and mathematics courses, including general biology, general chemistry, organic

chemistry, and physics. Additionally, optometry programs often require a host of associated coursework, some of which is beyond that required for M.D./D.O. applicants.

It is because of these rigorous standards of admission, advanced educational curriculum, and cutting-edge clinical course work that Doctors of Optometry are fully trained and qualified to meet the comprehensive ophthalmic needs of patients across the country, including Washington. Optometric physicians provide a valuable entry point into the health care system for many patients, and are often the first to diagnose serious health conditions such as diabetes, hypertension, multiple sclerosis, thyroid disease, high cholesterol, and cancer.

Many of the restrictions on optometrists' scope of practice in Washington prohibit procedures for which optometrists, have been trained and may have performed in other states when licensed there. Updating Washington's scope of practice laws would bring them into closer alignment with laws in other states, which have seen no increase in adverse patient outcomes from scope expansion. Expanding optometry's scope increases access to health care for Washington residents. Optometrists currently practice in all but three Washington counties, while 15 counties (nearly 40%) have no ophthalmologists. When optometrists are forced to refer patients to other providers for procedures they are trained to safely provide, it does not serve the patient well:

- Care may be delayed while waiting for an appointment
- The patient may have to travel a long distance and miss work to see a new provider
- Because of the inconvenience, the patient may fail to follow through on the referral to a new provider
- The patient may incur multiple co-pay expenses or incur expenses for multiple diagnostic tests
- Within their scope of care, research shows that optometric physicians provide equal care at lower costs compared to ophthalmologists

The proposed changes would authorize the State Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within the scope of practice. They would also eliminate ambiguity regarding what is and what is not included in the scope of practice of optometry and align optometrists' approved scope of practice consistent with national standards:

- Expanding the types of medications optometrists may prescribe, including oral steroids.
- Expanding the range of therapeutic procedures an optometrist may perform including injections, eyelid lesion removals, and board-approved laser procedures.

I understand, the proposed changes exclude many surgical procedures including cataract extraction, LASIK procedures, and posterior segment injections and lasers.

If I can provide additional information to aid you in your decision-making process, please do let me know. I can be reached at jcoyle@ketchum.edu or by phone at (714) 449-7473.

Sincerely,

A handwritten signature in black ink that reads "Jennifer Coyle". The signature is written in a cursive, flowing style.

Jennifer Coyle, OD, MS, FAAO
Dean



Doctor of Optometry Professional Education: A Review of Training in Ophthalmic Surgery

As with the exponential growth of medical knowledge in today's evolving health care arena, the profession of Optometry continues to incorporate the latest clinical technologies and advances in patient care. Optometric education in 21st century eye health and vision care continues to combine cutting-edge, expanded didactic and clinical curricula. For the U.S. to achieve optimum population health outcomes, this knowledge and expertise must be made adaptable to augmented community wide access. Doctors of optometry require modernization of state practice acts that incorporate today's educational and clinical advances into contemporary scope of practice.

Scope of practice of health care professions are defined by state legislatures. To address questions regarding what today's Doctor of Optometry graduates are learning and how they are trained in preparation to deliver comprehensive eye care, this document provides an overview of today's professional Doctor of Optometry programs.

Definition of Optometry

Doctors of optometry take a leading role in patient care with respect to eye health and vision care. Doctors of optometry examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify, diagnose and coordinate care of related systemic conditions affecting the eye. As primary health care providers, Doctors of optometry have extensive, ongoing training to examine, diagnose, treat and manage ocular disorders, diseases and injuries, and ocular complications and manifestations of systemic diseases. Doctors of optometry are the nation's front-

line primary eye care providers; doctors of optometry provide more than two-thirds of primary eye health and vision care in the U.S. Trend analysis of Medicare Physician/Supplier data show an increase of more than 740,000 patients for optometry and a decrease of more than 450,000 patients for ophthalmology, as measured over the last six years. This represents a 12.3% increase in total persons with optometry utilization and a 4.2% decrease in total persons with ophthalmology utilization, consistent with a growth of primary care.ⁱ

About Doctor of Optometry Training and Education

Professional post-baccalaureate education of students pursuing a Doctor of Optometry (O.D.) degree consists of classroom, laboratory, and clinical education, including a progressive clinical experience over four years, similar to students pursuing an allopathic (M.D.) or osteopathic (D.O.) medical degree or Dental Medical Degree (DMD). In the final two years when M.D./D.O. students are doing rotations to determine their specialty selection D.M.D./O.D. students begin a immersive training period of doctorate-level health care professional clinical study focused on their pre-chosen specialty. Optometry students focus on the eye, visual system, and associated systemic disease through classroom learning, laboratory exercises, and direct clinical care and dental students do likewise for oral systems. At the end of the four years optometry and dental students have the option of choosing a residency, whereas medical and osteopathic students must select and fulfill a residency requirement to practice their speciality.

In addition to concentrations on the eye, visual system, and systemic health, optometry students, progress through basic medical sciences in didactic and hands-on learning that includes:

- Histology, genetics, and biochemistry
- Human anatomy and physiology including whole body, head/neck, and eye
- Cell and molecular, biology, biochemistry, immunology, and pathology
- Microbiology, pharmacology, therapeutics, and pathology
- Neuroscience, with a concentration on the visual system
- Cardiovascular, respiratory, musculoskeletal, renal, gastrointestinal, and endocrine system anatomy, physiology and cell biology
- Clinical medicine of systemic diseases and disorders
- Principles of evidence based medicine.

Doctoral education also includes didactic and clinical education unique and specific to doctors of optometry in supporting their clinical care role and

comprehensive approach to assessment. The curriculum includes demonstrated competency in the knowledge of:

- Geometric, physical, and ophthalmic optics
- Ocular anatomy, physiology, and biochemistry
- Pharmacology
- Ocular diseases and disorders; anterior, posterior, and other structural diseases and their evaluation, management, and treatment
- Neuroanatomy and neuro-ophthalmic disease
- Ocular manifestations of systemic diseases and disorders and their treatment
- Visual neurophysiology and perception
- Binocular/developmental vision, and pediatrics
- Geriatrics; chronic visual impairment; vision loss
- Contact lenses; including therapeutic, refractive, and diagnostic applications
- Ophthalmic Surgery and ocular disease co-management
- Injections, lasers, and advanced ocular techniques.

Doctor of Optometry Training in the U.S. Department of Veterans Affairs

The U.S. Department of Veterans Affairs (VA) is home to the largest optometric clinical education externship program in the U.S, as an adjunct to the education that takes place in clinics at optometry schools/colleges. Every year there are about 1,400 opportunities for Doctor of Optometry candidates to rotate at VA medical facilities for clinical education and training. Each year over 80 percent of the approximately 1,700 graduates of accredited schools and colleges of optometry have performed public health care services at VA. All residents receive training in primary eye care and with VA's primarily geriatric patient population, the management of ocular disease is a significant portion of the training experience. In April 2020, the Veterans Health Administration (VA) issued Directive 1899 affirming that doctors of optometry and others should practice to the full scope of their licensure and training. In August 2020, VA rescinded Directive 1132, removing a previous ban that had prevented doctors of optometry from providing therapeutic laser eye procedures to veterans. As a result, optometric clinical education is expanding over time to ensure full scope training opportunities and better support the VA Optometry Service as it works to: provide care for about 80% of veterans receiving eye care services annually, perform about 70 percent of the more than 3.4 million select ophthalmic procedures, and provide nearly 99 percent of vision rehabilitation services in low vision clinics and blind rehabilitation centers each year.

Doctor of Optometry Program Admission Requirements

Admission requirements for optometric education remain consistent with U.S. pre-medical school requirements. Pre-optometry students are included in undergraduate pre-medical and health professional advising and counseling programs to ensure successful completion of college requirements and planning for successful candidate matriculation into optometry schools and colleges while achieving their undergraduate bachelor's degree.

To successfully gain admission, required pre-optometry undergraduate didactic and laboratory coursework is extensive and covers a wide variety of advanced health, science, and mathematics courses, including general biology, general chemistry, organic chemistry, and physics. Additionally, optometry programs often require a host of associated coursework some of which is beyond that required for M.D./D.O. applicants:

- Human Anatomy and Physiology
- Biochemistry
- Microbiology
- Genetics
- Calculus
- Psychology
- Biostatistics/statistics
- English
- Social science and other humanities.

Optometry Admission Test (OAT) and Other Standardized Exams

All schools and colleges of optometry accept the OAT. Many schools and colleges also accept the GRE, MCAT, DAT, or PCAT in lieu of the OAT. The OAT is a standardized examination designed to measure general academic ability and comprehension of scientific information. It consists of four subtests: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry), Reading Comprehension, Physics, and Quantitative Reasoning. The OAT is scored on a 200- to 400-point scale in increments of 10. At least one year of college education is required prior to taking the OAT, but most students elect to complete two or more years of college-level coursework prior to taking the exam.

Optometry Schools and Colleges

Optometry schools and colleges function either as private institutions, or as institutions within public universities as a component of a greater health care

medical and health sciences educational complex that includes medical, nursing, dental, and other health care professional programs. Ultimately, each accredited doctorate-level professional program must teach all necessary content for their graduates to pass professional national boards and meet state licensure requirements.

Accreditation

All optometry programs must meet extensive accreditation standards. As with other U.S. health care doctoral training programs, no person may be licensed to practice optometry in the United States unless they have graduated from an accredited school/college of optometry.

The Accreditation Council on Optometric Education (ACOE) is the only accrediting body for professional optometric degree (O.D.) programs, optometric residency programs and optometric technician programs in the United States and Canada.

ACOE is recognized as an accrediting body by two external agencies - the [U.S. Department of Education](#) (USDE) and the [Council on Higher Education Accreditation \(CHEA\)](#). Through periodic reviews by both USDE and CHEA, the ACOE demonstrates compliance with their respective criteria.

ACOE serves the public and the profession of optometry by establishing, maintaining, and applying standards to ensure the academic quality and continuous improvement of optometric education that reflect the contemporary practice of optometry. The scope of the ACOE encompasses professional optometric degree programs, optometric residency programs, and optometric technician programs. *In addition, schools/colleges are accredited by one of six regional organizations recognized by the [United States Department of Education](#) and the [Council for Higher Education Accreditation](#).*

There are currently 23 U.S. optometry programs and two in Canada accredited by ACOE.

National Boards

All 50 states require successful completion of parts of the National Board of Examiners in Optometry prior to applying for state licensure to practice as a doctor of optometry in the U.S.

The National Board of Examiners in Optometry (N.B.E.O.) is the independent, not for profit testing organization that oversees and administers board testing for doctors of optometry in the continental U.S. and Puerto Rico. Established in 1951, the mission of the NBEO is “to serve the public and the profession of optometry by developing, administering, scoring, and reporting results of valid examinations that assess competence.” Part I (Applied Basic Science) is taken the spring of the third year, Part II (Patient Assessment and Management) is taken in December of the fourth year, and Part III (Clinical Skills) is taken any time during your fourth year.

Special National Examinations

Additional voluntary examinations, including a national board certification exam and a laser and surgical procedures examination, have also been developed and are administered based on practice standards or evolving individual state licensure and advancing scope of practice requirements, and include:

- [American Board of Optometry Board Certification](#)
- [Treatment and Management of Ocular Disease \(TMOD®\)](#)
- [Advanced Competency in Medical Optometry \(ACMO®\)](#)
- [Laser and Surgical Procedures Examination \(LSPE™\)](#).

Doctor of Optometry Degree

Upon successful completion of optometry program requirements, candidates graduate from their accredited schools/colleges of optometry having earned and granted the degree, Doctor of Optometry (O.D.). Doctors of optometry are then eligible to apply for and take state licensure examinations. Individual U.S. state boards of optometry, as independent public agencies, determine requirements for licensure to meet state scope of practice guidelines.

Doctors of optometry can choose to participate in additional one-year post-graduate residency training programs following graduation from optometry school/college. This experience offers doctors of optometry focused training in a clinical area of optometric care such as pediatric optometry, primary care, cornea and contact lens, vision rehabilitation, and ocular disease.

The Doctor of Optometry Curriculum in Detail

While the sequence of course work varies from one program to another, some general characteristics are shared by all. In the first and second year of the

professional program, course work is concentrated in the basic and biomedical sciences (anatomy, physiology, pathology, biochemistry, pharmacology, and public health, optics, and vision science). These serve as the foundational underpinnings for clinical knowledge and application in the patient care setting. For example, the courses for anatomy and physiology are provided because they provide the required foundations necessary for surgical procedures. Furthermore, the course for physical optics is provided because this course provides the foundational knowledge to understand the properties of lasers. Patient care experience is incorporated with an increasing level of responsibility and increasing student learning expectations, culminating in a 12-month final year comprised entirely of direct patient care in a variety of clinical settings.

Typically, direct patient care experiences begin early in the curriculum. Students begin their clinical experience in pre-clinical skills laboratories with virtual reality simulators and classmates serving as patients in the first year, and then proceed to clinical training with real patients. This training includes obtaining full medical case histories, performing examinations, learning diagnostic and surgical techniques, and discussing treatment options and plans. As the curriculum progresses, students spend part of their time in the classroom and part of their time in the clinic examining, diagnosing and treating patients with acute and chronic eye diseases. The final year is entirely clinical training where clinicians are supervised one-on-one with an attending optometric physician, which includes off-campus clinical externship rotations. Sites for external rotations are available in the United States and abroad. Clinic settings include military facilities, Veteran's Affairs (VA) hospitals, public health service hospitals, community health centers, and various specialty and private practices. The lengths of the external rotations vary from eight to 16 weeks.

While it is not possible to include all curriculum outlines and course descriptions for every school/college of optometry, some sample course descriptions are included. These particularly focus on courses relating to advanced procedures or ophthalmic surgery. Full information on every institution's curriculum and course descriptions are available to the public on the individual schools/colleges' websites. Additional information is available via ASCO website at optometriceducation.org.

Example A: Western University of Health Sciences College of Optometry.
A composite listing of topics from various courses throughout the curriculum relevant to expanded scope of practice.

In the following section, a composite list of relevant topics is summarized. Because relevant content may be introduced in one course in the curriculum, may be reinforced in another course in the curriculum, may reach a higher level in another course in the curriculum, and may be applied in a subsequent course in the curriculum, it may not be readily evident that all of the important content is embedded within our curriculum simply upon review of the course descriptions provided. Here is the composite list of topics that span our curriculum:

- laser physics, hazards, and safety
- biophysics of lasers
- laser application on clinical optometry
- laser tissue interactions;
- laser indications, contraindications, and potential complications
- gonioscopy
- laser therapy for open angle glaucoma
- laser therapy for angle closure glaucoma
- posterior capsulotomy
- common complications: lids, lashes, lacrimal system
- medicolegal aspects of anterior segment procedures
- peripheral iridotomy
- laser trabeculoplasty
- minor surgical procedures
- overview of surgical instruments, asepsis
- surgical anatomy of the eyelids
- emergency surgical procedures
- chalazion management
- local anesthesia: techniques and complications.

OPTM 8120 Principles and Practices of Optometry VI: Laser Eye Procedures and Minor Surgical Eye Care (2.0 credit hours)

This course covers the uses of lasers to perform certain surgical eye procedures, including laser therapies for open angle glaucoma, for angle closure glaucoma, and for posterior capsulotomy. The course will include a review of laser biophysics, laser-tissue interactions, as well as contraindications and complications associated with laser procedures on ocular tissues. This course will also cover surgical preparation and management of lid and adnexal lesions with an emphasis on benign neoplasms and chalazion. Additional topics include medicolegal aspects of surgical eye care and postoperative wound care. The lab portion of the course will provide hands on experience in suturing techniques and ophthalmic laser operations.

OPTM 8021 Principles and Practice of Optometry V: Special Procedures (2.0 credit hours)

This course will cover the theory and methods of clinical techniques that build upon basic examination skills acquired during the courses Principles and Practice of Optometry I through IV. Clinical techniques including scleral depression, A- and B-scan ultrasonography, punctal occlusion, punctal dilation and irrigation, removal of foreign bodies from the cornea and conjunctiva, and the injection techniques of IM, SubQ and IV will be presented in a hands-on format. The course will include non-glaucoma visual fields and applications of significant optometric thought processing.

OPTM 6175 Ocular Disease: Diagnosis and Treatment of the Posterior Segment (4.0 credit hours)

This course builds upon the framework presented in the Principles and Practice of Optometry curricular track to present advanced concepts in ocular disease management. The anatomical, physiological, histological, and pathological processes of ocular disease will be emphasized. Topics include in-depth discussion of diseases and abnormalities of the vitreous and retina as well as vitreo-retinal pathology associated with systemic diseases.

OPTM 6073 Ocular Disease: Diagnosis and Treatment of Glaucoma (2.5 credit hours)

This course covers the pathophysiology, diagnosis, treatment, and management of patients with all forms of glaucoma, with an emphasis on evidence-based therapeutic interventions. The course includes technique and interpretation of visual fields for glaucoma diagnosis and management. Topical and systemic medical therapies will be emphasized. The course will also discuss current surgical management of various forms of glaucoma.

OPTM 6053 Optical Science: Physical Optics (3.0 credit hours)

This course presents the physics of light, including the wave and particle behavior of light. In particular, the course will include the characteristics of electromagnetic radiation, wave motion, total and partial coherence of light, interference, diffraction (single slit, double slit, gratings, circular apertures), zone plates, polarization, birefringence, anti-reflective lens coatings, lasers, emission and absorption spectra. Examples of applications in vision science and ocular diagnostic instruments will be provided.

OPTM 5133 Systemic Pharmacology (2.0 credit hours)

This course will cover medications commonly prescribed for systemic conditions, their indications and mode of action, as well as their ocular and visual side effects and toxicities. Topics include pharmacodynamics, pharmacokinetic aspects of drug formulations, routes of administration, and dosing & elimination, with an emphasis on drug indications, mechanisms of action, adverse effects, drug interactions, and contraindications. Additionally, a review of the pathophysiology of systemic diseases as it relates to current drug treatment paradigms will reinforce the connection between the medications and their corresponding indications.

OPTM 5130 Ocular Physiology (3.0 credit hours)

This course presents in depth coverage of the physiology of the eye, adnexa and visual systems. Topics include the physiology of the eyelids, lacrimal gland and its apparatus, tear production, cornea and lens, ocular fluid dynamics, vitreous body, retina, choroid and optic nerve. Topics of visual function and nutrition related to development and normal ocular function will be covered. When possible, relevant comparisons to disease states will be discussed to show the clinical relevance of the physiological concepts. The topics related to visual function includes, visual acuity, color vision, contrast sensitivity function, in health and disease states, accommodation function and decline in accommodation function with aging and presbyopic changes.

OPTM 5041 Anatomy for the Optometrist (4.0 credit hours)

This course covers all aspects of anatomy relevant to the practice of Optometry. Course content covers broad aspects of gross anatomy. Ocular anatomy is covered in detail including adnexa, orbit, orbital content, structure, and functional relationship of various ocular structures and their clinical importance. Through lectures and laboratory exercises students are introduced to the anatomy of the head and neck and neuroanatomy. Particular attention is paid to the cranial nerves, both their normal function and the numerous clinical syndromes that affect them as they pertain to optometric practice.

Sample topical outlines for selected content areas relevant to expanded scope of practice [selected courses only] In the following section, some samples of topical outlines are provided. These outlines go beyond the course descriptions to provide another layer of detail to more fully elaborate on the curricular content. The samples do not represent the entirety of the course content, and merely provide a portion of the content that is particularly relevant to demonstrating the education and training in support of expanded scope of practice.

OPTM 8120 Sample Topics

- Cataract surgery in Review
- IOL calculations and IOL types (premium IOLs)
- Femtosecond Laser-Assisted Cataract Surgery (FLACS)
- Post-op cataract complications
- LASIK in Review
- Post-op LASIK complications
- Innovations in corneal refractive procedures SMILE procedure
- Safety overview for minor surgical procedures: indications, surgical procedures. Instrumentation, anesthesia, asepsis & OSHA, medicolegal aspects, management of anaphylaxis & other complications
- Laser glaucoma procedures
- Gonioscopy review & ALT/SLT procedures
- YAG posterior capsulotomy
- Peripheral Iridectomy (PI)
- YAG cap, PI, ALT laser procedures (3-hr lab with proficiency)
- Minor corneal procedures: FB removal, amniotic membranes
- Corneal FB removal, lid speculum, pressure patch, amniotic membrane (2-hr lab with proficiency)
- Basic lid procedures e.g. chalazion, benign lesions
- Oculoplastic Procedures
- Glaucoma surgeries e.g. MIGS, trabs, tubes Retinal laser procedures e.g. PRP, macular grid
Surgical Retinal Procedures
- Suturing and subdermal injections (2-hr lab with proficiency)

OPTM 8021 Sample Topics

- Injections
- Reclined BIO
- Scleral Depression BIO 3-Mirror Fundus Ocular Foreign Bodies Punctal Plugs
- Dilation & Irrigation
- Cataract Surgical Procedures
- Anterior Segment OCT Refractive Surgeries
- Fundus Auto Fluorescence Sample Assessments
- Demonstrate ability to perform the complete process of injections for IM
- Demonstrate ability to perform the complete process of injections for IV
- Perform complete process of specialty testing suite including Interpretation and Report
- Integrate specialty fundus exam techniques (scleral depression BIO and 3-Mirror fundus lens) suitably into ocular health evaluation
- Examine angles with four mirror lens
- Discuss the processes and procedures of ocular cataract surgeries
- Discuss the processes and procedures of corneal refractive surgeries
- Demonstrate ability to perform Anterior Segment OCT
- Examine the retina using FAF
- Perform the sequence of managing corneal foreign bodies
- Complete process of ultrasonography
- Safely implement punctal health procedures of dilation/irrigation and plugs

OPTM 6053 Sample Topics

- Laser Theory and Clinical Laser Applications
- Spontaneous emission
- Stimulated emission
- Three-level ruby laser
- Brewster windows
- Laser types
- Helium Neon laser
- Pulsed laser
- Mode locking
- Q-switching
- Lasers in eye care
- Laser tissue interaction
- Photocoagulation
- Photoablation
- Photodisruption

OPTM 6073 Sample Topics

- Surgical management
- Laser options
- Types of surgeries
- MIGS
- Consideration in selection of procedures

- Transitioning from medical to surgical options
- Future developments
- Anaphylaxis and other office emergencies
- Post-operative wound care

Example B: The Ohio State University School of Optometry

At The Ohio State University College of Optometry, in addition to basic systemic anatomy, physiology, pathology, and pharmacology coursework, our students also extensively study the structure, function, and pathology of the eye and orbit. This coursework is not taken by any medical student. Relevant highlights of our curriculum include (course outlines enclosed):

1. A detailed course in ocular anatomy with both didactic and hands-on laboratory inspection and dissection of the globe, histological examination of all ocular tissue, and examination of all nervous and vascular supply to the orbit. This course covers a complete tissue study of every layer and tissue of the lids, conjunctiva, and globe in addition to the anatomy of the orbit. This course comprises 50 hours of didactic lecture and 30 hours of hands-on laboratory work.
2. A detailed course in the physiology of the eye and orbit. This course covers all fluid dynamics of the globe, detail on all immunological and inflammatory mechanisms of ocular trauma, and a discussion of blood flow, lymphatic drainage, neural control, etc. This course comprises 50 hours of didactic coursework.
3. An extensive course in the optical structures of the eye discussing in detail the exact thicknesses, curvatures, changes of these structures over lifetime, measurements of these structures using instrumentation and interpretation of these images. This course is comprised 50 hours of didactic lecture and 30 hours of laboratory hands-on work.
4. A 28-hour course in the understanding of lasers and ionizing radiation and its interaction with human tissue. A 50-hour course in the clinical use of optical instruments such as slit lamp biomicroscopes, funduscopy lenses, etc. with extensive training and practice in the precise use of these instruments and practical examinations ensuring that every student is proficient in the precise visualization and clinical interpretation of the health/pathology of each layer of the eye.
5. An extensive clinical rotation in which our students conduct complete vision examinations on patients under the direct supervision of licensed attending optometrists. These examinations typically include complete slit lamp biomicroscopic examinations of the eye and adnexa of each patient, thereby ensuring excellent skills in these procedures, e.g., examination and clinical interpretation of ocular tissues and treatment and management of inflammation and infection of any part of the visual system. At Ohio State each student currently completes approximately 1700 full eye examinations before graduation.
6. A 30-hour course in direct training (didactic and hands-on laboratory) in the area of lasers,

injections, and advanced procedures that has been approved by all states with advanced optometric scope as meeting the needed didactic and hand on procedures for licensure in those states.

7. A 17-week (40 hours per week) rotation in their fourth year in an ophthalmology office or surgical co-management site where students work directly with ophthalmologists in pre- and post-surgical care, thereby learning the diagnosis and treatment of complications of ophthalmic surgery, surgical candidate selection and observation of surgical procedures.

Example C: University of Alabama at Birmingham School of Optometry

The fundamental curricular contents required for advanced procedures, including ophthalmic laser surgical procedures, injections, and minor surgical procedures, are woven into the UAB School of Optometry curriculum from the 1st year of school and into the 4th, and include systemic and ocular anatomy, physiology, microbiology, pathology, biochemistry, pharmacology, management for conditions in eye care – with over 1000 hours of didactic and laboratory contact time for each student not including clinical encounters through clinical/patient care. In the first and second year of the program, optometry students take the same systemic curriculum as the dental students and medical students (Fundamentals in Health Sciences, Neuroscience, Gross Anatomy, Cardiovascular, Respiratory, Gastrointestinal, Musculoskeletal/Skin, Hematology, Endocrine, and Renal Systems) which was the design of the medical optometry curriculum from its inception in 1969.

2019-20	CONTACT HOURS
FUNDAMENTALS I	92
CLINICAL OPTICS	96
OCULAR ANATOMY	64
PHYSIOLOGY	64
BIOCHEM	24
FUNDAMENTALS II	92
SYSTEMS	290
OCULAR MICRO	16
VISUAL OPTICS	96
CEVS III (SLE, BIO, GONIO)	152
PHARM	64
ANT SEG	96
POST SEG	56
GLAUCOMA	24
NEURO	32
CLINICAL MANAGEMENT	48

TOTAL RELATED	1306
INJECTIONS MSP	48
LASERS	16.5
TOTAL RELATED	64.5

In order to ensure that students are able to apply fundamental concepts clinically, and perform surgical procedures, there are two required, stand-alone courses for injections/minor surgical procedures and ophthalmic lasers (OPT 326 and OPT 323), and have been since 2008 and 2012 respectively. These two courses account for an additional 46 contact hours. OPT 326 and OPT 323 were designed based on the broadest scope of optometric practice and utilize standardized high fidelity model-based practices to ensure safety and essential skills. The courses do not simply teach technical skills, but cover anatomy, pharmacology, clinical application, indications, contraindications and management of potential complications. Furthermore, faculty for the OPT326 and OPT 323 courses are only those who are certified in the surgical procedures.

**Example D: Northeastern State University Oklahoma College of Optometry
Select Course Descriptions – NSU Courses with Surgical and Laser Correlates**

5103 General Pharmacology

General principles of drug action and specific systemic treatment. Mechanisms of action and therapeutic guidelines for: autonomic drugs, anti-infective agents including those used for prophylaxis pre- and post-operatively, anti-inflammatory agents, agents used in the treatment of allergy, major drugs acting on the CNS, cardiovascular, kidney, and endocrine systems, agents used for local or infiltrative anesthesia and analgesia relevant to office-based procedures, antiseptic agents and common over-the-counter drugs. Adverse side effects and drug interaction of commonly prescribed pharmaceuticals.

4126 Geometric and Physical Optics

Imaging of light: ray tracing through optical systems; aberrations and optical systems design. Physics of light: sources, spectra, scatter, polarization, refraction, reflection, absorption, interference, diffraction. Theory behind diagnostic and therapeutic ophthalmic lasers. Lecture and laboratory.

4271 Interpersonal Communications

Interpersonal and interprofessional relationships. Creating and enhancing a professional image; communicating with patients; interpreting patient complaints and concerns; enhancement of patient understanding and compliance; interviewing and history taking techniques; referrals; surgical co-management; dealing with difficult patients.

5203 Ocular Pharmacology

Principles of ocular pharmacology and medical treatment, clinical administration of oral, topical, and injectable drugs and utilization of diagnostic agents in the clinical/surgical care of the eye and adnexa. Principles and specific management and treatment of ocular disease, trauma, anterior segment surgery, and laser treatment/surgery by systemic, local, and topical therapy, including antisepsis. Clinician responsibility in the treatment and management of ocular and systemic complications of pharmaceutical use.

4133 Clinical Immunology and Microbiology

A study of the cellular and biochemical aspects of the human immune system and the immune response to infectious disease. Abnormal immune responses will be discussed. Lectures will also cover microbial aspects of infectious diseases (including postoperative infections) caused by bacteria, viruses, fungi and parasites, with emphasis on pathogenic mechanisms, host-pathogen interaction and antimicrobial therapy.

7101 Systemic Therapy in Ocular Disease and Trauma

Basic systemic therapy in ocular disease. Clinical indications, dosage, drug interactions, and common complications of enteral and parenteral medications utilized in ocular disease. Management of surgical post-operative complications with systemic medications.

7132 Differential Diagnosis of Ocular Disease and Trauma

A review of ocular disease, including eyelid lesions, and trauma with emphasis on clinical presentation, adjunctive testing, differential diagnosis as well as treatment with oral agents, topical agents, office-based surgical procedures and therapeutic lasers.

6223 Strabismus and Amblyopia

Basic principles of strabismus and amblyopia. This will include the symptoms, signs, diagnosis, test administration, test data analysis and therapy with lenses/prisms, vision therapy, and surgical options including procedures, referral criteria and outcomes. Lecture and laboratory.

5183 Optometric Clinical Methods III

This course emphasizes instrumentation and procedures for the detection, diagnosis, and management of pathological conditions. Includes introduction to office-based surgical procedures. Credit will not be awarded for Optometry 5183 until the pre-clinical examination has been completed successfully. Lecture and laboratory.

4213 The Human Nervous System

Structure and function of the central, peripheral, and autonomic nervous systems including anatomic correlates to periocular sensory anesthesia. Particular emphasis is placed on the anatomy and physiology of the visual system as it applies to the processing of visual information. Lecture and laboratory.

6081 Optometric Case Studies I

Case presentation and a discussion of selected topics in optometric clinical care including optometric surgical and laser procedures by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

6251 Optometric Case Studies II

Case presentation and a discussion of selected topics including optometric surgical and laser procedures in optometric clinical care by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

7081 Optometric Case Studies III

Case presentation and a discussion of selected topics in optometric clinical care including optometric surgical and laser procedures by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

7171 Optometric Case Studies IV

Case presentations and discussions of selected topics in optometric clinical care including optometric surgical and laser procedures by faculty, students, and invited speakers. Current literature will be explored which applies to the subjects under discussion.

5273 Ocular Disease I:

Cataracts, Corneal, and External Ocular Disease Epidemiology, pathophysiology, differential diagnosis, management, and treatment of cataract, corneal and external ocular diseases, including disorders of the crystalline lens, eyelids, lacrimal

system, conjunctiva, cornea, sclera and episclera. Includes cataract pre-operative and post-operative care as well as indications for treatment of posterior capsular haze with the Nd:YAG laser. Also includes instruction of office-based surgical procedures for the treatment and relief of ocular abnormalities.

5291 Clinical Practice I

Performance of clinical procedures and observation with case discussion. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes observing and assisting faculty, residents and upper-class students with office-based minor surgical procedures, including anterior segment laser procedures.

6093 Clinical Practice II

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office based surgical procedures, including anterior segment laser procedures.

6195 Clinical Practice III

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment, and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office based surgical procedures, including anterior segment laser procedures.

6295 Clinical Practice IV

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office-based surgical procedures, including anterior segment laser procedures.

7095 Clinical Practice V

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office-based surgical procedures, biopsy and anterior segment laser procedures.

7196 Clinical Practice VI

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment, and management of vision conditions and other health problems. Optometric examinations conducted under the supervision of clinical faculty within clinical and hospital settings. Includes performance of office-based surgical procedures, biopsy and anterior segment laser procedures.

7293 Clinical Practice VII

Clinical practice under supervision of clinical faculty in the screening, examination, diagnosis, treatment, and management of vision conditions and other health problems in on- and off-campus clinics. Optometric examinations conducted under the supervision of clinical and adjunct faculty within clinical, private practice and hospital settings. Includes performance of office-based surgical procedures, biopsy and anterior segment laser procedures.

6231 Optometric Clinical Methods IV

Course topics covered include instrumentation and technical skills necessary for surgical procedures performed in the primary eye care setting. Includes OSHA regulations pertaining to blood borne pathogens. Included techniques are: asepsis, iv injections, fluorescein angiography, management of anaphylaxis, wound management, basic suturing, and in-office minor surgical procedures. The course discusses the indications for, alternatives to, and risk/benefits of all techniques, as well as the management of complications. The course includes lecture and hands on participation.

4264 Ocular Anatomy and Physiology

Gross and microscopic anatomy of the orbit and its contents including the globe, muscles, bone structure, blood and nerve supplies; embryology, histology, anatomy and physiology of the eye including the chemical composition, metabolic activities; physiological functions of the various tissues of the eye and related structures including sensory and motor innervation of the face and biomechanics of the eyelid as relevant to office-based eyelid surgical procedures. Lecture and laboratory.

7042 Office–Based Surgery

The role of office-based surgical practice within the comprehensive scope of current optometric practice. Application of evidence-based medicine and basic science human anatomy to office- based surgical patient selection, planning, instrumentation, procedures, anesthesia, and pre- and post-operative care.

7031 Ophthalmic Applications of Lasers

Laser biophysics, hazards, safety precautions, indications and contraindications for specific procedures, performance of the procedures, and follow-up care including management of complications are reviewed.

Example E: University of Pikeville, Kentucky College of Optometry

OPT 715 Advanced Topics in Ocular Disease Management

This course is a continuation of OPT 628. It includes discussion of advanced procedures and recent discoveries pertaining to the detection, diagnosis and management of posterior segment disorders.

OPT 716 Glaucoma Diagnosis & Management

This course is a comprehensive presentation of primary and secondary glaucomas, including etiology, mechanisms, prevalence and classification. The course emphasizes diagnostic testing including the use of advanced technologies, imaging procedures, photographic techniques and management options including medical, surgical and laser procedures.

OPT 717 Inter-Professional Clinical Case Analysis & Management

Clinical cases involving multi-disciplinary involvement will be presented. Participation will include discussion by physicians, nurses, pharmacists, social workers, public health personnel, and other professional personnel as well as optometrists to exemplify and provide proper sequential and/or parallel management and arrive at an integrated approach in solving the patient's issues.

OPT 722 Epidemiology and Research Methodology Epidemiology

Discusses the factors that concern the frequency of occurrence of certain eye diseases or conditions among a defined population, particularly rural areas of Appalachia and other rural areas in America, and their effect on the health and well-being of their patients. It discusses screening, standards of care and reviews major epidemiological eye studies together with those determinants that contribute to ocular diseases and conditions in aging and poverty. Other topics include those factors that contribute to or worsen the effect of visual impairment such as pharmacological factors or cognitive impairment in the aged population or psychological factors in the young. There is also a detailed analysis of health care policy. Research Methodology covers development of a research question, experimental design, specific aims and statistical analysis, writing of the research proposal, grant applications, regulatory requirements related to human subject and

animal research, CITI and other mandatory training for carrying out research and clinical trials, presentation of papers and posters and publication in refereed journals.

OPT 723 Clinical Internship IV

The student continues supervised clinical patient care with emphasis on the intern delivering care in the role of the provider. As in Clinical Internship III, care is supervised by KYCO clinical faculty and will take place mainly in the KYCO primary care clinics within the College and at one or more KYCO network clinics. Case conferences and Grand Rounds experiences will be assigned. Emphasis is upon correct interpretation and management of refractive and disease cases that have moderate complexity.

OPT 725 Neuro-Ophthalmic Disease, Neurological Disorders & Acquired Brain Injury

This course provides an in-depth discussion of the diagnosis of and management strategies for various neurological disorders that can affect vision and visual perception. Other systemic conditions such as some of vascular or cardiac etiologies or space-occupying lesions of the brain may also contribute to visual abnormalities or loss. Testing and neurological evaluation is discussed in depth and is accompanied by various radiological and other technologies that help the diagnostic process. The diagnostic strategies for the confirmation of acquired brain injuries are also covered in detail.

OPT 726 Clinical Medicine & Systemic Disease: Management & Co-Management

This course covers the major systemic diseases that have ocular and visual implications and reviews their etiology as discussed in pathology, the patient's signs and symptoms and other clinical assessments in order to not only reach a definitive diagnosis but also develop effective management plans. Since many systemic diseases have ocular correlates or implications, management often takes the form of co-management. The course will emphasize certain diseases such as diabetes, cardiovascular disorders, infectious and other conditions prevalent in the general and Appalachian populations.

OPT 727 Ophthalmic Surgery I: Laser Procedures

This course provides instruction and laboratory experience in advanced ocular therapeutic laser procedures. Topics will include a review of laser physics, tissue interaction, laser hazards and safety, and laser treatment protocol. As part of this

course, students will perform simulated laser treatments as well as receive instruction for providing pre and post-operative patient care in preparation for the clinical application of these procedures.

OPT 728 Optometry Review I

This course will review basic concepts focusing on the content presented in past and ongoing courses coordinated with the matrix outlined by the National Board of Optometry and the Accreditation Committee on Optometric Education. Targeted topics include principles of optics, general and ocular pharmacology and pharmacogenetics, and systemic and ocular disease. The goal of the course is to help participants prepare for their national board and state licensure exams, driving the course content.

OPT 731 Pre & Post-Operative Management of Ophthalmic Surgery Patients

This course presents the evaluation and management, including surgical decision-making in the care of the pre-operative candidate patient for ophthalmic surgery. All pre-surgical testing, counselling and preparation of the patient is presented as are the post-operative procedures, medications, and device management.

OPT 732 Advances in Optometry & Ocular Imaging

This seminar course is intended for presentations on contemporary and future innovations in the practice of optometry from the development of new technologies and instrumentation, to better management strategies, research in pharmacogenetics, detection of markers predictive of disease, pharmaceutical discoveries and better optical solutions to current refractive disorders. A wide array of advanced corneal and refractive imaging systems devices will also be introduced.

OPT 733 Clinical Internship V

Continuing supervised clinical patients care with emphasis upon the intern delivering care in the role of the provider. Care will be supervised by KYCO clinical faculty and will take place mainly in the KYCO primary eye care clinics within the College and at one or more KYCO network clinics. Case conferences and grand round experiences will be assigned. Emphasis is upon correct interpretation and management of refractive and disease cases that have high complexity.

OPT 735 Ophthalmic Surgery II: Injections & Periocular Surgery

This course provides an introduction to minor periocular surgical procedures including informed consent, OSHA guidelines and asepsis, sterile techniques, lesion removal, and post-operative wound care. Various techniques, including

radiofrequency surgery will be discussed. Injection topics include indications and techniques for periocular injections, venipuncture, local anesthesia, and emergency procedures for anaphylaxis.

OPT 811, 812, 813, 821, 822, 823, 831, 832, & 833 Clinical Externships

The fourth year rotations occur within the KYCO clinical network and include direct supervised patients care in the Primary Eye Care clinics with rotations to appropriate clinical facilities for direct and observed supervised clinical experience in specialty eye diseases, contact lenses, pediatrics, low vision, ophthalmic dispensing services as well as observational participation in other medical specialty clinics. Clinical management by interns during the fourth year is expected to reflect an ability to evaluate and manage a complex case load including surgical care.

Recent scope expansions

All states have updated their optometric practice acts over the years to some extent, e.g. prescriptive authority and foreign body removal. Other states permit some if not all the latest procedures being taught in optometry programs today.

Scope of Optometric Practice in 2020

The scope of optometric practice in the U.S. continues to evolve. State practice acts define what is included in care delivered by doctors of optometry. Some states have kept pace with expanding health care and clinical technologies and have updated individual practice acts to reflect the evolving health care landscape. Emerging clinical procedures- often referred to in statutes as ‘advanced procedures’ - and new therapeutic treatment options are currently allowed in some, but not all, states throughout the country.

Several states currently have optometric practice acts which include in their scope the ability to perform ophthalmic surgery such as but not limited to: injections of diagnostic and therapeutic pharmaceutical agents; drainage and/or removal of eyelid chalazia, cysts, abscesses, bullae and seroma; excision and biopsy of cutaneous lesions; repair of eyelid lacerations, removal of foreign bodies of the cornea and conjunctiva; probing/irrigation of the lacrimal drainage structures; the use of ultraviolet, visible, and infrared radiation for treatment of specific ocular conditions; and the use of radiofrequency and thermal cautery.

The term “ophthalmic surgery” is recommended as a description of skills doctors of optometry should possess in order to meet the needs of the patient population adequately. These procedures may be routinely performed in the typical office of a

doctor of optometry, as surgical procedures and the management of their possible complications fall well within the established optometric curriculum, assessment tools, and documentation of the Association of Schools and Colleges of Optometry institutions.

The document below was developed to establish general guidelines for all optometry schools/colleges to reflect the current state of ophthalmic surgery in 2020. For states that already permit these advanced procedures, optometry schools/colleges had to submit legal affidavits stating that their curriculums covered training on these procedures. Every school/college in the U.S. has submitted legal affidavits to those state licensure boards testifying that they do teach and educate their graduates to perform these procedures.

Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Ophthalmic Surgery

Process

The framework draws substantially from the Accreditation Council for Graduate Medical Education (ACGME) core competencies, the previously mentioned ASCO 2011 “Attributes” Report, the ASCO Functional Standards for Optometric Education referenced during the admissions process at all schools and colleges of optometry, Accreditation Council on Optometric Education (ACOE) standards for the professional optometric degree, Northeastern State University Oklahoma College of Optometry (NSUOCO) Surgical Anatomy and Introduction to Office-based Surgery (OPT 7042) Course, and coursework of Southern College of Optometry, and the Illinois College of Optometry.

The framework does not specify an exact number of credit hours, contact hours, observations or performed procedures. Educational research over the past two decades has advanced our knowledge of learning and techniques best suited to facilitate learning. The strategies and methods recommended today are not limited to the strategies of the past. Thanks to the emergence of new technology-based educational tools, we can now offer today’s learner a more valuable experience based on interaction and experimentation.⁹ Studies have demonstrated that authentic learning activities support the acquisition of knowledge that cultivates the kinds of skills that are lasting and more portable.¹³

The three pillars for the core competencies for entry-level ophthalmic surgery include: **1) Professional Values and Ethics; 2) Knowledge; and 3) Skill**. Each core competency is accompanied by a list of suggested objectives which provide examples of activities to measure knowledge, skill, and outcomes. **The framework is a starting point and is not meant as a prescriptive list of activities to restrict, limit, or regulate.** In fact, the project team looks forward to broad engagement and discussion with stakeholders to facilitate implementation.

The “skills” competencies expand upon the entry-level student learning outcomes in the 2011 ASCO Attributes Report, which include: “...the ability to prescribe or use ophthalmic materials, contact lenses, vision therapy, low vision devices, pharmaceuticals, and certain surgical procedures, to treat and otherwise manage common vision disorders and disease,⁴ “and specific procedures utilizing injections, biopsy, excision, curettage, irrigation, ultraviolet radiation, radiofrequency and thermal cautery, to treat and manage vision disorders and disease.

A. Professional Values and Ethics

- A.1. Expected to provide patient care that is compassionate, appropriate, and effective for the promotion of health and the treatment of health problems.
 - A.1.1 Be respectful and responsive to individual patients’ preferences and needs, and ensure their values guide all clinical decisions¹
 - A.1.2 Be mindful and apply varying dimensions of compassion including attentiveness, active listening, helping, and understanding²
- A.2. Expected to demonstrate the ability to investigate and critically evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on perpetual self-evaluation and life-long learning.^{3,4}
 - A.2.1 Identify strengths, deficiencies, and limits in one's knowledge and expertise
 - A.2.2 Systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement
 - A.2.3 Incorporate formative evaluation feedback into daily practice
 - A.2.4 Employ evidence-based practice and participate in learning and research activities to the extent possible⁷
 - A.2.5 Working knowledge of applicable Clinical Practice Guidelines (AOA) and Preferred Practice Patterns (AAOphthalmology)
 - A.2.6 Set learning and improvement goals
- A.3. Demonstrate a commitment to fulfilling professional responsibilities and an adherence to ethical principles.
 - A.3.1 Responsiveness to patients needs that supersede self-interest
 - A.3.2 Compassion, integrity, and respect for others
 - A.3.3 Demonstrate commitment to continuity of surgical care
 - A.3.4 Accountability to patients, society and the optometric profession
 - A.3.5 Refer to and make visible the Optometric Oath as a resource guiding clinical practice

- philosophy
- A.3.6 Adherence to patient privacy and protection policies
- A.4. Participate in identifying system errors and implementing potential systems solutions, including participation in disease and clinical registries and government reporting programs as appropriate.
- A.4.1 Apply quality improvement to identify hazards in patient care with the objective to improve outcomes⁷
- A.4.2 Participate in a qualified clinical data registry, like AOA MORE
- A.4.3 Participate in prescription monitoring programs (PMP)
- A.4.4 Awareness of reporting options and requirements to state, regional, or national authorities
- A.4.5 Maintenance of procedure logs in various practice settings
- A.4.6 Report adverse outcomes in ophthalmic surgery as part of quality assurance

B. Knowledge

- B.1. Expected to demonstrate knowledge and application of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences to patient care.
- B.1.1 Must demonstrate competence in their knowledge of basic and clinical sciences specific to optometry and ophthalmic surgery
- B.1.2 Evidence-based medicine
- B.1.3 Outcomes-based registries
- B.2. Able to implement appropriate infection control, cleaning, and sterilization protocols, as well as biohazardous waste disposal procedures.
- B.2.1 Aseptic technique
- B.2.2 Awareness, implementation, and documentation of applicable OSHA requirements
- B.2.3 Personal protective equipment/barriers for patient and provider
- B.3. Expected to demonstrate an understanding of Applied Basic Sciences.
- B.3.1 Integration and clinical application of anatomy, physiology, hemostasis, histopathology, and pathophysiology. Describe actions, mechanisms, and applications of relevant pharmacological and anesthetic effects on organ systems and adverse reactions
- B.3.2 Familiarity with the principles of energy-tissue interactions including laser, visible ultraviolet and infrared light, electrocautery and radiofrequency sources
- B.4. Demonstrate knowledge of intra and postoperative complications and how to manage them.
- B.4.1 Hemorrhaging
- B.4.2 Infection
- B.4.3 Intraocular hypertension
- B.4.4 Inflammation
- B.4.5 Anesthesia and anesthesia-related adverse events
- B.4.6 Adverse pharmaceutical reactions including anaphylaxis
- B.4.7 Wound healing complications
- B.4.8 Other potential complications, relevant to the procedure
- B.5. Expected to understand ophthalmic surgical instrumentation, including its purpose, design, intended use, and related equipment and supplies.

- B.5.1 Equipment for injection
- B.5.2 Wound closure
- B.5.3 Surgical instrumentation
- B.5.4 Ophthalmic lasers
- B.5.5 Radiosurgical technology
- B.5.6 Personal protective equipment for providers and patients
- B.5.7 Sterilization of surgical equipment
- B.5.8 Asepsis and sterile field creation
- B.5.9 Ancillary equipment and supplies

- B.6. Working knowledge of the laws and regulations relating to ophthalmic surgery.
 - B.6.1 Occupational Safety and Health Administration (OSHA)
 - B.6.2 State scopes of practice
 - B.6.3 Centers for Medicare and Medicaid Services (CMS)
 - B.6.4 Appropriate coding and billing practices
 - B.6.5 Accreditation and credentialing – e.g., Accreditation Council on Optometric Education (ACOE), American Board of Optometry (ABO), [Joint Commission](#) (surgery centers, and hospitals)
 - B.6.6 Stark and anti-kickback statutes
- B.7. Demonstrates an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.¹⁴
 - B.7.1 Work effectively in various health care delivery settings and systems relevant to their clinical discipline
 - B.7.2 Coordinate patient care within the health care system relevant to their clinical discipline
 - B.7.3 Advocate for quality patient care and optimal patient care outcomes
 - B.7.4 Incorporate considerations of cost awareness and risk-benefit analysis inpatient and/or population-based care as appropriate
 - B.7.5 Work in inter-professional teams to enhance patient safety, care and improve quality
 - B.7.6 Participate in identifying system errors and implementing potential systems solutions

- C. **Skills**
 - C.1. Ability to obtain an appropriate case history and proper informed consent
 - C.2. Be able to properly document an ophthalmic surgical procedure report following the standards set by the JCAHO and AAAHC for sufficient information to:
 - C.2.1 Identify the patient
 - C.2.2 Support the diagnosis
 - C.2.3 Justify the treatment
 - C.2.4 Document the postoperative course and results
 - C.2.5 Promote continuity of care

 - C.3. Appropriately evaluate and assess the ophthalmic and general medical indications and contraindications for ophthalmic surgery in order to obtain a valid informed consent, including alternatives, risks, benefits, and limitations or contraindications.

 - C.4. Provide acute and long-term post-procedure care for ophthalmic surgery.
 - C.4.1 Management and/or treatment of adverse events

- C.4.2 Maximizing procedural outcomes and systematic assessment for quality improvement
- C.4.3 Sequelae of procedure complications
- C.4.4 Wound healing
- C.4.5 Medications
- C.4.6 Necessity for further or ongoing intervention or consultation

- C.5. Manage acute and chronic complications which may be associated with ophthalmic surgery and anesthesia.
 - C.5.1 Supportive training (e.g., CPR, Basic Life Support)
 - C.5.2 Ability to manage early and late stage wound complications
 - C.5.3 Ability to identify and respond to intra and postoperative systemic complications.
 - C.5.4 Ability to utilize resuscitative equipment

- C.6. Expected to demonstrate the psychomotor skills and ASCO Functional Standards necessary to safely and effectively perform procedures.
 - C.6.1 Coordination and control of activity in free space and/or through magnification and illumination (e.g., manual dexterity, eye-hand coordination, and kinesthetic sense)

- C.7. Expected to demonstrate appropriate use, indication, and action of ophthalmic ultraviolet, visible, and infrared radiation LASER procedures
 - C.7.1 Trabeculoplasty
 - C.7.2 Post-cataract capsulotomy
 - C.7.3 Peripheral iridotomy
 - C.7.4 C.6.4 Refractive corneal modification for purposes of refractive changes

- C.8. Expected to demonstrate appropriate use, indication, and action of ophthalmic radiofrequency and thermal cautery procedures
 - C.8.1 Procedural hemostasis
 - C.8.2 Lesion removal

- C.9. Expected to demonstrate the psychomotor and cognitive skills necessary to perform nasolacrimal procedures
 - C.9.1 Punctal dilation and irrigation
 - C.9.2 Lacrimal probing
 - C.9.3 Punctal occlusion
 - C.9.4 Punctoplasty

- C.10. Expected to demonstrate the psychomotor and cognitive skills necessary to perform corneal procedures
 - C.10.1 Foreign body (FB) removal
 - C.10.2 Epithelial debridement
 - C.10.3 Emergent paracentesis
 - C.10.4 Cornea/Photorefractive Keratectomy
 - C.10.5 Cornea/Collagen cross-linking
 - C.10.6 Microstromal puncture

- C.11. Expected to demonstrate the psychomotor and cognitive skills necessary to perform

conjunctival procedures

C.11.1 FB removal

C.11.2 Lymphatic cyst removal

C.11.3 Granuloma removal

C.11.4 Biopsy

C.12. Expected to demonstrate the psychomotor and cognitive skills necessary to administer local and topical anesthesia effectively

C.12.1 Local anesthesia toxicity and management

C.12.2 Allergic reaction and anaphylaxis

C.12.3 Infiltrative local anesthesia

C.12.4 Regional anesthesia

C.13. Expected to demonstrate the psychomotor and cognitive skills necessary to perform injection techniques effectively

C.13.1 Intradermal

C.13.2 Subcutaneous

C.13.3 Subconjunctival

C.13.4 Intralesional

C.13.5 Intramuscular

C.13.6 Venipuncture

C.13.7 Intraocular

C.14. Expected to demonstrate the psychomotor and cognitive skills necessary to perform procedures on the lids and adnexa effectively

C.14.1 Suture techniques, including suture removal

C.14.2 Lesion excision, scalpel, scissors, dermablade, curette

C.14.3 Lesion incision and curettage

C.14.4 Cutaneous lesion biopsy

C.14.5 Intralesional injection

C.14.6 Lesion radiosurgical destruction

C.14.7 Laceration repair

C.14.8 Everting lid sutures for involutional entropion

C.15. Expected to demonstrate effective, culturally competent, interpersonal communication skills, oral and written, that result in a clear understanding of health information by patients, their families, and health professionals which result in meaningful outcomes for the patient

C.15.1 Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds

C.15.2 Communicate effectively with physicians, other health professionals, and health related agencies

C.15.3 Maintain comprehensive, timely, and legible electronic, or paper, health records, where applicable

C.15.4 Act in a consultative role to other physicians and health professionals

C.15.5 Work effectively as a member or leader of a health care team or other professional groups

Revised January 2021

ⁱ <https://www.aoa.org/AOA/Documents/Advocacy/HPI/HPI%20Medicare%20Physician%20Utilization.pdf>

TO: Umair A. Shah, M.D., M.P.H.
Secretary, Washington State Department of Health

FROM: Matthew Niemeyer, MD
Board Certified Ophthalmologist
Sequim, Washington

RE: Optometrist Scope Sunrise

Dear Dr. Shah,

Brevity is an art and attention and interest in short supply. Please give me a few minutes. I will establish my credentials which are significant and give you succinct thoughts to consider. You are welcome to call me for more if you wish.

First, I am an eye surgeon certified by the American Board of Ophthalmology. I perform more surgery and have a lower complication and infection rate than almost any ophthalmologist in the Northwest. I have done an estimated 26,000 cataract surgeries and 10,000 laser procedures in addition to a few thousand miscellaneous procedures.

Second, I have worked alongside a team of optometrists for the last 14 years. We are tied into our community with 17 other optometrists forming the Eye Emergency Network. We, as a contracted group with our local hospital, cover both surgical and non-surgical eye care for the Olympic Peninsula. Our Eye Emergency Network has existed for over 20 years.

Now, having established that I am both experienced and have extensive interaction with optometrists, let me make a short and succinct argument in favor of optometrists having a broad scope of practice. First, I would like to address the argument in opposition to optometrist scope expansion. This is a battle for turf, a constant and well thought out and funded attempt to limit the practice of optometrists who have a four year doctorate in their field. It is not about protecting patients. To demonstrate this point, let's review one subject, YAG laser capsulotomies. This procedure is done at a slit lamp which is a stereo microscope attached to a laser. The laser is used to cut a hole in the back of the tissue that holds a previously placed intraocular lens during cataract surgery. This procedure is taught to a resident ophthalmologist in a few minutes by either their attending or another resident. It is about as simple and as low risk as any procedure. A few years back at a Washington State ophthalmology meeting the president of the society got up and proudly announced that we now had some physician assistants (PA) doing YAG lasers. Mind you, any PA will have limited experience in the field of ophthalmology and likely less than a few dozen hours at a slit lamp. At the same time ophthalmology argues that optometrists, who have thousands of hours at a slit lamp and a doctorate degree in the field of eye care, many with residencies to further their education, should not be doing YAG lasers. This argument does not hold water and is dispicable when they support PAs doing the same procedure with little to no training. Next, optometry as a field provides extensive medical training to its providers. Optometry has a different knowledge base than ophthalmology. In some areas it is far broader and deeper, specifically in optics, glasses, and contact lenses. In the medical area it is extensive and broad as well. Those optometrists who have completed optional residency training have extensive medical training that rival a graduating ophthalmologist and many of those without a residency can still stand head-to-head with a graduating ophthalmologist with regards to knowledge base. A review of curriculum from optometric and ophthalmology training programs will bear this out.

Furthermore, I would like to address medications. Optometrists have a doctorate in their field and are extensively trained to prescribe medications specific to diseases of the eye and surrounding

tissue. Limitations should not be placed on their prescribing abilities when medications are being used to treat ocular issues.

Now let's get down to the meat. The above is not really an argument. The meat is the question of eye surgery.

Let me spell out my argument at a fundamental core. Surgery is about experience. In medicine, both in our doctorate training and ophthalmology training a common saying is, "See one, do one, teach one." Simple procedures are taught from resident to resident or maybe even a nurse will teach you how to put in an IV or draw blood. As procedures progress in complexity, you have to see a lot more and the teaching becomes more complex. You start working on animal and virtual models and then perform small parts of procedures guided by your mentors. You gain a knowledge base and you progress. Now, back to the question, should an optometrist be able to operate. The answer is simple. If they have the training, yes. Turf warfare is not the government's business. Making sure there are qualified providers that can take care of citizens is the business of the government. Optometrists have a giant knowledge base. There are plenty of procedures that are taught from one resident to the next, learned from your reference material while you are on call as a resident, and simply done while your senior resident guides you. So to keep it simple, simple procedures can be taught in weekend seminars or mentorships under ophthalmologists who will share their knowledge. If optometrists want to become surgeons in any area of eye care then they would need to complete full surgical residencies. The training would be the same. A balance would quickly take place with some optometrists becoming surgeons. Just as some ophthalmologists will transition into full time medical eye care after they finish residency.

All providers develop their own niche. This is not a new concept. Oculofacialmaxillary surgery, for example, is a residency formed from dentistry and the medical side. We will only have a shortage of eye care providers in the future. There is no reason to create a bottleneck when it does not need to be created.

Sincerely,

Matthew Niemeyer, MD

Robert Ford, MD
President, CEO

Debbie Eldredge
Executive VA, COO

DIRECTORS

Bruce Alves
Surgery & Equipment

Marlin Gimbel, MBA
Professional Relations

Bob Jasa, NCP
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- Doug Hansen, OD
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- Boon Johnson, OD
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- Oliver Kuhn-Wolven, OD
- Jason Long, MD
- Brentley Lightfoot, OD
- Rod Maruya, OD
- Mark Mateman, OD, MS
- Jeffrey Mattson, OD
- Abigail Neal, OD
- Waymond Pohl, OD
- Janey Ranney, OD
- Victoria Rogan, OD
- Daniel Scheraga, OD
- Loren Seery, MD
- David Starfield, OD
- Ronald Sugiyama, MD
- Michael Van Brocklin, OD
- Solow Williams, OD

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July 10, 2021.

Dr. Shah
Secretary of Health, WA State

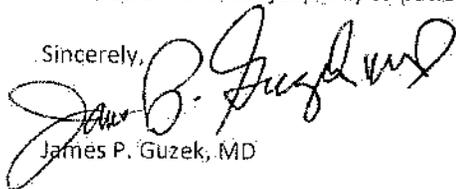
RE: Optometry Scope of Practice

Dear Sir:

As a practicing ophthalmologist with world-wide experience over 40 years, and with 20 years experience working side-by-side in the Pacific NW with profession Optometric Physicians, I wish to lend my support to the optometric expansion of practice bill that is before the legislature.

Honestly, I do not perceive a risk to patients in this. Is it a sea change? To some extent. But this is already being done in a couple of states. It is what is called progress. Optometric Physicians are far better trained than they were 40 years ago when I started in ophthalmology. And they are surely ready to assume more responsibilities, including YAG lasers. I would go so far as to say that, in my opinion, there is no doubt that our WA state optometrists can be well trained to safely expand their scope of practice – including doing YAG lasers – without jeopardy to patients.

Sincerely,



James P. Guzek, MD

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July 12, 2021

Cori Tarzwell, Optometrist Sunrise Review Lead
Health Systems Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504

Re: Optometrist scope of practice sunrise review

Dear Ms. Tarzwell,

The Washington State Society of Anesthesiologists (WSSA) appreciates the opportunity to comment on the Department of Health's (Department) Sunrise Review concerning the optometry scope of practice.

The WSSA members agree with the concerns outlined by the Washington State Medical Association (WSMA) opposing the scope of practice expansion for optometrists. The proposal from the Optometric Physicians of Washington represents a major increase in the scope of practice without requiring the education and training necessary to ensure the health and safety of patients seeking vision care and treatment.

The proposed legislation clearly states the practice of optometry does not include administration of general anesthesia or surgery performed with general anesthesia. However, optometrists would be allowed to administer other types of anesthesia, including deep sedation, infusions and regional blocks. Complications from these types of treatments can include infection, blindness, loss of an eye, and even death, in addition to general complications due to the use of anesthesia.

Ensuring patient safety and access to high quality health care should be the state's foremost consideration when evaluating the scope of practice expansion for a health profession. The WSSA believes optometrists do not receive an appropriate level of education and training to administer the types of anesthesia and injections allowed in their legislative proposal. Therefore, WSSA encourages the Department to oppose this scope of practice expansion.

Sincerely,

A handwritten signature in black ink that reads "S. Yang, M.D." with a horizontal line underneath.

Stephanie Yang, MD
President, Washington State Society of Anesthesiologists

P.O. Box 2990
207 Yelm Ave. W.
Yelm, WA 98597-2990
(360) 458-2088
(360) 458-5872 Fax

Dr. David Hays
Dr. Kim Eckroth

July 15, 2021

RE: Optometric Physicians of Washington Scope Expansion

To Whom It May Concern:

I am writing in support of expanding Optometric Physicians scope of practice in Washington State. I also support the Board of Optometry expanding their regulatory authority to approve additional scope expansion based on the standard of care and current education of Optometrists. This is in the best Interest of our patients of Washington State to enable them quicker access to care along with a more streamlined approach while reducing their out-of-pocket cost.

I practice at a smaller rural clinic in Yelm, Washington. Although Olympia and Tacoma are not that far away, many of my patients perceive the aforementioned locations as the "Big City" and do not want to leave Yelm. My patients see me as their primary eye care doctor who sees them and their entire family for all of their vision and medical eyecare needs.

I routinely prescribe oral antibiotics for lid infections, such as pre-septal cellulitis and hordeolums. I frequently see patients for corneal or conjunctival foreign body removals. I treat corneal abrasions, corneal ulcers, iritis, and evaluate for angle closure glaucoma and sudden onset of diplopia.

I have a great relationship with many of the physicians at our local primary care clinic and they frequently send patients to my office to be seen the same day for STAT consultations. I have ordered numerous MRI's over my 16 year career thus far. I have unfortunately discovered, through imaging, previously undiagnosed Multiple Sclerosis, orbital/sinus carcinomas, and various metastases. I have sent patients directly to the ER on numerous occasions and I have saved several patients' lives based on my diagnosis and subsequent referral.

I have a great group of subspecialties (retinal, oculoplastic, and cataract) that I routinely work with. Unfortunately, due to the restrictions in our scope, I have had to refer patients out for unneeded office visits due to my inability to prescribe the medication needed for their condition. The following are three examples of those aforementioned instances:

1. A longtime patient of mine, in her 70s with a history of giant cell arteritis, iritis, cataracts, retinal detachment, lupus, and diabetes presented with a red eye. She lives alone and she relies on others for her transportation. She did not have iritis, but scleritis in her right eye, which is a very serious condition, but is effectively treated with oral prednisone (which I am

unable to prescribe). She presented to my office on Friday afternoon and I diagnosed the condition and knew she needed treatment ASAP. Thus, myself and my staff spent over 20 minutes trying to find a local ophthalmologist in Olympia to refer her to so that she could get the proper treatment. We finally found an ophthalmologist that would see her on short notice. I sent over a referral along with the diagnosis of scleritis.

The patient called my office on Monday and she said the physician she saw didn't listen to her and her eye was now redder, more painful, and hurt worse when she moved her eye. I then called my local cataract co-management center and spoke with another optometrist (who cannot prescribe prednisone), who offered to see the patient the same day, but would also not be able to prescribe oral steroids either. They did not have an ophthalmologist in the office that day who could see the patient and prescribe the medication.

I then sent my patient to a well-known retinal specialist in Federal Way that specializes in autoimmune disease. She saw my patient the same day and concurred with my diagnosis of scleritis and put my patient on oral prednisone. The patient's symptoms improved rapidly and she was so thankful that I went the extra mile for her. I have communicated with her rheumatologist previously regarding her iritis and underlying systemic etiology. However, if my scope was not restricted, I could have prescribed the prednisone that she needed and saved her 2 additional office visits in addition to the pain and suffering of her untreated scleritis.

2. My first week of practice, I had a male in his 20s present to my office for double vision. He ended up having an orbital blowout fracture with entrapment of his inferior rectus in the right eye. I called the oculoplastic surgeon and he stated that he would see the patient; However, he needed to be on oral prednisone to decrease the inflammation prior to his visit. He instructed me to send in a prescription for prednisone for the patient. I had to tell the oculoplastic surgeon that I could not prescribe oral prednisone.
3. The local primary care physicians in my area have referred multiple patients with chalazions to my office for consult and removal. During my rotations as a 4th year student in Oregon, I was able to remove chalazions under my attending doctor's supervision. In Washington state, I am unable to perform the removal or to administer Kenalog injections of chalazia. I have to refer the patient out for consultation and removal. It would be in the best interest of the patient for me to remove them in my office.

The second example was 16 years ago and I still cannot prescribe the medication. This has and continues to inhibit my ability to provide the best care for my patients. Our optometric scope has not kept up with current education being taught in Optometry Schools. I had ocular and general injection classes (IV, subcutaneous, IM, subconjunctival, intralesional and retrobulbar) when I was in optometry school. I have taken continuing education and received certificates in advanced surgical procedures and laser (YAG capsulotomy, peripheral iridotomy) by Northeastern State University, Oklahoma College of Optometry. I am board certified by the American Board of Optometry and the College of Optometrists in Vision Development.

I am always striving to further my education, to enhance my clinical skills so that I can continue to provide the best care for my patients. Enhancing the scope of optometric practice will allow quicker access to care, along with and a more streamlined approach to patient's medical eyecare needs. As we still continue to battle the COVID19 pandemic, the need for efficient and in person care is paramount. Our restricted scope has led to an increased need for multiple physician visits in addition to the cost to both the patient and the healthcare system. Most clinics have long wait times due to limited staffing, Covid19 protocols, and the backlog of patients that are now finally seeking care. It is time that Optometric Physician's scope becomes current and inline with the standard of care being taught in Optometry schools so that we can continue to care for our patients across the state.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kim Eckroth', written in a cursive style.

Kim Eckroth, OD, FCOVD, Diplomate, American Board of Optometry



Sherry Thomas
Optometrist Scope of Practice Increase Sunrise Review Lead
Health Systems Quality Assurance
Washington State Department of Health

Sent via email to: optom-sunrise@doh.wa.gov

Dear Ms. Thomas,

On behalf of the Washington State Psychiatric Association (WSPA), we are writing to express our organization's opposition for increasing the scope of practice for optometrists practicing in Washington state. WSPA is a branch of the American Psychiatric Association, the largest Psychiatric organization in the world. It is a professional, non profit organization representing more than 500 psychiatrists in the state.

We fully stand behind the Washington State Medical Association's comments submitted and position taken. We are generally concerned with the scope of practice increases related to surgical procedures. We are also concerned about the lack of appropriate education and training. Specifically, regarding the increase in prescriptive authority, we are concerned about the scope increase to allow for the administration of general anesthesia. Our concerns are deeply rooted in patient safety and are wary of any proposal where there is a lack of education and training underpinning a scope proposal wherein patients' lives will be impacted.

Lastly, we find that arguments addressing access to care or, said otherwise, a dearth of ophthalmologists in practice could and should be best suited by increasing the number of physicians with appropriate training and education. That can be achieved by increasing medical residencies, among other measures, as opposed to risking patient safety.

Thank you so much for considering our comments.

Sincerely,

Eric Loraas, M.D.
President
Washington State Psychiatric Association

Umari A. Shah, MD, MPH
Director, Washington State Department of Health
P.O Box 47890
Olympia, Washington 98504-7809

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah;

I am writing in support of the proposed revisions to the scope of practice for the Washington State Doctors of Optometry.

I am a residency trained Optometrist. I am licensed both in the state of Washington and Texas, and have practiced in multiple states before deciding to make Washington home. I currently work in a group practice in Ellensburg, providing essential-primary eye care to a rural community.

Washington's current scope of practice prevents me from providing essential care to my patients, especially working in a rural community where access to specialists is incredibly limited. The desired scope expansion practices are things that I have been trained for in optometry school and have practiced with during my residency training. Denying me, the primary eye-care provider, access to these essential procedures limits access to my patients getting these procedures done in a timely manner.

Washington would not be the first state to allow for these types of procedures to be completed by Optometrists. During my residency I spent time in Louisiana performing these procedures in a rural community, this community having access to these types of procedures was critical as the next largest town/city with similar medical care was 4 hours away in Texas. Without access to these procedures it is unlikely these patients would have received this essential care. The people of Washington are in similar situations as this Louisiana practice, almost every county in this state has an optometrist, while only 60% of the counties have practicing ophthalmologists. Allowing Washington Optometrists to perform such procedures would lead to more comprehensive, prompt care to our patients.

In allowing optometrists to expand our scope of practice to things such as minor lumps and bumps procedures, and minor lasers, the pressure of local ophthalmologists and eye surgeons is lessened. This leaves highly coveted ophthalmologists' chair time to focus on complex patient cases that us as optometrists cannot serve. It is important to recognize that these procedures being brought to the Sunrise community are minor procedures that us as optometrists are capable and trained to perform safely.

It is important that Washington's remains up to date with the technology and delivery of eye care for the residents of Washington, it is essential to authorize the Board of Optometry to determine

which procedures are included in the approved scope of practice expansion and decide and what additional educational requirement all the optometrists must meet to provide them.

I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you for your time.

Sincerely,

Jackelyn Meyer, O.D.

2201 W Dolarway Ave
Ellensburg Wa 98926

7/12/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890
RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah –

I support the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for 6 years and am a provider at a local children's hospital with clinics serving the Seattle, Bellevue, and Everett communities for medical and primary eye care.

During my four years of post-graduate training in Ohio for my Doctorate of Optometry, I was trained to do many procedures beyond the scope of Washington's current practice regulations. After moving to Washington, I was surprised by the restrictions in the scope of care to my patients that are inconsistent with other states and national standards.

The current scope limitations on optometry in Washington state make it challenging for me & my colleagues to provide timely care. This increases the cost of services to patients and delays sight-saving care. For example, several of my optometric colleagues are unable to perform procedures to treat post-surgery complications (such as secondary cataracts formed after a primary cataract extraction) even when they are the first person to diagnose the complication. They work in interdisciplinary settings where they have access to the instruments to treat the patient immediately and have been trained to do so, but Washington's scope inhibits them. The patient could then be left with a visually disabling issue that decreases their quality of life, including their ability to work, until they are seen by another provider. This can take weeks, if not months, depending on their location & access to providers. Washington needs to keep up with changing technology & standards to provide the best eye care for patients. If you authorize the Board of Optometry to regulate the scope of optometry as other health care professional boards in the state do, it accelerates best clinical outcomes & quality of life to our residents.

Please recommend that the Legislature support the proposed changes in the optometry scope of practice for Washington. I thank you for your consideration.

Best Regards,



Milda Bandza, OD

Optometric Physician, Seattle Children's Hospital



STATE OF WASHINGTON

DEPARTMENT OF HEALTH

PO Box 47890 • Olympia, Washington 98504-7890

Tel: 360-236-4030 • TTY Relay: 800-833-6384

July 14, 2021

Sherry Thomas, Policy Coordinator
Washington State Department of Health
Sunrise Reviews
P. O. Box 47850
Olympia, WA 98504-7850

Dear Ms. Thomas:

The Board of Optometry writes this letter in general support of the proposal to expand the optometric scope of practice consistent with the request made by the Optometric Physicians of Washington in its request for a sunrise review as required by 18.120.010.

The Board believes this proposal will promote public health. Expanding the scope of optometric practice to include injections and the use of diagnostic or therapeutic instruments utilizing laser, ultrasound, or other technology in the performance of primary eye care within the scope of an optometrist's education and training will:

- Expand access to primary eye care to underserved regions of our state;
- Align Washington's scope of practice with that of Oregon, Idaho, and California;
- Provide improved care to veterans by aligning Washington's scope of practice with that of the Veteran's Administration;
- Provide improved care to tribes by aligning Washington's scope of practice with that of the Indian Health Service;
- Reduce costs for primary eye care for patients.

By reducing barriers to care, aligning with states nearby, improving care for underserved regions and groups, and reducing costs, this proposal will make Washingtonians healthier.

The Board is still engaged in a technical analysis of the proposal and its potential impacts and will likely have more specific recommendations or ideas for particular revisions as the sunrise review process continues.

Sincerely,

Glen Owen, OD, Chair



EMPIRE EYE
PHYSICIANS
EmpireEye.com

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SPOKANE VALLEY OFFICE

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Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890 Olympia, Washington
98504-7890 7/8/2021

RE: Sunrise Review, Optometric Scope of Practice

Dear Dr. Shah,

I am writing this letter to express support for the proposed revisions to optometric scope in Washington.

For over nine years I have served as the chief of optometry at Empire Eye Physicians - a busy ophthalmology/optometry practice in Spokane Valley, Washington. I specialize in dry eye disease management, specialty contact lens fitting and serve as a liaison between our referring optometrists and our ophthalmologists. Every day, I co-manage cataract and corneal surgical patients with our surgeons. We rely heavily on each other's expertise as we strive to provide the best eyecare to our community.

Prior to joining this practice, I served for three years as a Captain in the United States Air Force where I provided eyecare to active-duty servicemen and women, retirees and their families. While practicing in the military and during my graduate instruction, I was trained to do many procedures beyond the scope of Washington's current practice regulations. Washington's current scope prevents me from caring for my patients as I have been trained and are inconsistent with other state standards across the nation. Both myself and my colleagues all over Washington are not able to provide expedited care for patients. This also increases the cost of care and delays some sight-saving care that we are trained to provide.

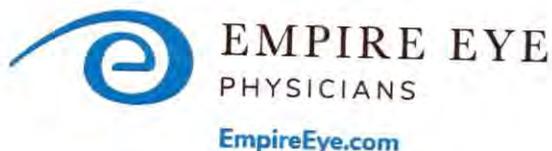
Many of my patients drive from rural settings of 2-4 hours in distance and must make that return trip to see our ophthalmologists for a procedure that even they believe I could safely and effectively perform. As an optometrist that works in a multi-disciplinary setting, with access to instruments that I have been trained on, efficiency would allow me to provide better care for my patients. Instead, I am forced to reschedule the patient to return to our clinic on a different day to see one of our ophthalmologists. This is exactly the sort of inefficiency that is increasing health care costs across our country, while preventing some patients to get the care that they need.

I am in favor of a law that will give the Washington Board of Optometry authority to oversee what is permitted in our state. This would allow optometrists the ability to practice at the highest level of their education and provides greater time for ophthalmologists to also provide care for more complicated surgeries. This would maximize care, efficiency and cost without compromising safety.

Thank you for your service in our state. If you have any questions, please feel free to contact me.

Sincerely,

Casey Claypool, OD



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Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890 Olympia, Washington
98504-7890

July 15, 2021

RE: Sunrise Review, Optometric Scope of Practice

Dear Dr. Shah,

The purpose of this letter is to express my support of the Optometry Scope of Practice bill that is under consideration. I am an ophthalmologist specializing in corneal, cataract and refractive surgery. I am the managing partner of Empire Eye Physicians, an MD/OD practice with offices in Spokane Valley, Washington and Coeur d'Alene, Idaho.

I have worked alongside optometrists since joining Empire Eye Physicians for the past 20 years & currently employ 2 optometrists. My daughter is finishing her final year of optometry school in Forest Grove, Oregon and has informed me of the advanced training she is receiving. For the past 20 years, I have co-managed cataract & refractive surgery with optometrists. My extensive experience with optometrists makes me uniquely qualified to provide my support of their proposed Scope Expansion. Every day I see care that optometrists provide.

I am in favor of a law that will give the Washington Board of Optometry authority to oversee what is permitted in Washington. This allows optometrists to practice to the highest level of their education and benefit Washington citizens.

For years I have seen patients coming from many of the rural areas in Eastern Washington. Many of these patients drive several hours for a minor procedure that a local optometrist could provide. Allowing optometrists to practice to their highest capability in primary care is essential to providing care to our community. As the population continues to age the projected numbers of ophthalmologists will not meet the demand. I believe as we continue to partner with optometry to serve the population effectively it will benefit our patients the most. This will allow me to provide care at the secondary and tertiary level that I was trained to do.

Thank you for your service in our state. Please feel free to contact me if you have any questions.

Sincerely,

Christopher Sturbaum, MD

FROM THE DESK OF

Donald T Shute, OD

July 11, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometric Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I am a recently retired optometric physician who practiced in a private group practice in Yakima for 34 years. I completed a one year optometry residency at a VA hospital in Newington, CT upon my graduation from optometry school in 1984. I also held licenses in Oregon and Connecticut in the past. I continue to be licensed in Washington state and I am board certified with the American Board of Optometry.

Throughout my career I was frustrated with being unable to practice optometry to the level of my training due to the limitations set forth in our state's optometry law. There have been some changes during my career which have been helpful to my patients but our current law has not kept up with other statutory changes in other states. By way of illustration there are numerous simple procedures and prescriptive authorities which my colleagues in other states were able to perform when I entered practice which I was never able to perform in Washington state during my career.

The effect of these limitations is that optometric physicians in our state who are trained and fully capable to perform these procedures are forced to refer patients to other health care professionals for appropriate treatment. This leads to unfortunate treatment delays and add costs for our patients.

Another unfortunate result of having outdated laws is that it makes it more difficult to recruit young optometric physicians to our state to replace those of us who retire.

Doctors prefer to practice in states that allow them to practice to the full extent of their training. This was of particular concern to me as I recruited doctors upon my retirement.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes to the optometric scope of practice in Washington state. Thank you.

Sincerely,

Donald T. Shute, OD
809 N 49th Court
Yakima, Washington 98908

07/11/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah –

I am writing in to ask for your and the Department of Health's support in promoting the profession of Optometry within our state to that of others around the country. This not only includes expanding the scope in which optometrists practice but also to remove some of the procedural roadblocks inherent in keeping health professions current. The Board of Optometry which the legislature has designated as capable of making decisions to regulate aspects of its own profession should be granted authority to also determine what is included in its scope of allowed practice and procedures. As medical knowledge and technology advances it is sensible to allow judicious analysis of patient safety and proper training required by a panel of professional members that make up that specific profession. Requiring extensive legislative process each time a novel procedure becomes standard of care for any profession directly prohibits timeliness and access. This authority is consistent with other doctoral level professions and has been something the legislature trusts the board of health to oversee.

In my four years of post-graduate schooling to be an optometrist, I have found the training not only rigorous but strictly empirical. As the schools of optometry around the country can attest, evidence-based medicine and statistical analysis of patient outcomes is the only objective way in which standards of practice are developed and followed. Having now been in practice 6 years in rural eastern Washington, I can attest other healthcare professionals are equally matched in their dedication to evidence-based practice and the collective understanding of putting the patient first. I trust that the authority the legislature has granted to other professional healthcare boards to regulate their own practice requires exceptional trust and responsibility. I believe the profession of optometry is deserving of that same trust and responsibility.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you for your time.

Sincerely,



Justin C. Dalke, OD

Optometric Physician, Valley Vision Clinic
Legislative Co-Chair, Optometric Physicians of Washington
Member of American Optometric Association
Young OD of the Year 2020

CC: Skyler Rude, LD 16, House Healthcare Committee



James P. DeVleming, O.D.

238 East Main
Pullman, WA 99163
(509) 334-1131

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

7/9/2021

RE: Optometric Scope of Practice, Sunrise Review

Dear Dr Shah,

I am writing in support of proposed changes to the optometric law in Washington State to allow properly trained and certified optometrists to perform some advanced procedures. Our patients currently are being referred to other offices for care and treatment that graduates of optometry schools and those of us taking advanced classes are trained and fully capable to perform. Providing the highest quality care to our patients is always top priority, but due to current law, we here in Washington State are unable to provide care at the highest levels.

As the President-elect of the American Optometric Association, I have worked closely with many other states as they have passed advanced scope language and it is time for Washington to again become a leader in the patient care realm by updating our laws. I am currently trained and certified to perform all the procedures and minor surgical treatments our updated law will allow, but since we aren't in Kentucky, where I took my classes and training, or Alaska, Arkansas, Louisiana, Mississippi, Oklahoma or Wyoming, my ability to provide the care my patients need is hindered.

Also, practicing on the more rural side of Washington, when a patient needs care that I currently can't provide they have to travel an hour and half north to Spokane or two plus hours to Tri Cities to receive the needed care. That is wasted time for patients and in the winter, in many cases, traveling that far for care isn't even an option.

I appreciate your time and energy around this issue and please feel free to call me if your have any further questions or concerns.

Sincerely,

James P DeVleming, O.D.

President-elect, American Optometric Association
Past President, Optometric Physicians of Washington
Diplomate, American Board of Optometry

Received

JUL 13 2021

Department of Health
Secretary



Independently Owned and Operated by Local Optometric Physician

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James P. DeVleming, O.D.
238 East Main
Pullman, WA 99163

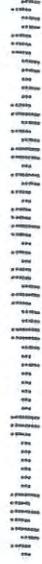


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9 JUL 2021 PM 1 L

Amgir Shah MD MPH
Director, WA STATE DEPT HEALTH
PO Box 47890
Olympia WA 98504-7890

98504-7890





Bryan Cholico, OD • Benjamin D. Crowell, OD, FAAO • Jason A. Sifrit OD, FAAO
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2914 E. Madison St, STE109 • Seattle • WA • 98112 • O: (206) 333-0564 • F: (206) 333-0565

July 16th, 2021

Umair A Shah, MD, MPH
Director, Washington State Department of Health
PO Box 47890
Olympia, WA 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support for the expansion of the scope of practice for the Optometric Physicians in Washington State and granting the Board of Optometry regulatory oversight consistent with other healthcare professional boards.

I have been a practicing optometrist for 17 years, and I currently practice at group private practices in Seattle and Renton.

The passage of this measure would provide multiple benefits. Below summarizes why scope expansion and Board of Optometry oversight is the right choice:

1. Increased access to health care for Washingtonians
2. Reduce health care costs by reducing medical visits and medical copays.
3. Allow optometrists to perform procedures that many have already been trained to complete but unable to practice since practicing in Washington.
4. Increased appeal for recent graduates to practice in Washington state due to expanded scope of practice compared to other states with more limited scopes. Currently, Washington state is defined by Optometric Physicians as a state that has limited scope of practice and therefore deters prospective doctors from choosing to practice in Washington.
5. Better clinical training of optometry students: I am an adjunct professor at the Illinois College of Optometry. In this role, optometry students rotate through my office quarterly to gain valuable clinical experience. An expanded scope would allow me, as a clinical preceptor, to further train optometry students in these necessary procedures that would greatly improve patient care.
6. Lastly, research shows that Optometric Physicians provide equal care at lower costs compared to ophthalmologists.



Bryan Cholico, OD • Benjamin D. Crowell, OD, FAAO • Jason A. Sifrit OD, FAAO
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Washington State must continue to prioritize patient care. In order to prioritize patient care the Department of Health must simplify the Optometric Physician scope of practice expansion process and align with other medical professional boards by authorizing the Board of Optometry to determine optometric scope and to establish educational standards.

Past, present and future Washingtonians deserve the best health care system. Optometrists are an invaluable patient care resource. We are often the first to diagnose serious health conditions, such as: diabetes, hypertension, sleep apnea, multiple sclerosis, thyroid disease, high cholesterol, and even cancer.

In 1989, scope expansion gave optometrists therapeutic privileges to dilate eyes. Without this privilege I would not have diagnosed a patient with malignant melanoma of her eye. Because of my ability to dilate her eye, I was able to diagnose the problem, refer her to oncology and save her sight. Washington legislature approved therapeutics for optometrists in 1989, it is important for Washington's regulatory framework to maintain pace with rapidly changing technology in the delivery of eye care.

In closing, I strongly encourage you and your staff to recommend the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Respectfully,

A handwritten signature in black ink that reads "Jason Sifrit". The signature is stylized and includes a large flourish at the end.

Jason A. Sifrit OD, FAAO



June 23, 2021

TO: Umair A. Shah, M.D., M.P.H.
Secretary, Washington State Department of Health

From: Mira Swiecicki, OD
Lynden Vision Clinic

RE: Delay/Expense of Eye Care

Dear Dr. Shah,

I am writing in support of the Sunrise Review for Optometry. I have practiced in Lynden, Washington for 25 years, in a rural solo practice. The nearest ophthalmology clinic is in Bellingham, approximately 30 minutes away.

The expansion of scope would allow my patients access to care locally, and in an expedited manner. I am Board Certified, and practice a medical model of optometry, serving patients from 6 months of age to 104! My schedule always allows for emergent care. At times we will need to refer them for further treatment due to limitations in our scope, and those appointments can take 4-6 weeks, delaying treatment to the patient.

An example that I had just last week involved a 97 year old gentleman, who does not drive outside of Lynden. He has a wife with dementia and cannot leave her alone for long periods of time. When trying to get a referral for corneal care, the earliest time available was in 6 weeks, and the closest was in Mt. Vernon. This is not possible for this patient. I am left with monitoring the patient, hoping he does not progress. He would have a very difficult time arranging transportation for himself, but also additional care for his wife. He is planning on forgoing the care, due to the difficulties that present in him waiting and getting to the appointment. This is just a recent example, but unfortunately it is one of many.



By expanding the scope of care that optometry can provide, we can increase access in rural communities, decrease waiting times everywhere, and improve health outcomes to the citizen's of Washington.

I request your support for the expansion of scope to optometrists in Washington state, to match that of other states. Optometrists are well trained, complete ongoing education annually, and are ready to serve the needs of their patients.

Sincerely,

Mira Swicicki, OD

Mira Swicicki, OD

Wednesday, July 7, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah –

I am an optometrist practicing in Ellensburg, Washington since 2020. I am writing in support of the proposed changes to the scope of practice for optometry, and also to give the board of optometry the ability to be the governing body to determine future modifications—as it is for many other healthcare professions in the state.

Washington’s current scope of practice regulations prevent me from caring for my patients as I have been trained and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

Throughout optometry school, we were trained to the highest level in the country. Due to some graduates going into more progressive states, we received extensive education on minor laser procedures and removal of lumps and bumps. By allowing optometrists in Washington to practice to our full potential, we would reduce healthcare costs and improve access to care. Oftentimes in practice, I find myself referring for simple procedures that I have been trained to do myself.

It’s important that Washington’s regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Thank you for your consideration of these proposed changes.

Sincerely,

Jordan Dravitzki, OD
Valley Vision Associates
2201 W Dolarway Rd
Ellensburg, WA 98926

402-764-0457 jdravitzki@valleyvisionassociates.com

To whom it may concern,

I have been diagnosed with a secondary cataract, a condition that is treated by an in-office YAG laser procedure. I had to delay having the procedure done because I am moving soon, so instead of having my optometrist perform the laser for me at my convenience, I now need to wait until I reestablish care in my new community, get a referral, and wait until an ophthalmologist can see me. It would have been much more convenient and less costly for me to have my optometrist perform the in-office procedure in a timely manner before I had moved. And as you can imagine being able to see more clearly would make packing and moving much easier. I understand that both doctors at Tumwater Eye Center have been trained to do the procedure, however, are not allowed due to current law in this state. I support changing the law to allow optometrist to do procedures they are trained to do.

Sincerely,

Dale Zimmerman

Dale Zimmerman
Moving to Anacortes, Washington

June 29, 2021

July 13, 2021

Washington State Department of Health
Tumwater Towncenter 2
111 Israel Road SE
Tumwater, WA 98501
Sent via email to: optom-sunrise@doh.wa.gov

A400 Starling Loving Hall
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Columbus, OH 43210

614-292-1113 Clinic
614-292-9086 Office

earley.3@osu.edu

To Whom It May Concern:

I write to provide comment related to the sunrise review of legislation regarding the scope of practice for optometrists in the State of Washington. The Ohio State University College of Optometry strives to provide exceptional optometric education and to prepare graduates with the skills necessary to deliver care at the most advanced level possible in a safe and efficient manner. Accordingly, it is in our interest and the interest of patients that graduates be permitted to utilize these skills when providing eye care. This is precisely the intention of the legislation under review.

Optometrists provide a valuable entry point into the health care system for many patients, and are often the first to diagnose serious health conditions such as diabetes, hypertension, multiple sclerosis, thyroid disease, high cholesterol, and cancer. Optometrists are highly trained doctors who have completed undergraduate degrees and at least four years of specialized biomedical training at an accredited school of optometry, and must comply with strict licensing and continuing education standards.

The medical training provided at the OSU College of Optometry is extensive and rigorous. Like medical students, optometry students spend two years in foundational courses studying the full body, i.e. anatomy, physiology, and pathology. In addition our optometry students also take extensive coursework dedicated to the anatomy and physiology of the eye, the orbit, and the surrounding adnexa. Our advanced coursework on lasers and surgical procedures then builds on this foundational knowledge by addressing specific procedures. This advanced procedure coursework is therefore an adjunct to hundreds of hours of clinical preparation. In fact, the amount of time dedicated to the understanding of the intricacy of the ocular tissue and an understanding of the structures that we interact with in surgical procedures is much more detailed in the optometric didactic curriculum than it is in medical school training.

In addition to basic systemic anatomy, physiology, pathology, and pharmacology coursework, our students also extensively study the structure, function, and pathology of the eye and orbit. This coursework is not taken by any medical student. Relevant highlights of our curriculum include:

- A detailed course in ocular anatomy with both didactic and hands-on laboratory inspection and dissection of the globe, histological examination of all ocular tissue, and examination of all nervous and vascular supply to the orbit. This course covers a complete tissue study of every layer and tissue of the lids, conjunctiva, and globe in addition to the anatomy of the orbit. This course comprises 50 hours of didactic lecture and 30 hours of hands-on laboratory work.
- A detailed course in the physiology of the eye and orbit. This course covers all fluid dynamics of the globe, detail on all immunological and inflammatory mechanisms of ocular trauma, and a discussion of blood flow, lymphatic drainage, neural control, etc. This course comprises 50 hours of didactic coursework.
- An extensive course in the optical structures of the eye discussing in detail the exact thicknesses, curvatures, changes of these structures over lifetime, measurements of these structures using instrumentation and interpretation of these images. This course is comprises 50 hours of didactic lecture and 30 hours of laboratory hands-on work.



- A 24- credit hour course in the understanding of lasers and ionizing radiation and its interaction with human tissue.
- A 50-hour course in the clinical use of optical instruments such as slit lamp biomicroscopes, funduscopy lenses, etc. with extensive training and practice in the precise use of these instruments and practical examinations ensuring that every student is proficient in the precise visualization and clinical interpretation of the health/pathology of each layer of the eye.
- An extensive clinical rotation in which our students conduct complete vision examinations on patients under the direct supervision of licensed attending optometrists. These examinations typically include complete slit lamp biomicroscopic examinations of the eye and adnexa of each patient, thereby ensuring excellent skills in these procedures, e.g., examination and clinical interpretation of ocular tissues and treatment and management of inflammation and infection of any part of the visual system. At Ohio State each student currently completes approximately 1700 full eye examinations before graduation.
- A 25-hour didactic course, primarily taught by ophthalmologists, on the surgical co-management of patients including areas such as cataract, glaucoma, refractive, and laser surgery.
- A 17-week (40 hours per week) rotation in their fourth year in an ophthalmology office or surgical co-management site where students work directly with ophthalmologists in pre- and post-surgical care, thereby learning the diagnosis and treatment of complications of ophthalmic surgery, surgical candidate selection and observation of surgical procedures.
- A 30-hour course in direct training (didactic and hands-on laboratory) in the area of lasers, injections, and advanced procedures that has been approved by all states with advanced optometric scope as meeting the needed didactic and hand on procedures for licensure in those states.

As you can see, new graduates from the Ohio State University College of Optometry complete extensive training which would allow them to treat patients at an advanced level but for some of the limitations on the practice of optometry in the State of Washington.

Each year at Ohio State we graduate between 60-70 new optometrists and increasingly we see those new graduates relocate to jurisdictions where they are able to utilize the full range of skills they have acquired. States that do not adequately adjust its regulations to reflect these realities risk potential access to eye care and work force challenges in the future. However, taking action on this important issue now helps expand access to eye and health care for Washington residents with optometrists currently practicing in all but three Washington counties, and sets the stage to attract new doctors in the future.

Thank you for the opportunity to comment on this important issue. Please feel free to contact me should you require additional information or have questions.

Sincerely,

Michael J. Earley, OD, PhD
Professor of Clinical Optometry
Associate Dean for Academic Affairs
VSP Chair for Advancement of Professional Practice
The Ohio State University College of Optometry



STATE OF WASHINGTON

DEPARTMENT OF HEALTH

To: Department of Health

Cc: Martin Pittioni, Director, HSQA – Office of Health Professions, Terri Ferreira, Pharmacy Quality Assurance Commission Chair

From: Lauren Lyles-Stolz, Executive Director, Pharmacy Quality Assurance Commission

Date: July 16, 2021

Subject: PQAC Sunrise Review Comments: Optometrist Scope of Practice Expansion

The Pharmacy Quality Assurance Commission (PQAC) thanks the Department of Health for the opportunity to provide remarks on the Sunrise Review: Optometrist Scope of Practice Expansion Draft. PQAC appreciates the Optometric Physicians of Washington for their initiative to further advance their profession's scope of practice, education, and training through the legislature's sunrise review process. We understand that optometry care and access is instrumental to improving the ocular health of Washingtonians.

The Legislature has provided in current statute the expectations for optometrists who prescribe and administer drugs and devices in Washington. This includes: no oral corticosteroids; no administration of injections or infusions except epinephrine by injection for the treatment of anaphylactic shock' and the ability to prescribe oral non-legend drugs, oral Schedule III-V controlled substances, and Schedule II hydrocodone combinations products, if authorized by the Board of Optometry (board). In addition, an optometrist may not prescribe, dispense, or administer a controlled substance for more than seven days in treating a particular patient for a single trauma, episode, or condition or for pain associated with or related to the trauma, episode, or condition.

Additionally, the board, with the approval of and in consultation with the PQAC, may establish in rule, the specific guidelines for the prescription and administration of drugs by optometrists so that licensed optometrists and persons filling their prescriptions have a clear understanding of which drugs and which dosages or forms are included in the authority granted by this section.

After review of the bill request #3085.2/21 2nd draft, PQAC has identified the following three areas of concerns:

Section 2. (1)(iv) includes dispensing of samples as new service for optometrists which was previously banned under the former rules. This would require further amendments to RCW 69.45.010 to recognize optometrist(s) as a practitioner notwithstanding their current scope of practice. This amendment would legally authorize drug manufacturers to distribute drug samples to optometrists.

This proposal would also lift a prohibition on optometrists performing and prescribing steroid injections and infusions. PQAC requests further clarification on the intent and additional training behind the significant prescribing and practice shift and the perceived impact on patient care before providing additional recommendations.

Section 2. (10)(a) states: Any optometrist authorized by the board shall be permitted to purchase diagnostic pharmaceutical agents for use in the practice of optometry. Any optometrist authorized by the board shall be permitted to prescribe therapeutic pharmaceutical agents in the practice of optometry. *Optometrists authorized by the board to purchase pharmaceutical agents shall obtain them from licensed drug suppliers or pharmacists on written orders placed in the same or similar manner as any physician or other practitioner so authorized.* Purchases shall be limited to those pharmaceutical agents specified in this section, based upon the authority conferred upon the optometrist by the board consistent with the educational qualifications of the optometrist as established in this section.

The proposed *italicized* language should align with the current term of art in the pharmacy practice for both “drug suppliers” and “written orders.” Instead it should read “wholesalers” in lieu of “drug suppliers,” unless drug supplier is intended to have different meaning. If so, could the applicant provide further explanation on what is meant by “drug suppliers” for overall clarity? In addition, “written order” should be replaced with “prescription and/or chart order.” Further clarification on the latter would be appreciated to fully understand the intent behind the use of written orders versus prescriptions. It’s also worth noting that controlled substances will be required to be transmitted electronically beginning January 1, 2022 unless a practitioner has qualified for a waiver through the Department of Health. This should be taken into consideration when providing additional clarity regarding the use of the term written order above.

Finally, we would be remissed not to express support for inclusion of the ICD-10 code or diagnosis on an optometrist’s prescription to help pharmacists determine if a prescription is within the scope of practice.

We acknowledge the perceived challenge of access to ocular health services identified in the proposal; however, PQAC does not support the applicant’s proposal as written. PQAC appreciates the opportunity to comment on the Sunrise Review: Optometrist Scope of Practice Expansion Draft and supports further collaboration on amendments to the applicant’s report.

July 7, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for 25 years, and I currently practice at Kaiser Permanente in both the Longview and Vancouver locations.

Washington's current scope of practice regulations prevent me and my colleagues from caring for our patients as we have been trained, and have limited our patients access to quality eye care. This lack of direct access increases the cost of that care to the patient, and also takes time away from their jobs and families when extra appointments are required to receive necessary treatment.

On many occasions, my comprehensive eye examination reveals the need for treatment that my current scope of practice does not allow me to perform. As such, I need to refer the patient to another physician on another day often at another location. This requires the patient to take additional time off from work and/or their families to receive the care they need.

It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

I urge you to consider proposing that the Legislature enact these changes in the optometry scope of practice for the great state of Washington.

Sincerely,


Jeffrey Fries, OD

Received
Received

JUL 13 2021

Department of Health
Office of the Secretary

July 14, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for four years, and I currently work in a co-management setting with ophthalmologists practicing medical optometry to its fullest extent at Northwest Eye Surgeons in Seattle.

Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

Several of the patients I see require immediate medical care that may require longer than desired wait times resulting in permanent vision loss. This hurdle is troublesome for both my patients and myself. There are several procedures optometrists have been trained to do in Washington, however, are not permitted under our scope of practice which could prevent this permanent vision loss. These procedures include non-invasive laser procedures which are very simple to perform. Being permitted to perform these procedures which we are trained to do would allow myself, and colleagues alike, to preserve vision for these critical, time sensitive situations.

It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Thank you for your consideration,



Sarah Henderson, OD

Date: June 23, 2021

To: Umair A. Shah, MD, MPH
Secretary, Washington State Department of Health

Re: In support of improving Optometry Scope of Practice Law, State of Washington

Washington's scope of practice laws have not kept pace with the educational and technological advancement of clinical eye care over the last few decades.

This legal deficit prevents optometrists from fully caring for their patients commensurate with their education, training, and experience.

When optometrists are forced to refer patients to other providers for procedures they are trained to safely provide negative sequelae commonly occur. For example, delayed treatment while waiting for an appointment elsewhere, more travel and missed work to see a new provider on another day, and always another co-pay, another office visit, and possibly redundant diagnostic tests billed to insurance.

The proposed changes would align optometrists' approved scope of practice consistent with national standards: Expanding the types of medications optometrists may prescribe, including oral steroids. Expanding the range of therapeutic procedures an optometrist may perform including injections, eyelid lesion removals, and board-approved laser procedures.

What is being proposed is conservative and responsible. Research shows that optometric physicians provide equal care at lower costs compared to ophthalmologists. And the proposed changes exclude many surgical procedures including cataract extraction, LASIK procedures, and posterior segment lasers and posterior segment injections.

Certainly the proposed changes would be a safe and effective improvement to the Washington State healthcare system.

Thank you for your consideration. Please support this scope expansion for Washington State.


Benjamin M. Stoebner, OD, FAO
Edmonds Eyecare Associates
7315 212th St SW Ste. 200
Edmonds, WA 98026
425-774-2020



Letter in support of Expansion of Scope for Optometry in Washington State

June 23, 2021

Greetings,

I am writing to offer my position on why the profession of optometry's request for being allowed to practice at a level equal to that which they have been educated, certified and needed by citizens of Washington State should be moved forward for consideration by our legislature.

There will be many statements made with regard to the quality of education in optometric schools and the ever changing eye and vision care needs of our patients that will require skilled healthcare professionals to provide. It is the latter half of this statement that I would like to focus on in this letter.

I was a student from Nebraska that graduated from Pacific University in Oregon with a doctor of optometry degree in 1981 and was looking for a state to practice in that allowed me to use my freshly acquired skills at the highest level possible. At that time, Washington State allowed the use of diagnostic pharmaceuticals in the examination of the eyes that only a few states had legislatively approved, so I chose to move here where I had no family or previous acquaintances. It was the ability to practice my profession with one of the most favorable state scope of practice statutes in the country that brought me to Centralia, Washington where I have been active as a community college trustee, career and technical education board member, arts groups president, fire commissioner, service clubs member and advisory board member for drug court and the Salvation Army. I also have built a 40 year private optometric practice working with area pediatricians, diabetic physicians, neurologists, occupational therapists and area ophthalmologists providing comanagement services to patients in Lewis and Thurston Counties. It has been a great pleasure to have done this here for so many years.

My major concern is simply this. It is getting hard to find young optometric physicians to practice in rural settings when this state has a scope of optometric practice that is becoming significantly less than that found in neighboring states and much less than what is being taught to them in colleges throughout the country. I do not think that I would now choose Washington State to begin my practice in unless I had family living here. I will be retiring in a few years and am looking for a new optometry graduate to continue my rural care practice. If I cannot find someone, there will be a reduction in local patient services that our outlying communities will feel the most. Along with the healthcare provider loss, there will be missed service opportunities that these doctors would provide in the towns that they live in.

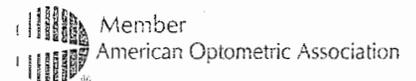
While other items of concern will be brought up by my fellow optometric colleagues, this is the area of concern that I would also like to be considered in these legislative processes. I urge scope expansion to keep up with the changing times and keep optometry relevant. It will allow our state to provide its residents with the best healthcare possible.

Respectfully,

Joseph L. Dolezal, OD

jld

Joseph L. Dolezal, O.D.
Mindy Rice, Office Manager, Optician



Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

7/8/2021
RE: Sunrise Review, Optometric Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revision to the optometry scope of practice in Washington State.

I have three optometry practices located in Seattle, Kirkland, and Bellevue. I have been in practice since 2004. In my 15 years of practice, Washington's scope has not caught up to what I was taught in graduate school.

My four year post graduate doctoral program in Oregon trained me to do many things that are not allowed under the scope of my practice in Washington State. Many of our colleagues around the country can care for their patients in ways that I am not able to, and this does not match up with other states and national standards.

The current scope of practice places restrictions on my care for my patients. Both myself and my colleagues all over Washington are not able to provide expedited care for patients who need our help. This also increases the cost of care to patients and delays some sight-saving care that we are trained to provide. When optometrists work in multi-disciplinary settings with access to instruments that they have been trained on, efficiency would allow them to care for their patients at a level that they are taught. Instead, the practitioner is forced to reschedule the patient to another provider. This is exactly the sort of inefficiency that is increasing health care costs across our country, while preventing some patients to get the care that they need.

A major challenge under our current framework with scope is that it is not streamlined. If we can streamline the process of scope evaluation to match technology and procedures that expand and grow, we can provide our patients the care they need in a safe and efficient manner. Other states board of optometry facilitate this. This protects the patients by ensuring that a state sanctioned optometry board is approving what is in the best interest of patient care rather than legislative action. The boards Mission Statement clearly states this: The mission of the Board of Optometry is to protect the public health, safety, and welfare, and to provide for state administrative control, supervision, licensure, and regulation of the practice of optometry. By providing them the guidance to regulate scope, it would allow for cost saving and better access for patients across Washington State to get the care that they need.

Please recommend that the Legislature support the proposed changes in the Optometry Scope of practice for Washington.

Thank you for your consideration

David Kading, OD, FAAO, FCLSA

Optometric Physician, Specialty Eyecare Group
King County Optometric Society Past President
Member of Optometric Physicians of Washington
Member American Optometric Association
Fellow of the American Academy of Optometry
Fellow of the Contact Lens Society of America

Received

JUL 15 2021

**Department of Health
Office of the Secretary**



Scott Borgholthaus, OD
1867 First Street Cheney, WA 9904
Ph. (509)235-2010 / Fx. (509)235-2011

July 9, 2021

Umair A. Shah, MD, MDH
Director, Washington State Dept. of Health
P.O. Box 47890
Olympia, WA. 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for Optometric Physicians.

I have been practicing optometry for 35 years, of which 25 have been in the state of Washington. I have an optometric license in Washington, Oregon and Idaho. Since being in Washington, I have had several patients that I had to send out for procedures, that I could have performed myself, if I were in Idaho. This caused a delay in care, that caused undue pain & anxiety for the patients involved.

I have taken “hands on” injection courses and laser courses in years past that taught me to successfully treat patients with eyelid lesions and lens capsule opacities. I have also treated countless patients with eye infections and foreign bodies on the eye surface.

I can appreciate that certain surgeries , such as for cataracts and retinal detachments , require further experience than I have expertise to perform presently. I also believe that the scope of practice changes proposed are in line with the experience and capabilities of Optometry.

A shortage of ophthalmologists is occurring in Washington, and other states. This shortage is because not enough ophthalmology students are being trained to take the place of the ophthalmologists retiring. Therefore, it seems appropriate that Optometry should help fill the gap for the care that is needed.

Sincerely,

Scott Borgholthaus, O.D.



COEUR D'ALENE OFFICE

2175 N. Main St. (Riverstone), Coeur d'Alene, ID 83814
Phone (208) 664-9888 | Fax (208) 666-0816

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Phone (509) 928-8040 | Fax (509) 928-0784

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890 Olympia, Washington
98504-7890

July 15, 2021

RE: Sunrise Review, Optometric Scope of Practice

Dear Dr. Shah,

The purpose of this letter is to express my support of the Optometry Scope of Practice bill that is under consideration. I am an ophthalmologist specializing in cataract and refractive surgery. I am the senior partner of Empire Eye Physicians, an MD/OD practice with offices in Spokane Valley, Washington and Coeur d'Alene, Idaho.

I have worked alongside optometrists since joining Empire Eye Physicians for the past 25 years & currently employ 2 optometrists. I was one of the first ophthalmologists in Spokane to co-manage cataract & refractive surgery with optometrists. My extensive experience with optometry makes me uniquely qualified to provide my support of their proposed Scope Expansion.

The current law proposal hinges on the education an optometrist receives. I am in favor of a law that will give the Washington Board of Optometry authority to oversee what is permitted in Washington. This allows optometrists to practice to the highest level of their education and benefit Washington citizens. Healthcare is an ever evolving arena, the optometric law needs to be nimble and allow optometrists to evolve as new procedures & treatments do.

Eastern Washington has many rural areas and there are many communities that do not have an ophthalmologist. Empowering optometrists to practice to their highest capability in primary care is essential to providing care to our community. As the population continues to age the projected numbers of ophthalmologists will not meet the demand. We must continue to partner with optometry to serve the population effectively. This will allow me to provide care at the secondary and tertiary level that I was trained to do.

Thank you for your leadership. Please contact me if you have any questions.

Sincerely,

Mark Kontos, MD



July 15, 2021

Sunrise Review Panel
Optometrist Scope of Practice
Department of Health

Via email: optom-sunrise@doh.wa.gov,

Dear Sunrise Review Panel:

On behalf of the Washington Association of Nurse Anesthetists (WANA) and our over 900 members, I am providing comments on the optometrist scope of practice sunrise review application submitted by the Optometric Physicians of Washington (OPW). WANA is in full support of expanding the scope of practice of optometrists as outlined in the sunrise review application. The current outdated scope of practice laws effectively reduce access to and increase the cost of quality eyecare for Washington residents.

Optometrists' practice aligns with that of certified registered nurse anesthetists (CRNAs) in several ways. First, optometrists practice across our state, but are found in many rural areas as the only provider of eye care. They are an independent practitioner and do not require any supervision. Finally, they are a cost-effective eye care provider compared to other providers.

Washington's outdated scope of practice laws prevent optometrists from providing a full scope of eye care to their patients. Many of the restrictions on optometrists' scope of practice in Washington prohibit procedures for which optometrists have been trained and may have performed in other states when licensed there. We all want our health care providers to be working at the "top of their scope," meaning that they are providing care in all areas for which they are educated and trained. Washington's current laws are a barrier to achieving this.

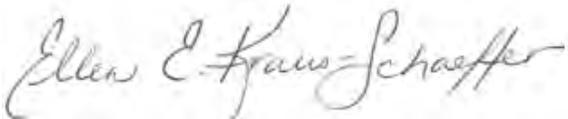
Additionally, updating Washington's scope of practice laws would bring them into closer alignment with laws in other states. There has been no increase in adverse patient outcomes from scope expansion in these states, demonstrating patient safety has not been compromised.

Expanding optometry's scope increases access to health care for Washington residents. Optometrists currently practice in all but three Washington counties, while 15 counties (nearly 40%) have no ophthalmologists at all. In these counties, care may be delayed while waiting for an appointment with an ophthalmologist, not to mention traveling a long distance to see that provider. Because of the inconvenience, the patient may fail to follow through on the referral to a new provider.

Care may be more expensive for patients, as well. It does not serve the patient when optometrists are forced to refer patients to other providers for procedures they are educated and trained to safely provide. The patient may incur multiple co-pay expenses or incur expenses for multiple diagnostic tests. Within their scope of care, research shows that optometric physicians provide equal care at lower costs compared to ophthalmologists.

The proposed changes are necessary to eliminate ambiguity regarding what is and what is not included in the scope of practice of optometry. The proposed changes would authorize the State Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within the scope of practice.

Thank you for the opportunity to provide comments on behalf of WANA.

A handwritten signature in cursive script that reads "Ellen C. Kraus-Schaeffer". The signature is written in black ink and is positioned above the typed name and title.

Ellen Kraus-Schaeffer, RN, ARNP, CRNA
President

June 18, 2021

Umair A. Shah, M.D., M.P.H.
Secretary, Washington State Department of Health

RE: Optometric Scope Expansion in WA State

Dear Dr. Shah,

I am a practicing optometric physician in Arlington, WA. I am writing to ask for your support for the proposed expansion of the optometry act in WA State which is currently going through the Sunrise Review process.

Washington's current scope of optometric practice laws have not been updated for many years, thus becoming quite antiquated compared to most other states; especially those states neighboring Washington. These antiquated laws governing the scope of optometric practice have created an environment that potentially reduces access to appropriate eye care to patients as well as raising the cost of that eye care. This is especially true in rural areas where patients must often travel extended distances to receive the care their optometrist, or optometric physician, could provide to them if the optometry act were updated to allow optometric physicians to provide those services they have been trained to do. Updating such antiquated laws to expand the scope of practice for optometric physicians, would increase access to quality health care for Washington residents while also helping to reduce the cost of such health care. Within the scope of care of optometric physicians research has shown that optometric physicians provide an equal quality of care at lower costs when compared to ophthalmologists. While optometric physicians currently practice in all but three of Washington counties, nearly 40% of Washington counties have no practicing ophthalmologist.

Patients may not be served well when optometric physicians are forced to refer patients to other providers for procedures and services that they have been trained to safely provide. Some of the issues that can arise from such forced referrals include:

- Care may be delayed as patient wait for available appointments
- Patients may have to travel extended distances
- Patients may be forced to miss additional work or school to see the referred to provider
- Due to this inconvenience, many patients fail to follow through with the recommended care
- Patients can incur additional and multiple copayment expenses, or have duplicated diagnostic tests performed which raises the cost of health care to not only the patient, but to the overall health care system itself

The proposed changes to the optometry act are necessary to reduce and eliminate the ambiguity regarding the scope of optometric practice in Washington State. This would also bring Washington's optometric practice act into close alignment with optometric acts in other states that have seen no increase in adverse patient outcomes from such scope expansion.

The recommended updates to the Washington Optometry Act would provide the following:

- Authorize the State Board of Optometry to determine the scope of practice of optometry similar to other health care professional boards
- Establish educational standards required to perform procedures deemed within the scope of optometric practice
- Would closely align with national standards optometric physician's scope of practice in Washington State
- Would expand the types of medications that optometric physicians may prescribe including oral steroids
- Would expand the therapeutic procedures optometric physicians may perform including injections, eyelid lesion removal, and State Board of Optometry approved laser procedures
- These proposed changes would exclude many ocular surgical procedures such as cataract extraction, Lasik, and posterior segment injections and laser procedures

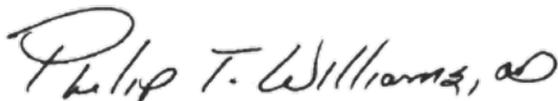
Optometric Physicians are highly trained doctors who have completed undergraduate degrees, and at least four years of specialized biomedical training at an accredited school of optometry. Many go on to complete accredited residency programs and/or fellowships prior to beginning practice. Optometric physicians must also comply with strict licensing and continuing education standards.

Optometric physicians are a critical component of the health care system. They provide a valuable entry point into that health care system for many patients, and are often the first to diagnose serious health conditions such as diabetes, hypertension, multiple sclerosis, thyroid disease, high cholesterol, and cancer to list a few.

Updating and expanding the scope of practice of optometric physicians in the state of Washington will enhance the health care for Washington residents by providing increased access to needed health care while simultaneously helping to control the cost of that health care to both patients and the health care system at large. I personally have had many patients over the past thirty nine years who could have benefited from receiving the type of care in my office that is being requested in the updated optometry act. In some cases that care was delayed, or not completed, due to the inconveniences of having to be referred to another provider for the care I have been trained to provided, but cannot due to an outdated law.

I request that you provide positive support to the Sunrise Review of the expansion of scope for optometric physicians in the state of Washington. I would be happy to discuss this with you personally should you have questions or concerns about this issue.

Respectfully submitted,



Philip T. Williams, OD

7/8/21

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington. I have practiced optometry in WA state for eight years, and I currently practice at an independent medical clinic in Franklin County. We currently do not have any ophthalmologists in our city or county. Patients must travel to the neighboring county to be seen by an ophthalmologist.

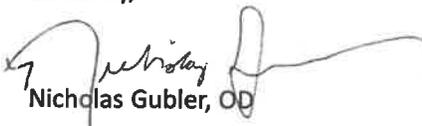
As an optometry student, I practiced in a variety of clinical settings in several states, including: Arizona; North Carolina; and Oklahoma. Each of these states has a broader scope of practice for optometry and has certain requirements for state licensure to ascertain advanced clinical acumen. I saw first hand how the optometrists in Arizona were able to gain access to oral steroid treatment for their patients. In North Carolina, optometrists are allowed to perform injections and lasers similar to the current proposed measures in our state. Oklahoma by far has the most freedom for optometry practitioners and an excellent track record for patient safety.

I believe it is in our patients best interest to allow optometrists to practice to the full scope taught in optometry school. That is the current trend of public health in optometry, as our neighboring states (Alaska, Oregon, and Idaho) have allowed optometrists to have an expanded scope of practice. Even California, has a more optometry friendly scope law than WA state. I fear that optometry students may begin to look more favorably at these locations and that WA state may have a shortage of optometrists in the near future.

There is no doubt optometry will continue to work with ophthalmology when specialized care and treatment are needed for our patients, but currently only 40% of counties in WA state have an ophthalmologist. We need to increase quality eye care in our state, and I believe the best way to do that is to allow the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you!

Sincerely,


Nicholas Gubler, OD



June 29, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
Delivered via email

RE: Optometry Scope of Practice Sunrise Review

Dear Dr. Shah:

As the President of the Optometric Physicians of Washington, I urge you and your Department of Health colleagues to provide a positive review of our proposal to expand optometry's scope of practice in the state.

Washington state's scope of practice is more restrictive than many other states. These restrictions elevate my concern that Washington is losing quality students to other states that allow a broader scope of practice, a trend that does not serve the citizens of our state well. Reversing that trend by expanding optometry's scope of practice will enhance patients' access to care, ensure timelier treatments, and reduce patients' travel and cost to receive care.

I have been a licensed optometrist practicing in Washington since 1988 and during that time have worked in collaboration with many ophthalmologists. Although they may quietly support the proposed scope of practice expansion for optometry, many are reluctant to speak out for fear of criticism from their peers.

Over the years, optometrists have gone to the Legislature for a series of modest expansions to our scope of practice including authority to use diagnostic drugs to dilate the pupil, then later to prescribe eye drops to treat infections and glaucoma, and finally to prescribe oral medications. Each of these proposals was met with strong opposition by a vocal minority within the medical profession. But a review of the record will clearly show that our profession has a good track record of being cautious and conservative in our approach to patient care. We have taken the same careful approach in our scope expansion proposals, keeping our patients' interests our top priority. Accordingly, each time we have improved our scope, we have done so safely and with high quality, a result that will again be true with our current proposal.

Our bill would give the Washington State Board of Optometry the authority to determine optometrists' scope of practice based on our education and training. This approach is consistent with how other health care professional boards determine the approved scope of practice for their respective professions. Not only will this approach benefit patients by ensuring that Washington's scope of practice remains current with technology trends and nationwide standards, but it also will significantly reduce

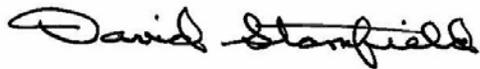
the amount of attention DOH staff and legislators have to devote to scope expansion, freeing up time for them to spend on other important issues. My peers and I look forward to a future in which our profession no longer has to go to the Legislature to adjust our scope of practice every time a new procedure is developed.

Finally, I want to emphasize that our bill responsibly limits optometrists to procedures they have or will be trained to perform and prohibits procedures they are not trained to perform. The bill includes a variety of specific exclusions, including prohibitions against optometrists performing cataract extraction, LASIK, retinal surgery and laser procedures, any surgery that requires a general anesthetic as well as many other procedures.

In summary, there is a strong case to be made for the Department of Health to provide a positive review of the proposed optometry scope bill. By aligning Washington's scope of practice with that in many other states, it removes some current restrictions that serve neither the health nor the interests of our patients. It also establishes a new regulatory framework that will ensure optometry's scope of practice in Washington continues to serve those interests in the future.

Thank you for your thoughtful consideration of this proposal.

Sincerely,

A handwritten signature in black ink that reads "David Stanfield". The signature is written in a cursive, flowing style.

David Stanfield, OD, FAAO
President, Optometric Physicians of Washington

FERRIS STATE UNIVERSITY

MICHIGAN COLLEGE OF OPTOMETRY

July 12, 2021

To whom it may concern:

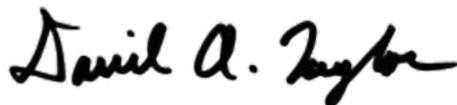
Optometric Physicians are trained over an intensive, four-year graduate curriculum in the techniques, skills, and knowledge to effectively diagnose and treat conditions of the eye and visual system. Conditions treated by optometric physicians include amblyopia, strabismus, refractive error, glaucoma, eye infections, posterior capsular opacifications, and others, both medically- and functionally-based.

At Michigan College of Optometry at Ferris State University, our students are trained to identify, diagnose, and treat these and other conditions. They receive hours of hands-on training in pharmaceutical injections of the eyelid and therapeutic LASER use, sufficient to allow them to obtain full-scope licensure in any state of the union. In many communities in Washington, optometric physicians provide the only eye care available. It is crucial to public health that optometric physicians practice to the full scope of their training.

The proposed scope of practice law from the Optometric Physicians of Washington would allow optometric physicians in the state to set their scope according to the level of the training they receive. This would allow patients to receive more care from their primary eye care providers, without having to rely upon costly, inconvenient, and unnecessary referrals. Please consider providing a favorable review of the law.

Feel free to reach out if I may be of service at DanielTaylor@ferris.edu, or by phone at (901)831-7130.

Regards,



Daniel A. Taylor EdD OD MS FAAO DipOE

Associate Dean for Academic and Student Affairs

Michigan College of Optometry at Ferris State University

1124 S State Street, MCO 231
Big Rapids, MI 49307-2738

Phone: (231) 591-3700

Fax: (231) 591-2394

Web: www.ferris.edu/mco

HOPE CLINIC

A Division of Developmental Vision Associates, PLLC

July 11, 2021

Sunrise Review Committee
Department of Health
State of Washington

Re: Expanded Scope of Practice for WA State Optometric Physicians

Members of the Sunrise Committee:

Thank you for this opportunity to present my views to you.

I want you to know that I have had 79 birthdays and I am still in active practice. I am a specialist in binocular (two eyes) visual function and Neuro-Optometry, providing vision therapy and vision rehabilitation services to children and adults with visually based learning challenges, strabismus (eye turns), and visual dysfunctions from traumatic brain injury. I choose to limit my practice to these services.

I depend on the ability to refer to my Primary Care colleagues. My patients need to have access to the best eye refraction, contact lens, dry eye, Myopia management and medical eye services that I do not provide.

All the requested scope expansion procedures are now routinely taught in all Optometry schools. When an Optometry school graduate passes the National Boards, the new Optometric Physician may choose to practice in any of the 50 states. Scope of practice is extremely important to the new graduates – the top performers will likely choose states offering the highest levels of scope.

Presently, all the Western States contiguous to Washington State and beyond have the expanded scope of practice. I am extremely concerned that present and future top young Doctors wanting to be in the Western United States will NOT choose to practice in Washington – why should they? Procedures they have been trained to do cannot be performed in Washington.

Bellevue Clinic
Place 10 Building
12301 NE 10th PL STE 302
Bellevue WA 98005
Tel: (425) 462-7800
Fax: (425) 455-3019
Toll Free: (866) 251-5581

Tacoma Clinic
Allenmore Terrace Office Bldg.
3315 S 23rd ST STE 215
Tacoma, WA 98405
Tel: (253) 925-1288

Silverdale Clinic
Creekside Complex
9633 Levin Rd. NW STE 201
Silverdale WA 98383
Tel: (360) 613-0181

I am also overly concerned for Washington citizens living in rural areas of our State. Optometric Physicians for years have served all citizens of Washington State, including rural Washington. These rural Optometric Physicians are available to handle medical eye emergencies – yet our Scope of Practice does not allow them to provide treatment they are trained to perform. These Optometric Physicians must refer to other medical providers, often many miles away!! In my opinion, this makes no sense. Washington State’s rural citizens are entitled to the same health care efficiency enjoyed by our urban and suburban citizens.

In summary, Washington State’s Optometric Physicians owe Washington State citizens the highest quality eye and vision care services. We want the top Optometric Physicians in the country practicing here – we need to be competitive in scope of practice to attract the best.

Do know that I will spend many thousands of dollars taking courses and learning skills I choose not to provide in my specialty practice. I am OK with this – I believe there should be one scope of practice equal to or better than other States for all Optometric Physicians practicing in Washington State.

Again, thank you for your time in reviewing my comments and concerns, as well as those of my colleagues.

Sincerely,

Theodore S. Kadet, OD, WA Optometric Physician License #805
Fellow, College of Optometrists in Vision Development (FCOVD)
Director of Functional and Neuro-Optometry
Developmental Vision Associates, PLLC dba Hope Clinic

To Whom it may concern,

I was seen by my optometrist today, June 29, 2021 and had a new bump on my lower lid. I was told by my optometrist, Dr Douglas Jeske that it was a blocked oil gland. He told me that one treatment option would be to use a medication injected into the gland that would allow it to calm down and get better quickly. However, due to current Washington law, he is unable to do this procedure, even though he is trained to do it and that many other states allow his profession to do the procedure. I now had to decide if I wanted a referral to a different office to see a doctor that I do not know in order to have the simple procedure done. I did not want to go anywhere else due to extra cost and inconvenience. It would be great to approve new laws to allow my optometrist to do procedures that he is trained to do.

With my regards,

Carol Langley 6/29/2021

Carol Langley
15033 119th Way SE
Yelm, WA 98597
360-280-1350

*I want Dr Jeske do the procedures I need
that he is trained to do! Thank you.
Viola Dougherty 6/29/2021*

7/13/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah .

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for five years, and I currently practice in a private practice setting in Renton, WA. I am also licensed to practice in Nevada.

Washington's current scope of practice regulation prevents me from caring for many patients that I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

There have been several occasions when my patients have been bothered by something as benign as a conjunctival cyst. Our current scope of practice does not allow for lancing and draining of such ocular lesions. Considering the only option for immediate relief would be to lance the cyst, several of my patients have had to be referred out and wait months to get in with an oculoplastic surgeon. This burdens them with longer wait times, longer periods of discomfort and extra copays.

This is just one example of the many unnecessary restrictions impeding my profession from providing accessible, less costly care. Others include the inability to prescribe oral steroids, excise chalazions and perform YAG capsulotomies.

It is important that Washington's regulatory framework keep pace with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,

Sincerely,



Bryan Cholico, OD

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

July 13th 2021

RE: Sunrise Review, Optometric Scope of Practice Dear

Dr. Shah,

I support the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for 15 years and am in a private practice in Kennewick, serving the Tri-cities communities for medical and primary eye care. During my four years of post-graduate training in Chicago for my doctorate of optometry, I was trained to do many procedures beyond the scope of Washington's current practice regulations. Washington's current scope prevents me from caring for my patients as I have been trained, and are inconsistent with other states and national standards.

The current scope restrictions on optometry in Washington state make it challenging for me and my colleagues to provide expedited care, increasing the cost of care to patients and delaying certain sight-saving care.

This is exactly the sort of inefficiency that is increasing health care costs across our country, while preventing some patients to get the care that they need. If we can streamline the process of scope evaluation to match technology and procedures that expand and grow, we can provide our patients the care they need in a safe and efficient manner. Other states board of optometry facilitate this. This protects the patients by ensuring that a state sanctioned optometry board is approving what is in the best interest of patient care rather than legislative action.

The boards mission statement clearly states this: The mission of the Board of Optometry is to protect the public health, safety, and welfare, and to provide for state administrative control, supervision, licensure, and regulation of the practice of optometry. By providing them the guidance to regulate scope, it would allow for cost saving and better access for patients across Washington State to get the care that they need.

Please recommend that the Legislature support the proposed changes in the Optometry Scope of practice for Washington.

Thank you for your consideration,

Maureen Fahey, OD,

Optometric Physician, Desert Valley Eye Care
Tri-cities Optometric Society Past President
Member of Optometric Physicians of Washington
Member American Optometric Association

07/12/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for three years, and I currently practice in a specialty referral center alongside other medically-trained optometrists and ophthalmologists in Bellingham and Mount Vernon. I also am currently licensed to practice in Oregon and was previously licensed in Idaho.

During my optometric training and residency, I showed proficiency in skills that I am currently precluded from performing in Washington state. Because I completed my residency at a federal facility in Washington state, I was able to remove superficial eyelid lesions and perform fluorescein angiography. These are two skills that I am barred from doing now that I am in private practice here.

Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

I routinely see patients that have conditions I have been trained to treat, but am prevented from doing so due to the current limitations on my scope of practice. For example, I often have patients that I see that have chalazia that are recalcitrant to oral antibiotics. When this happens, I am unable to provide further care for the patient and must refer them to my ophthalmology

colleagues for excision or steroid injection. Not only is this both a time and financial burden for the patient, but it also delays the care the patient ultimately needs.

It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you.

Sincerely,

Emily R. Freeman

4265 Ridgewood Avenue
Bellingham, WA 98229

July 16, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometrists in the state of Washington.

I have been a practicing optometrist for 7 years now and I currently practice alongside ophthalmologists in a medical/surgical practice in the Renton area. I am heavily involved in pre- and post-operative patient care as well as medical eye care – commonly treating conditions such as dry eye, glaucoma, corneal abrasions, corneal foreign bodies, uveitis, etc. I have previously practiced in a private optometric practice setting as well as in a Department of Veterans Affairs Hospital in Los Angeles California.

During my four years of post-graduate optometric training and in my year of residency training, I was exposed to procedures and prescribing patterns that are beyond the scope of Washington's current practice regulations. These regulations prevent me and my colleagues from caring for our patients as we have been trained and are inconsistent with the regulatory structure of other states and with national standards.

The current restrictions on optometric scope of practice in Washington decrease patient access to expedited quality eye care, often delay sight saving treatments, and often increase the financial burden on our patients. At my current practice, these restrictions and inefficiencies are seen on a daily basis. I work alongside ophthalmologists at a high volume interdisciplinary tertiary referral based medical/surgical practice. Our ophthalmology colleagues split their time between clinic and surgery, which leads to less availability of our ophthalmologists to see new patient referrals. Due to this, new patient referrals are often seen by our optometric physicians first and we are often the first eye care provider to diagnose such common conditions as posterior capsular opacification after cataract surgery and acute angle closure. Both of these conditions require low-risk, non-invasive laser treatments to help improve and/or save vision. Because our ophthalmologist colleagues are focused on surgical consultations, our optometrists are also responsible for the majority of post-operative eye care for our patients. It is not uncommon for our optometric colleagues to be the first eye care provider to identify post-operative complications, such as immunologic rejection of a corneal transplant. Currently, due to Washington's restrictive scope of practice laws, we are unable to initiate the treatment that the patient needs and that we have been trained to do. Thus, patients are forced to delay treatment and return for a second visit with one of our ophthalmologist colleagues. These restrictions do not serve our patients well as they decrease access to timely quality eye care and increase the costs of such care. With the limited number of ophthalmologists in the area and the growing aging population, scope expansion is necessary to provide adequate care for our community.

Washington's regulatory framework must keep up with changing eye care technology and standards. The best way to ensure such timeliness is to authorize the Washington Board of Optometry to regulate the scope of optometry, as other health care professional boards in the state already do. I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. I appreciate your attention and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Alana Curatola". The signature is fluid and cursive, with the first name "Alana" being more prominent than the last name "Curatola".

Alana N. Curatola, OD

July 11, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
PO Box 47890
Olympia, WA 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

This letter is in support of the proposed revisions to the scope of practice for Washington's Optometric Physicians.

I have been in practice for 35 years and just relocated to Washington in 2020. I am also licensed to practice in Oregon and Arizona.

Washington's current of scope of practice regulations are different than the other states in which I have a license to practice. When optometric physicians relocate across state lines, the regulations prevent us from providing care to our patients to the level of our training and scope we previously performed.

It is important to allow the Board of Optometry to update the scope of practice and training required. Washington's optometric physicians provide safe and cost-effective eye care in many rural counties across the state. These updated regulations would benefit Washingtonians by not having to travel long distances to receive care that their family optometric physician can provide. Optometric physicians have been providing this care across the United States and in Veterans Administration hospitals for many years.

I strongly encourage you and your committee to recommend that the legislature enact the proposed changes to the optometric scope of practice.

Sincerely,



Chad D. Burton, OD



July 2, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
Delivered via email

RE: Optometry Scope of Practice Sunrise Review

Dear Dr. Shah:

WA State Optometry scope of practice law is outdated and should be revised to reflect the training and experience of today's optometric physicians. This is in the best interest of Washington State residents, who will benefit from increased access to high quality eyecare and lower costs for that care.

Performance of in-office minor surgical procedures has become the standard in our profession. Optometrists are trained to do these procedures and are doing them safely in many other states, as well as at federal facilities here in Washington.

I graduated professional school in 2002 and completed post-doctorate residency training in 2003. I successfully performed many of these procedures during the course of my training, as well as while working at a VA Hospital from 2003-2011. Now I am in independent practice in Washington state, and am prohibited from fully caring for my patients by performing the same procedures, all because of our state's outdated practice laws.

I practice in a rural setting. When I am forced to refer one of my patients to another provider for a procedure I am fully trained to perform, it delays care by several weeks and increases patient costs. The cost of such a referral is higher because it forces patients to schedule additional office visits, spend additional travel time visiting additional facilities, potentially pay for duplicative diagnostic procedures, and incur additional co-pays. This unnecessarily drives up costs and reduces access to care.

Optometrists like me practice in 39 of 42 counties in WA State. As primary care eye doctors, we see and treat patients in all populations including those in rural and underserved areas. In contrast, more than 40 percent of Washington counties do not currently have a practicing ophthalmologist. Allowing optometrists to perform the procedures we are fully trained to

perform is one way to minimize the impact of this disparity on underserved populations around the state.

I want to emphasize that the proposed scope expansion would bring these benefits to patients across the state while protecting their safety. This has been the case in other states that have expanded scope, and care has been taken to incorporate important patient protections into this legislation as well. It would not authorize optometrist to perform procedures that are beyond their training, nor would it allow every optometrist to perform every procedure included in the law.

Instead, the bill provides a mechanism, through State Board of Optometry review and action, for optometrists to be granted authority to perform a procedures only if and when we have completed the necessary training to do safely. This is the regulatory framework provided by other professional healthcare boards in our state, and the Board will be expected to exercise the same conservative, patient-centric approach optometrists bring to our practices each day.

Finally, the proposed legislation would continue to prohibit optometrists from performing a range of specific procedures for which the education and training of an ophthalmologist is more appropriate.

Thank you for your positive consideration of this change in state law.

Respectfully,

Michael Sirott, OD
President Elect, Optometric Physicians of Washington
Diplomat, American Board of Optometry

TO: Umair A. Shah, M.D., M.P.H.
Secretary, Washington State Department of Health

FROM: Steven Snell

RE: Delay of Eye Care

Dear Dr. Shah,

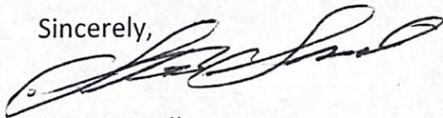
In early 2021 my optometrist diagnosed me with posterior capsular opacity, causing me to have progressively blurrier vision in my left eye. Although he was easily capable of treating me for this condition, I learned he is unable to do so in the state of Washington.

As a result, I was referred to separate office, requiring an extra visit, co-pay, and establishing care with a new doctor for a simple procedure that could have been performed in my original optometrist's office. The procedure almost instantly restored my vision, and wonder why if so easily diagnosed and treated, why was I required to go somewhere else?

It is my understanding that the department of health is currently reviewing a proposal that would update Washington licensing to match the training that optometrists have and the care they are authorized to provide in other states. I write in as a patient to support these changes.

Thank you.

Sincerely,



Steven Snell
Walla Walla WA

July 9, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am an optometrist currently practicing in Washington state writing to support the proposed revisions to the scope of practice laws for optometric physicians.

I currently practice in Spokane, WA in a group practice alongside other optometrists and ophthalmologists. I have been practicing optometry since 2016 and have also been licensed in the states of Oregon and Florida. I completed my training in both of these states where I learned to perform procedures and prescribe medications that I am unable to here in Washington.

The current scope of practice regulations limit Washington optometrists' ability to provide quality care. I experienced an unfortunate example of this reduced access to care when an elderly patient came to my clinic due to sudden vision loss in one eye. She had experienced an ischemic event to her optic nerve, and I suspected that she was suffering from giant cell arteritis, a serious inflammatory condition. This condition requires immediate treatment with oral steroids to prevent further vision loss. Practicing in Washington state, I was unable to prescribe oral steroids and was required to consult with another provider who could prescribe the medication. Unfortunately, the patient was not given steroids immediately and she developed an ischemic event in her other optic nerve, leaving her permanently blind. Had I been allowed to prescribe oral steroids in this situation, this patient may not have lost her vision.

Although a negative outcome this severe is less common, patients in Washington often deal with many other challenges related to the current restrictions, such as delayed care and traveling long distances to see ophthalmologists. In my current position I have the luxury of referring easily to my ophthalmologist colleagues in the same clinic, but many optometrists must send patients several hours away for simple procedures they are trained to perform. Allowing the Board of Optometry to regulate which procedures and medications can be safely offered by optometrists would expand access to care and improve outcomes for many patients, especially those living in rural areas.

I am in strong support of the proposed changes to the optometry scope of practice for Washington state as I feel it would help support patients across the state. Thank you for your time and consideration.

Sincerely,

Emily M. Korszen, OD

Spokane Eye Clinic
427 S Bernard St.
Spokane, WA 99204

July 8th, 2021

Washington State Department of Health

RE: Optometrist Scope Expansion Sunrise Review

Dear Sir or Madam:

As an optometrist licensed in Washington and Oregon, I would like to explain why I support the proposed optometric scope expansion currently under Sunrise Review by the Washington State Department of Health.

As our population grows, and as the proportion of elderly within the population grows, the demand for eye care services is expected to grow exponentially in Washington and in the US. Because the number of ophthalmologists graduating each year is limited by the number of residencies, which have not increased in over 20 years, the number of ophthalmologists has been flat-lined for 2 decades, and is not expected to increase. We are already seeing a gap between the need for eye care and the amount of work each ophthalmologist can physically perform.

For decades now, optometrists have helped to fill this gap by steadily increasing their knowledge and experience. The proposed scope expansion is an attempt by optometrists to continue to help serve the growing needs of the state. Many states across the nation are passing similar scope expansion legislation to allow optometrists to practice to the full ability of their training, and Washington patients would be served well if we joined them.

I am proud to work at Pacific Cataract & Laser Institute, a large multistate ophthalmology referral center employing dozens of ophthalmologists and optometrists. We specialize in cataract surgery, LASIK, and other secondary and tertiary ophthalmic procedures some of which are included in this proposed scope expansion. Almost every minute of my day is spent supporting our surgeons, qualifying patients for surgery or caring for them afterwards, and so allowing our ophthalmologists to perform many more of their exquisite and precise surgeries.

Ophthalmology and optometry have fought for decades over their boundary. In order to meet the impending demand, we should abandon turf battles and focus on patient care. The only important goal should be how to provide the best and safest care to the patients that need it. This criterion strongly suggests that the proposed optometric scope expansion should be passed.

Thank you for your attention,

Oliver Kuhn-Wilken, OD
Pacific Cataract & Laser Institute
2205 NE 129th St., Vancouver, WA 98686



07/16/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I would like to **state support of the proposed revisions to the scope of practice for Optometric Physicians of Washington.**

I have been a practicing optometrist for 11 years, and I currently own two private practices in the Spokane area. I also am licensed in the state of Idaho.

Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

One example of this was when I needed to prescribe oral steroids for a patient with a vision threatening condition. He came to me with sudden onset complete vision loss in one eye. After examining him, I determined that he had inflammation of the arteries near his eyes and was at high risk of suddenly going blind in the other eye if we did not intervene. He needed a short course of oral steroids immediately to prevent this from happening. Because that is considered outside my scope in Washington (but not Idaho) I had to refer him out for treatment. I referred him to the neuro-ophthalmologist in town, but was told later that she was on vacation. I immediately made several calls to other ophthalmologists before I found one able to see him, but it took several days before he was seen and prescribed the necessary treatment. He was lucky he did not experience the same episode in his other eye during that time. **He could have gone completely blind. Had I been able to prescribe the oral steroids I am trained to prescribe, it would have been much safer for the patient.**

It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational



requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, **I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.** Thank you,

Sincerely,

Melissa Barnhart, OD
Spokane, WA

7/16/2021

Umair A. Shah MD, MPH
Director, Washington State Department of Health
P.O. Box 47890 Olympia, WA 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing to you in support of updating and modernizing Washington State's scope of practice for optometric physicians. I have been practicing optometry in Washington since 2014 after completing my residency.

My practice is in Monroe in Snohomish County, and my patients come from as far as the Stevens Pass area. This means that some patients have to drive an hour to see me for their eye care needs. This presents an even greater challenge for patients when they have complicated care and I must refer them to an ophthalmologist. While not far from the bustling east-side of King County, there are few ophthalmologists in the immediate area. This means that they must travel an additional 30-40 minutes to reach ophthalmologists in Everett or Kirkland.

Scope expansion for optometrists in Washington means that patient's access to care will be improved. The burden placed on patients to travel to seek additional care means they must take time off work with possible loss of wages. Oftentimes they must recruit someone to help them with transportation due to poor vision, which further affects the community. By expanding our scope and allowing optometrists to perform procedures we have been trained to do, this would be a significant relief towards this economic burden.

I am currently dually licensed in California and Washington. The Optometry Practice Act that was passed in 2017 has expanded the scope of optometry in California and helped modernize optometric care in the state. The California legislature sees fit that optometrists can help patients improve access to care. It is now time for Washington to do the same.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "Joseph Lee OD, FAAO". The signature is fluid and cursive, with a small "OD" at the end.

Joseph Lee OD, FAAO

Board Member, Optometric Physicians of Washington
Immediate Past President, King County Optometrist Society
Member of American Optometric Association
Fellow of the American Academy of Optometry



07/05/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for thirteen years, and I currently practice inside a Costco in Covington, Washington.

Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Sincerely,

Natalie Lam

Natalie Lam, OD
27520 Covington Way SE
Covington, Wa 98042

July 9, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah:

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington. I have been a practicing optometrist for 12 years, and I currently practice in a private practice in Kirkland, WA.

Washington's current scope of practice regulations prevent me from caring for my patients as I have been trained, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin Jue". The signature is stylized with a large loop at the end.

Justin Jue, OD
Juanita Vision Clinic
11314 NE 124th ST
Kirkland, WA 98034

July 12, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for seven years, and I currently practice alongside an ophthalmologist, performing pre- and post-operative, and medical eye care in Walla Walla. I am also licensed to practice in Oregon.

During my four years of post-graduate training in optometry, I was exposed to procedures and prescribing patterns that are beyond the scope of Washington's current practice regulations. These rules prevent me from caring for my patients as I have been trained and are inconsistent with the regulatory structure of other states and with national standards.

The current restrictions on scope of practice in Washington make it challenging for me to provide expedited care, delay sight-restoring treatments, and often increase the financial burden on my patients. This is readily seen in my practice daily. I practice in an interdisciplinary, tertiary referral center, alongside an ophthalmologist. My ophthalmologist colleague splits his time between surgery and clinic, which leads to less availability to see new patient referrals on a weekly basis. Due to this, new patient referrals are often seen by me first. I am often the first to diagnose post-surgical complications, such as secondary cataracts formed after a primary cataract extraction or immunologic rejection of a corneal transplant; however, due to Washington's restrictive scope of practice laws, I am unable to initiate the treatment that we have been trained to do, both as part of my education, and as on-the-job training from my ophthalmologist colleague. These patients are forced to delay treatment and return for a second visit with the ophthalmologist within the same practice, thus increasing travel time and expenses, and having the patient pay multiple copays. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of said care.

Washington's regulatory framework must keep up with changing technology and standards in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to regulate the scope of practice of optometry, as other health care professional boards in the state.

I strongly encourage you to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Thank you for your time and consideration,

Tara Evanger-Dalke, OD

*Optometric Physician, Lifestyle Eye Center
Walla Walla County Optometric Society President
Member of Optometric Physicians of Washington
Member of American Optometric Association*

July 11, 2021

RE: Sunrise Review for Optometric Legislation

Dear Sir or Madam:

I am writing to encourage you to favorably rule to allow the Washington State Board of Optometry to determine scope of practice issues for Optometrists. As per your website page, "The mission of the Board of Optometry is to protect the public health, safety, and welfare, and to provide for state administrative control, supervision, licensure, and regulation of the practice of optometry." The Washington State Board of Optometry is the best equipped in experience and knowledge to access if a licensed Optometrist can perform a procedure or prescribe a treatment. Several states have enacted similar policies, including Alaska, Kentucky, Louisiana and Oklahoma.

A Favorable Opinion and Successful Passage of Legislation Would Allow:

- 1. Most Qualified Governmental Agency to Determine Scope of Practice**
Legislators are ill-equipped and lack critical knowledge to determine scope of practice by health care providers. In addition, the Department of Health has resources and protocols in place to investigate scope issues.
- 2. Timely Use of Technologies**
Prevents delay in determining if a new procedure or medication can be used.
- 3. Saves Money**
Limits legislative action when new technologies and advances are made-currently scope changes need to go through time consuming and expensive legislative process. In addition, patients face a financial burden when they need to find another provider many times after seeing an Optometrist and the other provider may be outside of their community.
- 4. Best Care for Patients**
Patients will receive up-to-date and safe procedures and treatment in their community. By limiting optometric practice, this forces patients to find another provider type which can delay care and treatment. We must utilize the skills, education and training of Optometrists to provide appropriate and accessible patient care.

I thank you for your time and consideration of this important health care issue. If you have any questions, please do not hesitate to contact me.

Sincerely yours,



Curtis A. Ono, O.D.

E-mail: conopugetsoundeyecare@gmail.com

Phone: 206-526-5222

July 8, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist in the state of Washington for seven years, currently as part of a surgical center in Tacoma, where I work closely with other optometrists and ophthalmologists to treat a multitude of eye conditions. Prior to that, for five years, I have practiced in the Eastern part of the state in a town of Walla Walla, serving largely a rural population from surrounding small towns and counties.

Washington's current scope of practice regulations have prevented me from caring for my patients as I have been trained on numerous occasions, and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

Though I have been trained to perform safe and non-invasive procedures such as YAG laser capsulotomy or laser peripheral iridotomy, and knew that I would do those well, I have always had to refer my patients to an ophthalmologist to have such procedures done, even though it often resulted in longer wait times, repeat testing and additional co-pays for the patient. I cannot perform minor eyelid procedures, such as removing a bothersome papilloma or a chalazion, though I have been extensively trained on them in optometry school and during residency, and my colleagues in surrounding states are legally able to do such procedures. When I practiced in Walla Walla, the closest reliable retinal specialist was 3 hours away, so unnecessary referrals for a second opinion resulted in large costs and huge time commitments for patients. Such costs might have been justified if obvious retinal care would be provided, but there were many patients with less than obvious presentations. Diagnostic tests such as fluorescein angiography could help add confidence to the need for specialty referral. Often times it can aid in differentiating conditions such as wet macular degeneration from the dry form or from more self-limiting disorders such as central serous chorioretinopathy. While the former requires specialist intervention, the latter often do not and can be managed under my care. But while fluorescein angiography is routinely done by technicians in the retinal clinics, I am not allowed to perform it as an optometrist in the state of WA. Again, I have been extensively trained to perform this important diagnostic test. Again, in many other states, my colleagues are able to perform this. Again, the cost of care and access to it is affected by these limitations. In the Tacoma area, I see that distance to travel to see an ophthalmologist is usually not an issue for patients, but time still is. It is disheartening to see my patients wait weeks or months for a simple procedure I know I could have safely provided in my office.

Medicine and eye care are evolving rapidly. New procedures, treatment protocols arise regularly. The legislature and the regulatory framework it enacts is a not able to keep up with these changes, resulting in frequent delay of care to patients. The best way to ensure timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,

Sincerely,

A handwritten signature in black ink, appearing to read "Gleb Sukhovolskiy", with a long horizontal flourish extending to the right.

Gleb Sukhovolskiy, OD
2915 S Alder St,
Tacoma, WA 98409

July 14, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometrists in the state of Washington.

I am an optometrist currently practicing in Seattle at a surgical co-management practice with optometrists and ophthalmologists. In my practice, I work alongside an ophthalmologist seeing patients in the glaucoma and cataract surgical specialty. With the current mode of practice, patients experiencing vision loss from secondary cataracts and vision loss from glaucoma must be seen a minimum of 3 times in order to access the proper laser treatment to help protect their vision. Patients must first be referred into the practice by their routine optometrist, then seen in our clinic by myself/ophthalmologist, and then return for a laser procedure at a later date in the surgery center. With this current protocol, patients must wait on average 2-3 months to receive the procedure. Due to the current scope of practice in Washington state, patients are unable to have laser services provided by a skilled and competent optometrist in the clinic. This scope limitation forces all of these patients to be seen by an ophthalmologist. If optometrists were able to perform such procedures in a clinic setting, patient wait time would significantly decrease, healthcare costs for procedures would decrease, and reduced risk of vision loss for patients would be accomplished. Optometrists have or can have access to the training and skills to perform these laser procedures within the current optometric education system. Authorizing the Board of Optometry to regulate the scope of practice of optometry in Washington would allow for more efficient and affordable eye care for all patients.

Please consider recommending that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Thank you for your time and consideration,

Emily A. Bucher, OD, FAAO

July 16, 2021

Umair A. Shah, M.D., M.P.H.

Director, Washington State Department of Health

P.O. Box 47890

Olympia, WA 98504

Re: Sunrise Review, Optometrist Scope of Practice

Dear WA Department of Health,

I am writing in support of the proposed revisions to the scope of practice for optometrists in the state of Washington.

Throughout my 19-year career, I know the impact I have to the local public health landscape. Washington's current scope of practice regulations prevent and limit me from caring for my patients as I have been trained and are inconsistent with both the regulatory structure of other states and national standards in optometry. These restrictions can be prohibitive for my patients to gain fast, efficient, and quality eye care. In addition, referring my patient to another provider to care that I am trained to provide increases the costs of that care.

By remaining in the old standard and regulation is to support a system that keeps the status quo of high healthcare cost and delayed patient's care. Referring a patient to another clinic appointment increases their travel time and unnecessarily lead to more time off from work and family. I feel it is important for Washington's regulatory framework to keep up with modern standard delivery of eye care.

The best way to approach this is to authorize the Board of Optometry to determine optometrists' scope of practice, as other healthcare professional boards do, and to establish education standards required to perform procedures deemed within current the scope of practice.

In closing, I strongly encourage you to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,

Regards,



Philip Lo, O.D.

Queen Anne Eye Clinic

20 Boston St.

Seattle, WA 98109

Northwest Vision Clinic

2201 NW Market St.

Seattle, WA 98107

July 3rd, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health

RE: Optometry Scope of Practice Sunrise Review

Dear Dr. Shah,

I am a practicing optometrist in Chehalis, WA and work for a large group practice consisting of both optometrists and ophthalmologists. Over the 13 years of practice, I've been blessed to be able to serve thousands of patients in caring for their eye care needs and work closely with my ophthalmologic colleagues in co-managing surgical cases as well as managing complex ocular disease. In addition, my fellow optometrists and I take call for any eye care needs for the county, which includes two hospitals and multiple urgent care facilities, as well as being the primary eye care referral center for doctors of all specialties in the community. Over the years I've observed many things; three of which I would like to discuss and are most relevant to the purposed changes to optometry's scope language currently under sunrise review at your department.

One, ophthalmologists and their time are in short supply. There have been multiple sources from ophthalmology themselves showing the impending labor shortage of ophthalmology due to a stagnant number of graduating ophthalmology residents and rates of retiring physicians not keeping up with an aging population growth. We have seen that in our own practice when trying to recruit new ophthalmologists, as there simply are not a lot of providers that are available. In addition, even those within our practice have limitations to their time and it is not unusual for patients to have to return on a different day to have a relatively simple office based procedure done by one of our ophthalmologists because they are busy utilizing their skills to the fullest in doing more complicated ophthalmic surgeries.

Two, optometry is uniquely situated to meet these population demands in serving our communities eye care needs. Having four years of post-undergraduate doctorate level training, with emphasis specific to evaluating, managing and treating conditions of the ocular and visual system makes optometric training the best suited in using that training to fill the gaps in eye care needs for Washington patients. In addition optometric training covers pharmacology, anatomy, neurology, and whole body systems and how those systems interact with visual anatomy and physiology. In fact, many of the optometry programs have their students take these classes alongside fellow allied healthcare professional students; such as Osteopathic Medicine, Dentistry, Podiatry and Pharmacy and taught by those within the various professions. Lastly, current statistics show around 1 in 4 graduating optometry students go on to complete an additional one-year Residency program with training in specialty areas within eye care and adding thousands of hours of patient care to their training.

Three, the existing optometry scope law in Washington does not allow for a timely implementation in utilizing optometry's advanced training for not only current ophthalmologic treatment options, but also for future technological advancements. The purposed bill will allow for the modernization of the optometry board to be in line with how most other health care professions in Washington State are regulated, including the Medical Commission, the Dentistry Board, the Nursing Commission and the

Podiatry Board. The bill does not give free range to the Optometry board as you can see. There are still many restrictions to the practice of optometry in the bill itself, but it does allow and require that the board through rulemaking establish criteria to ensure adequate training has been accomplished by the optometric provider prior to any advanced scope of practice procedures or treatments being performed. Again, this is no different from how the healthcare professions mentioned above are organized and have been functioning for decades, because it is the most efficient way of allowing a professions training to keep up with technological advancements while still ensuring safety to the public.

Lastly and from a personal note, I am licensed to practice optometry in five states, and in each of those states due to their respective optometric scope laws I am able to perform procedures or provide treatments that are currently prohibited in Washington State. On more than one occasion I've had to tell my patients they will need to return to see one of our ophthalmologists who is not currently available to see them in order to have a procedure/treatment which unfortunately if we were in a different State I would be able to take care of for them without requiring another appointment. This isn't because of any safety concerns but simply because Washington's Optometric Scope Laws are antiquated and as a result makes patients unnecessarily wait for care they deserve.

I urge you to consider supporting the suggested changes to optometry's scope laws to allow doctors like myself in better serving the needs of my fellow Washingtonians.

Sincerely,

Mark Maraman OD, MS

Chehalis, WA

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
Olympia, Washington 98504-7890

7/11/2021

RE: Sunrise Review, Optometric Scope of Practice

Dear Dr. Shah,

There is a disparity between what is taught in optometric graduate schools throughout the county and what optometrists are currently allowed to practice in Washington state. The scope of practice process is currently dependent upon the legislature, while properly deliberate in its procedures, is not as well equipped to keep up with this disparity as the Washington State Board of Optometry. As you are aware, the Washington State Board of Optometry which consists of optometrists and members of the public appointed by the governor, would be more appropriate for this process.

I am writing in support of the proposed revision of how optometry's scope of practice is determined in Washington State. I have two optometry practices located in Lynnwood and Redmond. I have been in practice since 1980. The scope has not kept up with the training of my associate doctors, who are future partners and owners of the practice. They have been trained to do things that are not allowed under the scope of practice in Washington. As I lecture around the country, many of our colleagues can care for their patients in ways that we are not able to, as Washington does not match up with other states and national standards. I have an additional license in Oregon and in Oregon the scope is broader than in Washington.

My patient population is special as our team offers optometric vision therapy. We have seen patients from 4 ½ months old to 98 years young. Patient challenges range from learning and vision disabilities, strabismus (those with eyes that do not work together because of an eye turn), amblyopia, (where even with the best glasses or contact lens prescription, they cannot see 20/20), special needs, those on the autism spectrum, concussion and acquired brain injuries. Many of our patients have a multitude of sensory processing dysfunctions and experience high anxiety. We find it difficult to find providers who understand both their diagnosis and their anxiety level. For these fragile patients, it would benefit the families if our office could care for them when certain needs arise. It would decrease wait time between services and decrease the cost of care. The scope of practice and training requirements should constantly be evaluated, which the Board of Optometry is better equipped to do than the legislature. This change could make a big difference for these families.

Several years ago, a pediatric ophthalmologist who is a strabismus surgeon, asked me to rent space in his practice, to collaborate in the care of patients with vision therapy. I want to assure you that this proposal by the Optometric Physicians of Washington would allow optometrists

to perform some advanced procedures if they have the requisite training, it also specifically excludes many procedures that ophthalmologists are better trained and prepared to perform.

As a past chair of the Washington State Board of Optometry, I ask you to please recommend that the legislature support the proposed changes in the optometric scope of practice.

Thank you for your time and work on behalf of the people of Washington state and taking this into consideration.

With gratitude,
Nancy G. Torgerson

Optometric Physician, Alderwood Vision Therapy Center
Washington State Board of Optometry Past Chair
Snohomish County Optometric Society Past President
Member of Optometric Physicians of Washington
Member American Optometric Association
Fellow of the College of Optometrist in Vision Development

July 14, 2021

Umair A. Shah, M.D., MPH

Director, Wash. St. Department of Health

P.O. Box 47890

Olympia, WA 98504-7890

RE: Sunrise Review, Optometrist scope of practice

Dear Dr. Shah,

I have practiced optometry in the state of Washington for over 30 years. I have greatly enjoyed my profession. I have enjoyed meeting the eye care needs of many people. There have been many times over the years that I have been unable to perform a needed task or prescribe a needed medication for my patients due to our limited scope (this adds hardship for patients with extra appointments/travel/insurance issues/etc.). A long time ago (1988), I had a residency in Pine Ridge, South Dakota, at the Pine Ridge Indian hospital. I am sad to say that I was able to practice more fully than I can today in Washington state. I did not lose the mental ability to perform these tasks or prescribe these medications when I crossed the border into Washington. Our wonderful state is being left behind-while many other states are safely allowing optometrists to more fully practice what we are taught.

Optometrists are trained and very capable of doing more than allowed in the state of Washington. The restrictive laws reduce access and increase the cost of eye health care for the people of Washington state.

I believe that the best new graduates evaluate which state allows them to practice fully-versus restrictively. If we want to recruit the best, we must give them the opportunity to practice fully to meet the needs of the people of the state of Washington.

I'm asking for your recommendation that the legislature support the changes to the scope of practice for Optometry in the state of Washington.

Respectfully yours,

Robert Nicacio, O.D.

July 16, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for 17 years, and I am currently the Dean at Pacific University College of Optometry (PUCO) in Forest Grove, Oregon. I also have been licensed to practice in the states of Washington and Maryland.

Washington's current scope of practice regulations prevent those licensed in Washington, which includes alumni of PUCO and future practitioners currently in our program, from caring for their patients as they have been trained. These are inconsistent with both the regulatory structure of other states and national standards in optometry and these restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

Pacific University College of Optometry was founded in 1945 and we are the only Optometry program in the Pacific Northwest. We grant the degree Doctor of Optometry (OD) as well as MS and PhD degrees and have alumni across the world. We believe in teaching a well-rounded education so that after our students graduate they can help anybody who is sitting in their chair. Our mission is to prepare "engaged learners to be highly competent practitioners, optometric leaders, and vision scientists through a diverse education while advancing professional and ethical eye care, scholarship, and service to the community."

Along with our mission statement, we also make commitments to our students. One of these commitments is that our graduates will be "fully qualified to practice in any state in the U.S. and province in Canada, the curriculum far exceeding the most stringent educational requirements." There are other states that currently have "expanded" scopes compared to Oregon and these states recognize and accept our curriculum as meeting their standards.



The curriculum at PUCO is spread out over four years where the first two years are primarily focused on foundational topics relative to contemporary optometry and health care. These topics are not limited to solely eyecare as we must educate our students as a part of the interprofessional healthcare community. Our students learn about systemic diseases since so many conditions impact the eyes and visual system. For example, we can see changes in the eyes of our patients with uncontrolled diabetes. We have to understand the diseases and medications in order to help our patients and be a part of the interprofessional care of our patients.

In addition to foundational knowledge, our students are trained in the latest in assessment, diagnostic, and treatment for ocular and systemic conditions. This includes hands-on laboratories. These psychomotor skills do not develop overnight; rather, we scaffold the learning so our students have to understand the foundational knowledge. They have to demonstrate mastery of foundational skills in order to progress to more technical or complex skills. This progression and application of classroom knowledge in a lab setting allows them to be more confident when they apply this skill under the supervision of a licensed Optometric Physician when our students enter clinic.

We have been teaching about lasers, lid lesion removal, and suturing for over 20 years. As more States have expanded their scopes, we have also invested in a Duet laser so we can match similar education that is taught at other programs with laser requirements in their state. This allowed us to expand our offerings within our Ocular Disease curriculum and associated labs.

Our students understand the disease processes, the structures and function of the anatomy and the rationale for when certain procedures will be provided. The students have to demonstrate an understanding of patient selection, risks associated with these procedures, informed consent, and more in order to be successful if they are able to practice these skills.

In addition to our curriculum, we have also supported our faculty who teach in various topical areas. For example, we have supported our faculty to travel to Oklahoma to be certified with their laser curriculum. Our faculty are dedicated to making sure that our students are trained for the latest in Optometric care.

It's important that Washington's regulatory framework keep up with rapidly changing technology in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to determine which procedures are included in the approved scope of practice and what educational requirements must be met in order for an optometrist to provide them. This is essentially the authority granted to other health care professional boards in the state, a system that has served patients well.

In closing, I strongly encourage you and your staff to recommend that the Legislature enact the proposed changes in the optometry scope of practice for Washington. Thank you,

Sincerely,



Fraser C. Horn, OD, FAAO
Dean
Pacific University College of Optometry
2043 College Way
Forest Grove, OR 97116
hornfc@pacificu.edu

July 7, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for eight years, and I currently practice alongside ophthalmologists, performing pre and post-operative, and medical eye care in Seattle. I have previously practiced in an academic setting in Pennsylvania, and in a Department of Veterans' Affairs Hospital in New Jersey.

During my four years of post-graduate training in optometry and in my year of residency training thereafter, I was exposed to procedures and prescribing patterns that are beyond the scope of Washington's current practice regulations. These regulations prevent me and my colleagues from caring for our patients as we have been trained, and are inconsistent with the regulatory structure of other states and with national standards.

The current restrictions on scope of practice in Washington make it challenging for me and my colleagues to provide expedited care, delay sight saving treatments, and often increase the financial burden on our patients. This is readily seen in my practice on a daily basis. My optometric co-workers and I practice in an interdisciplinary, tertiary referral center, along side ophthalmology. Our ophthalmology colleagues split their time between surgery and clinic, which leads to less availability to see new patient referrals on a weekly basis; due to this, new patient referrals are often seen by our optometric physicians first. We are often the first to diagnose post surgical complications, such as secondary cataracts formed after a primary cataract extraction or immunologic rejection of a corneal transplant; however, due to Washington's restrictive scope of practice laws, we are unable to initiate the treatment that we have been trained to do, both as part of our education, and as on the job training from our ophthalmologist colleagues. These patients are forced to delay treatment, and return for a second visit with one of our ophthalmologists within the same practice. These restrictions do not serve my patients well, as they decrease access to quality eye care and increase the costs of that care.

Washington's regulatory framework must keep up with changing technology and standards in the delivery of eye care. The best way to ensure such timeliness is to authorize the Board of Optometry to regulate the scope of practice of optometry, as other health care professional boards in the state do.

Please consider recommending that the Legislature enact the proposed changes in the optometry scope of practice for Washington.

Thank you for your time and consideration,

A handwritten signature in black ink, appearing to be 'SK' or similar initials, written in a cursive style.

Stacey Keppol, OD, FAAO

*Optometric Physician, Northwest Eye Surgeons
King County West Optometric Society Vice President
Member of Optometric Physicians of Washington
Member of American Optometric Association
Fellow of American Academy of Optometry*

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

I am writing in support of the proposed revisions to the Washington state optometric scope of practice.

As an optometric physician who has been licensed and practiced in California and Colorado, I have experienced first-hand how Washington State's restrictions to the optometry scope of practice are inconsistent with the regulatory structure of other states.

Additionally, I completed my training at federal institutions that enable clinicians to practice to the maximal scope of their profession, including Veterans Affairs hospitals and Indian Health Services. I found that expanded practice scope enables greater patient access to timely care, resulting in faster treatment of illness and enhanced quality of care. The current Washington state regulations are not in the best interest of the communities we serve.

I provide perioperative and medical eye care as an optometric physician at a busy surgical practice in Renton. We serve a predominantly geriatric population and many patients travel long distances from rural locations to seek medical attention for complex ocular conditions. As a referral-based clinic, healthcare providers in our community refer patients to us for urgent or emergent eye care. Optometric physicians are the first to see these referrals, as our ophthalmologists are often in surgery or are booked out for weeks to months. Due to current scope of practice restrictions, I am often unable to provide treatment to a patient who has traveled to see me, sat through a complete dilated eye exam, whom I have assessed and accurately diagnosed, and whom I am well-equipped to treat. Instead, I must advise the patient to return on another day for a separate appointment in the same clinic to see an ophthalmologist. This directly limits access to care, impedes efficiency of care, risks further advancement and complication of untreated illness, and places an unnecessary financial burden on patients.

The first step in improving care for our patients is to put the decisions that define how optometric physicians practice into the hands of the Washington State Board of Optometry. Members of the board best understand the nuances of ocular disease and the consequences of delayed treatment. I hope our patients can count on you to support the revisions to the optometric scope of practice.

Vision is one of our most precious senses, loss of which vastly erodes one's quality of life. We owe it to our community to provide expedient, cost-effective, high quality eye care.

Sincerely,



Sarah Sandhaus, OD, FAAO



6510 Capitol Blvd SE, Tumwater, WA 98501
Phone/text: 360.352.6060 Fax: 360.357.7339

TO: Department of Health
Sunrise Committee

DATE: July 4, 2021

RE: Support of Optometry Bill for Board of Optometry Autonomy-Sunrise Committee Review

The following is a summary of why I support the the Washington State Board of Optometry to have autonomy to regulate my profession of optometry.

Washingtonian Born, Raised, and Educated:

I am a native of Ellensburg, product of public school, and obtained a Mechanical Engineering B.S. degree from Washington State University. I went to work in Wenatchee, WA for ALCOA in 1984. Five years later, I choose to further my education and to become an optometrist. I understood optometry to be a helping profession, allowing me to diagnose and treat patients vision dysfunction and medical conditions. I also had an interest in creating and operating my own business. I attended Wenatchee Valley Community College for one year to complete prerequisites, then gained acceptance to Pacific University College of Optometry in Forest Grove, OR. Overall I have 10 years of post high school education.

Recipient of WICHE Grant to Encourage Doctors of Optometry to Return to Washington:

In 1989 I was a recipient of a Western Interstate Commission for Higher Education Grant (WICHE) as the state of Washington does not have a graduate school for obtaining a doctor optometry degree. I am grateful for this grant as I was an older student, married, and was completely responsible for tuition and expenses. I graduated from Pacific University in 1993 and then completed a one year geriatric, hospital based residency at the Department of Veteran Affairs Hospital at American Lake. After completion of my residency, since the optometry law was one of the most progressive laws in the country, I was excited to stay in Washington. All of the education I had learned was able to be immediately implemented to provide a high level of patient care. The progressive optometry law was one of the key determining factors in my decision of where to practice optometry.

Providing Full Scope Eye Care-The Primary Eye Care Profession:

Over the past 27 years, I created an eye care clinic in order to serve the population of Thurston County. I pride myself in being a “full scope” doctor of optometry. I examine patients of all ages, perform routine vision exams for glasses and contact lenses, diagnose and treat medical eye conditions including glaucoma, macular degeneration, dry eye disease, allergic eye disease, and help people overcome challenges of eye turns that many times cause learning disabilities. Over the years I have provided care to immigrants from other countries, women on pregnancy aid, and people with disabilities. Full scope means helping all the patients you can at the top of your abilities. I have been trained to be the “primary eye care physician”. Just like primary care physicians, when I feel additional care is needed beyond my expertise, I refer for specialty surgical services.

I recently invested in a new building on Capitol Boulevard in Tumwater. As part of this move, I invested heavily in new technology to bring the eye examination methods into the 21st century. Due to continual reductions in reimbursements and increased expenses, a small, independent health care facility has become a difficult business model. The larger facility has allowed me to expand patient

care options by creating more examination rooms which allowed me to hire an associate doctor of optometry.

Continuing Education Requirements: Why Require Them If Allowed To Implement Knowledge?

Per Washington state law, I am required to continually be educated. As the profession of optometry has advanced, so has the offerings of continuing education. When new medications are FTC approved, I have been educated on its safe and appropriate use. When new procedures and treatment protocols are created through research and development, my continuing education courses have taught me implementation methods. When new examination techniques and equipment are approved for patient care, I am taught how to properly utilize them and then offered the purchase the new equipment. As a health care professional, just like all other health care professionals, I am continually educated to provide the latest, high quality health care options to improve patient care.

Over the years, I have had the opportunity to learn new treatments and implement them. I was trained to remove small skin lesions around the eyelid that primary care doctors did not feel comfortable to remove as they have minimal training about the eye. But then I was informed that this procedure was not approved in Washington for optometrist. Thus, I stopped doing the procedure. I referred patients to see a different specialist. The patient is then required to schedule another examination and procedure at a different doctors office. The patient must meet and become comfortable with a new doctor they had never met. This is a waste of the patients time and money as well as driving up the cost of health care.

Additionally, I have taken continuing education programs to learn use of a commercially available laser to remove small skin lesions and to perform a procedure to remove the secondary cataract from the intra-ocular lens (YAG capsulotomy). I have also been taught to perform injections for anesthetic and medication delivery. However, even though I have been properly trained, Washington state does not allow our health care profession to perform these procedures. I have attached two PDF documents from patients that needed to be referred elsewhere for a simple procedure that I, and my new associate, have been trained to complete, but was not able to perform simply because we have chosen to practice in Washington.

Due to growing patient care needs in Thurston County, and my recent investment in our facility, my practice has grown to a point where I could hire an additional doctor. The problem is that many other states in our great country have much more progressive state laws that allow doctors of optometry to practice as their training and ability allows. Washington state optometry law has not really been updated since I graduated in 1993! Therefore, many new graduates look at our beautiful state, with an out-of-date, restrictive optometry law, and unfortunately choose to practice elsewhere. The new doctor I hired last year highly considered other states with much more progressive optometry laws.

My question to the Washington State Legislature is why do you require any profession to complete continuing education requirements, if the state laws do not allow the profession to implement what is learned?

Thus, as a native Washingtonian, WICHE recipient, Tumwater invested, continually educated, doctor of optometry who wants to attract the best and brightest talent to our great state of Washington, I fully support the Board of Optometry to have autonomy to regulate my profession. On this weekend of USA's independence, please allow the Board of Optometry the independence to direct Washington doctors of optometry to provide high quality patient care based upon their training and education.



Douglas N. Jeske, O.D.
Tumwater Eye Center, Inc
6510 Capitol Blvd SE
Tumwater, WA 98501

TO: Umair A. Shah, M.D., M.P.H.
Secretary, Washington State Department of Health

FROM: Drew Aldrich, O.D., M.S., F.A.A.O

RE: Optometric Scope of Practice

Dear Dr. Shah,

I have been a practicing optometrist since 2007 and currently practice in Kennewick, WA. I also hold active licenses in both Oregon and Idaho. I would like to express my full support for the proposed update of optometric scope of practice currently undergoing Sunrise review by the Washington State Department of Health.

Scope of practice laws have already been updated to meet the public need in several states. This has resulted in greater access to excellent, demonstrably safe, and cost efficient care for patients. As there are optometrists currently practicing in most of the thirty-nine WA counties (while 40% of counties have no ophthalmology), this is especially relevant for the residents of Washington state. Our outdated scope of practice is having a real impact on the access and cost effectiveness of quality eye care in this state. When optometrists are required to refer patients for the procedures they are qualified to provide there is the possibility of delayed care, extensive patient travel, and the patient incurring multiple expenses for co-pays and redundant diagnostic testing.

The proposed changes would authorize the State Board of Optometry to determine optometrists' scope of practice, similar to what other healthcare professional boards do. It would also grant authority for the Optometry board to establish the educational standards required to perform procedures within this scope.

More specifically, the current scope expansion under review would expand the types of medications optometrists provide, including oral steroids, and expand the range of procedures that may be performed including injections, eyelid lesion removals, and board-approved laser procedures. Other states with similar scope have not seen an increase in adverse patient outcomes. On a personal note, I removed several lid lesions a week during my optometric residency training without any complications. I think it is also important to point out that the proposed changes would not allow optometrists to perform many other surgical procedures including cataract surgery, LASIK procedures, and posterior segment procedures and lasers.

Optometrists are highly trained doctors with a minimum of four years of specialized post-graduate training at an accredited school of optometry. They also serve a valuable role as the entry point into the health care system for many patients, regularly being the first to diagnose serious disease such as diabetes, cancer, and auto-immune disorders to name a few.

In conclusion, I urge you to support the proposed scope of practice expansion which will allow optometrists to provide excellent care, commensurate with their training, for the residents of Washington state.

Sincerely,

A handwritten signature in black ink, appearing to be 'Drew Aldrich', with a long horizontal flourish extending to the right.

Drew Aldrich, O.D., M.S. F.A.A.O

WA Lic # OD60048285

Kennewick, WA

July 14, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
PO Box 47890
Olympia, WA 98504

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah:

I am writing in support of the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been in private practice optometry for the past 3 years on the “Eastside” of Seattle, and am residency trained in ocular disease and trauma in a hospital setting.

The current scope of practice in Washington prevents me from providing the care I was familiar with providing during my residency through the Indian Health Service. The most common example I encounter is the inability to prescribe oral steroids. This is a burden for patients as this results in a delay of care, especially since oral steroids are used to control acute ocular inflammation (i.e., scleritis and forms of uveitis). As an alternative, patients are prescribed stronger topical ophthalmic steroids, which can be much more costly, and patients are left to wait until a referral is placed or care is coordinated in order for a different provider to prescribe oral steroids. This is not only inconvenient, but a risk to patient safety in regards to managing ocular disease in a timely fashion.

Outside of my personal experience, I believe that expanding the scope of practice for optometric physicians will increase accessibility to eye care for patients in more rural areas. The sheer number of optometric physicians practicing in rural areas far outweighs the population of ophthalmologists. Therefore, allowing optometric physicians to perform the procedures that we were trained to do in these settings and locations can save patients time and money by reducing the need for unnecessary medical trips and associated co-pays and time off work.

I encourage you and your staff to recommend the Legislature enact the proposed changes to the optometry scope of practice in Washington, and that any future regulations regarding educational requirements for scope expansion be determined by the Board of Optometry. Many other states follow this model with excellent patient outcomes. Please allow optometric physicians to care for our patients to the fullest extent that we were trained to do.

I appreciate your time and consideration.

Sincerely,



Nathania Nhouyvanisvong, OD, FAAO



AMERICAN ACADEMY™
OF OPHTHALMOLOGY

July 15, 2021

Cori Tarzwell
Optometry Scope of Practice Sunrise Review Lead
Health Systems Quality Assurance Division
Washington State Department of Health
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aao.org

Dear Ms. Tarzwell:

We are writing on behalf of the American Academy of Ophthalmology. As a global community of 32,000 medical doctors, we are the world's largest association of eye physicians and surgeons, dedicated to protecting sight and empowering lives by ensuring the delivery of, and access to, the highest quality eye care. It is our concern that the proposal being considered in Washington to authorize optometrists to perform laser eye surgery, surgery on the eyelid to remove lesions and injection procedures around the eye present significant patient safety and quality of surgical care issues.

Authorizing optometrists to perform surgery would lower the high standards of surgical care in Washington. Preparation and judgement as well as the technical skills required to perform a surgical procedure are the basis of a successful surgery of any kind. This is especially true of eye surgery where the margin of error is minimal. That preparation and judgement is formed through years of medical school and residency training. The bottom line is optometrists do not leave optometry school with the type of hands-on experience and training necessary to perform eye surgery.

Lasers are surgical instruments and are specifically recognized as such by the American College of Surgeons and the American Medical Association. Lasers can cut as deeply and sharply as any knife. Lasers can cause spikes in intraocular pressure (which may require immediate operating room surgery), mild or severe inflammation of the eye, cataract formation, corneal damage, hemorrhage, and permanent visual loss.

Seemingly benign eyelid lesions may actually be carcinomas (skin cancers). Sometimes, it only becomes apparent that the lesion may be cancerous during the surgery. Improper surgical technique can lead to vision-threatening deformities of the eyelid or incomplete removal of the lesion. A surgical error of just a few millimeters with a needle can result in a punctured eyeball and catastrophic vision loss. Injecting a cancerous lesion that has not been properly diagnosed can result in the cancer spreading.

Thank you for your consideration of our patient safety and quality of care concerns.

Sincerely,

A handwritten signature in black ink that reads "David W. Parke II, MD". The signature is written in a cursive style with a large initial 'D'.

David W. Parke II, MD
CEO
American Academy of Ophthalmology

A handwritten signature in black ink that reads "Tamara R. Fountain, MD". The signature is written in a cursive style with a large initial 'T'.

Tamara R. Fountain, MD
President
American Academy of Ophthalmology

A handwritten signature in black ink that reads "John D. Peters, MD". The signature is written in a cursive style with a large initial 'J'.

John D. Peters, MD
Secretary for State Affairs
American Academy of Ophthalmology



WASHINGTON
ACADEMY OF
EYE PHYSICIANS
& SURGEONS

Cori Tarzwell, Optometrist Sunrise Review Lead
Health Systems Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504

Re: Optometrist scope of practice sunrise review

Dear Ms. Tarzwell:

The Washington Academy of Eye Physicians and Surgeons (WAEPS) appreciates the opportunity to comment on the proposal from the Optometric Physicians of Washington (OPW) to increase optometrists' scope of practice. WAEPS' members (ophthalmologists) are medical and osteopathic doctors specializing in the diagnosis and treatment of diseases of the eye and associated structures.

Given their extensive training and experience in the field of eye care, ophthalmologists wish to express their universally strong opposition to the OPW's proposal, currently under review by the Washington Department of Health as part of its Sunrise Review process. By means of this letter and its attached explanatory documents, WAEPS will answer the questions raised by the DOH, in addition to responding in detail to the many concerning elements of the OPW proposal.

We have noted that the role of the Department of Health, per RCW 18.120.010, during a Sunrise Review is to largely determine whether a proposal benefits the public, is cost effective, and protects patient safety. We believe the OPW proposal does not meet any of those criteria.

Before extensively commenting on the serious medical implications of the proposal, we would like to share some more general, but still significant, observations.

Nationally, as well as in Washington State, there has been no public request or outcry for optometrists to be permitted to expand their scope of practice. This proposal is not patient-driven. It appears that the only serious advocates for such expansions are the optometrists themselves. Proposals introduced across the country by optometrists have been met with overwhelming public opposition to granting surgical and similar privileges to

practitioners other than medical doctors. In fact, in the past six years, optometry has had 58 failed attempts in 24 separate states to expand their scope to include surgery. Notably, this year during its 2021 legislative session, the Oregon legislature decided to maintain its state's high surgical standards by rejecting the optometric scope expansion. In fact, only seven states in the entire country allow optometrists to perform laser and/or scalpel surgery. In our attached more detailed response, we will elaborate on this opposition and explain why there has been such national concern, based on training and other significant safety issues.

Proponents of the proposal before the DOH suggest that there is a need for greater access to more advanced eye care in Washington State. Data significantly refutes that suggestion. As we explain more in our attached response, there is no shortage of ophthalmologists in this state. Approximately 96.2% of Washingtonians are within a 30-minute drive time to an ophthalmologist. One example presented by the OPW is in Okanogan County, citing "no ophthalmologists". To the contrary, in Okanogan County there are five board-certified ophthalmologists who regularly see patients and accept Medicare. Further, a survey conducted by WAEPS indicates that across the state ophthalmologists will see patients for an acute eye care need on either the same day or the next day. Please see the attached comments for further statistics on the timely availability for laser and other surgical procedures in ophthalmologists' offices.

By defining "ophthalmic surgery", the Washington State Legislature has placed in statute the most nationally respected patient protections and the highest quality standards for eye surgery. The definition, agreed upon by the OPW in 2003, ensures that only medical and osteopathic surgeons may perform ophthalmic surgery. The current OPW proposal would remove that definition and allow optometrists the use of steroids, injections, scalpels, lasers and other surgical modalities in the treatment of eye disease.

Ophthalmologists are the most highly educated eye care professionals, and the only surgeons trained to national standards to perform delicate and complex procedures on the eye and surrounding structures. After completing undergraduate studies, ophthalmologists go to medical school for four years, and then do a one-year internship followed by three years of residency training in eye disease diagnosis, treatment and surgery. Many do fellowships for one to two additional years. In our attachments, we will compare this high level of training with that of optometrists, finding they are significantly lacking in hands-on mentored clinical experience and necessary education. Despite optometry's assertion otherwise, they have only group observation and laser practice on inanimate objects and no direct surgical training on actual patients Washington State.

While we will elaborate further on this point in our attachments, please be aware that the optometrists' legislative proposal would:

- eliminate the prohibition on optometrists performing ophthalmic surgery
- eliminate the prohibition on optometrists performing injections and infusions
- eliminate the prohibition on optometrists prescribing systemic steroids by all routes

- eliminate the prohibition on optometrists using lasers and other surgical techniques in the treatment of eye disease

WAEPS' final general comment concerns the functions of the Board of Optometry. The OPW proposal mandates that the Board of Optometry (BOO) will be the single statutory authority to determine what constitutes the practice of optometry. To our knowledge, no other disciplinary board or entity in Washington is delegated such authority. The OPW proposal permits the Board of Optometry to determine optometrists' scope of practice, making it the only Washington medical practitioner board to have such broad powers, whereas only one other state in the nation, Alaska, has given its Board of Optometry such broad external authority.

We feel obligated to express concern about the Board of Optometry's Special Meeting on July 14, 2021. The agenda indicated that there would be public comments, and then the board would consider the OPW Sunrise proposal. The BOO heard a presentation by the Attorney General's Office about the proposal, indicating that the draft legislation must have been written in error since it removed the Legislature from determining optometrists' scope of practice. After the presentation, the BOO voted to approve a pre-written draft of a letter supporting the proposal, not reflecting the AG's comments. Only after voting to support the proposal did the BOO open up the meeting for public comments, reflecting that public input was not the goal of the meeting, nor important to their deliberations. We hope that in the future public opinions will be considered more carefully by the BOO, especially if they were to be allowed to determine scope of practice matters.

For your reference, we have divided our comments into the following sections: national standards, analysis of proposed legislation, education, access to eye care, and cost of eye care. Hopefully this will assist you in reviewing specific subject matter germane to your Sunrise Review.

For all of the above reasons, as well as those further elaborated upon in the attached documents, WAEPS stands in strong opposition to the proposed expansion in optometric scope to include surgery and injections requested by the OPW. These changes have the potential to adversely impact the quality of care, health, vision, and safety of the citizens of Washington State.

We know you will carefully review the attached detailed information provided by WAEPS and WAEPS will certainly be available to answer questions or provide additional clarity upon your request.

Sincerely,



Hubert H Pham, MD, MS
President, Washington Academy of Eye Physicians & Surgeons

WASHINGTON ACADEMY OF EYE PHYSICIANS & SURGEONS' RESPONSE TO THE OPTOMETRIC PHYSICIANS OF WASHINGTON'S SUNRISE REVIEW PROPOSAL

JULY 16, 2021

NATIONAL TRENDS

The OPW section entitled “List states where this profession includes expanded scope of practice” is highly misleading. Its lists include states that do not have specific prohibitions on surgical procedures, which artificially inflates their claims; statutes that are *silent* on surgical procedures does not mean they are *permissive*. A simple search of public Medicare claims data shows that surgical procedures are not being done by optometrists in most of their list of states.

Optometrists like to use the term “lumps and bumps” in reference to eyelid scalpel surgery, which overlooks and trivializes the fact that many of these lesions are cancerous. Regarding the few states that do allow optometrists to perform surgery to remove lid lesions, what is not mentioned is that many of these states prohibit optometrists from performing injections - including anesthetics in or around the eye (Iowa, for one). Injected anesthetics and vasoconstrictors are a necessary part of the surgical excision of eyelid lesions, and without the ability to use injections, these surgeries cannot proceed without significant and unnecessary pain for the patient and liability risk for the surgeon. Simply put, medical doctors would never operate on a patient without the proper anesthetics and surgical safeties in place. It would be considered “not in the patient’s best interests” and in fact would constitute malpractice.

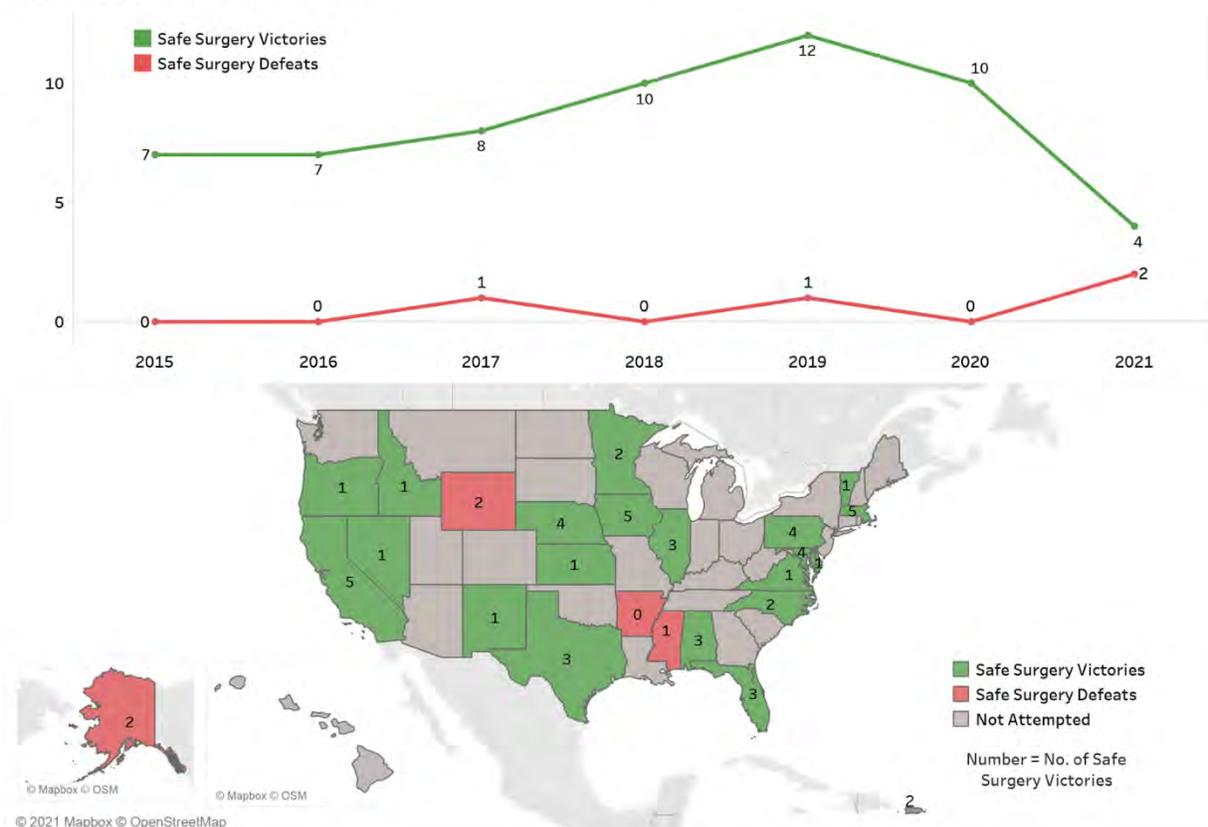
Finally, in the OPW proposal the optometrists are lumping non-surgical procedures in a broad category that they are calling “minor surgical procedures”, thereby suggesting that they are already doing surgery. This is entirely inaccurate. The procedures optometrists currently perform in Washington State, such as punctal plugs, removal of misdirected eyelashes, and superficial foreign body removal, are not incisional and are *not* considered surgery.

While optometrists claim that they are being taught to a “national standard” that includes eye surgery, they must be referring to didactic education, as surgical treatments by optometrists on live patients is prohibited at most optometry schools.

The overwhelming majority of the country has decided to maintain high surgical standards for their citizens. In fact, again and again states have rejected optometry’s attempts to expand their scope to include surgeries, including lasers which, according to the current definition of surgery in Washington state, are considered surgery. *Optometry has had an astounding 58 failed attempts to expand their scope of practice in 24 states since 2015.* During this six year period, optometry has been successful in expanding their scope to include surgery just four times: Alaska (2017), Arkansas (2019), Mississippi (2021) and Wyoming (2021). Overall, there are only seven states that allow optometrists to perform laser surgery and/or use of scalpels. In addition to the four states listed above, the remaining three states are Oklahoma, Kentucky and Louisiana. Of particular interest, in several of those states where optometrists’ expanded scope was successful, optometrists were serving as state legislators and either sponsored or supported the bills: Louisiana, Arkansas and Mississippi are examples. This makes up nearly half of the states that allow for expanded scope. This is in direct contrast to what their constituents desire. Polls in state after state reveal that the overwhelming majority of constituents want only an MD or DO to perform eye surgeries, including injections and lasers around their eyes. There is no public outcry for expanded scope. The diagram below illustrates the results of organized optometry’s efforts since 2015.

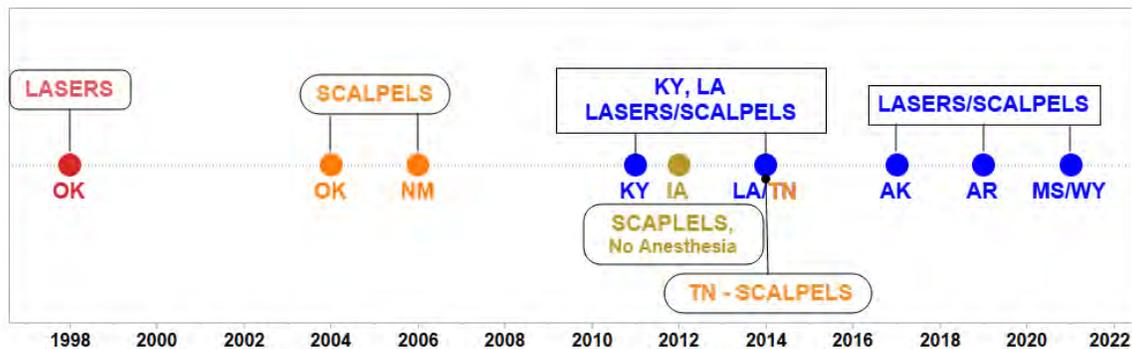
2015 - 2021 Optometric Surgery Victory/Defeat Tally

States have rejected optometric surgery 58 times in 24 states while optometric surgery laws have been enacted twice since 2015

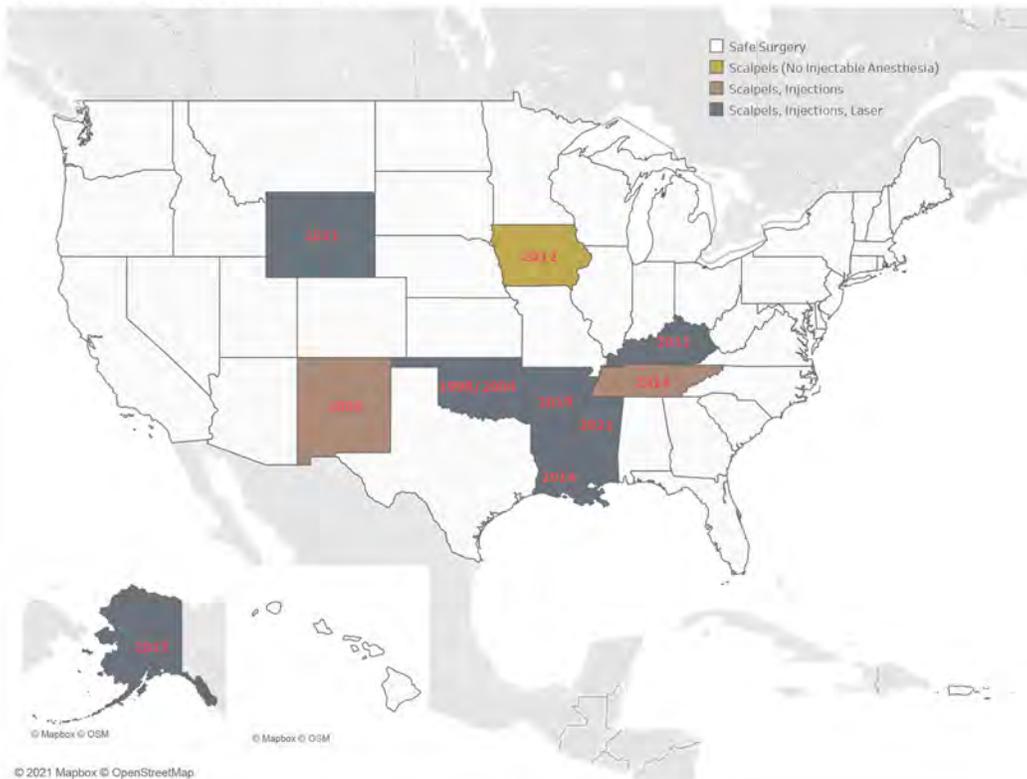


The figures below show the time-line and extent of optometric scope expansion in the United States. Please note that the earliest surgical scope expansion was Oklahoma in 1998. As mentioned, only six other states have granted optometrists scalpel and/or laser surgery privileges in the last 22 years. The slow growth of optometric surgical scope expansion suggests hesitancy because, among other things such as safety, these laws have not demonstrated cost savings, nor have they improved access to care.

Optometric surgical scope of practice timeline and map showing states where scalpel and laser surgery are permitted are below:



Optometric Surgical Authority



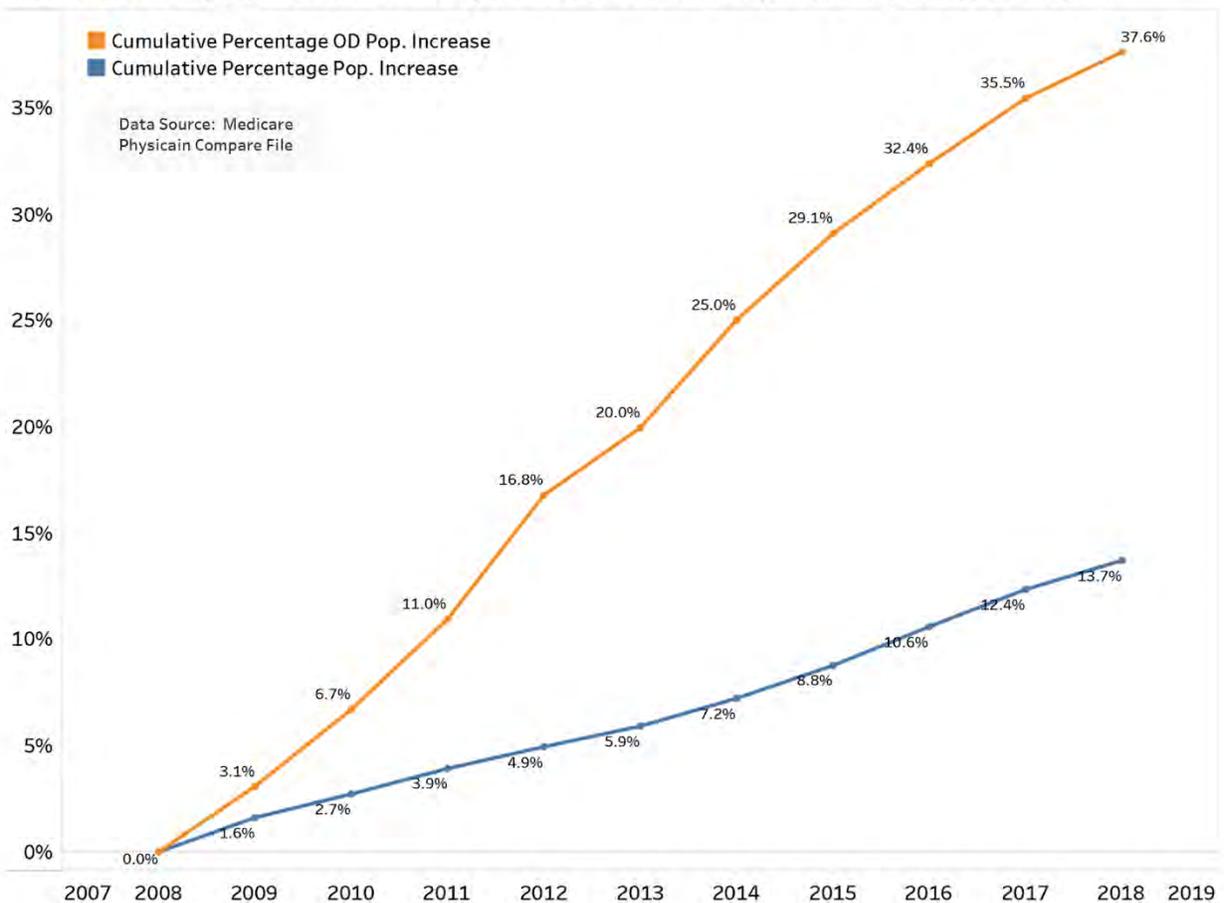
VETERANS AFFAIRS PROHIBITS OPTOMETRISTS FROM PERFORMING LASER SURGERY

The OPW section discussing VA policies is false. ***Optometrists are prohibited from performing laser surgery at the U.S. Veterans Health Administration Facilities*** (see appendix). VHA Directive 1132 was rescinded as a “stand-alone” directive prohibiting optometrists from performing laser surgery, but the prohibition itself was not rescinded. Instead, the VHA incorporated that “stand-alone” directive into a more comprehensive VHA eye care policy, VHA Directive 1121(2). *By combining these two health care directives, the Department of Veterans Affairs has maintained its longstanding policy that only ophthalmologists may perform therapeutic laser eye procedures in its healthcare facilities.* Statements that the VHA has abandoned its policy prohibiting optometrists from performing laser surgery at VHA facilities are demonstrably false. See appendix for the VA Directives 1121(2).

OPTOMETRISTS ARE NOT LEAVING WASHINGTON STATE FOR STATES WITH EXPANDED SCOPE

Optometrists claim that unless expansion of scope is authorized in Washington State, optometrists will be tempted to leave the state for those states that allow for expanded scope. Or, that optometrists will not locate here because of perceived limited scope. This is simply not true. The diagram below shows that the number of optometrists in Washington - and nearly every state in the country - has outstripped population growth by a massive percentage. This is due in part to the fact that optometrists are graduating in record numbers across the country since there is no regulation on the numbers of optometry schools that may be built. Of the 23 optometry schools across the country, six are new. In conclusion, the optometrists’ argument that Washington State’s current statute is leading to a “brain drain” is clearly false.

Cumulative Pop. Increase of WA Optometrists vs. the Pop. of WA from 2008 - 2018



ANALYSIS OF OPW DRAFT LEGISLATIVE PROPOSAL

Analysis of the Draft Legislative Proposal S-3085.2/21

WAEPS has carefully reviewed OPW's proposed draft legislation that is intended to reflect their request for an enhanced scope of practice. While the language of exclusion that they use around prohibited procedures initially seems specific and restrictive, it is not. What is less obvious is that the drafted restrictions potentially permit EVERYTHING that is not prohibited. By using this approach, and adding the proposed independence of the Board of Optometry, it is clear that the OPW intends to leave vast swaths of surgery open to their later determination without the oversight of the legislature. If they want to expand their scope to include Yag lasers, SLTs and eyelid surgeries, they could just say that. However, they do not. The apparent

intent is to look reasonable and restrictive, while leaving as much scope as possible available to expand into at a later date. By restricting some retina, refractive, plastics and cataract treatments, they perhaps hope to reduce the backlash from those segments of the ophthalmic community.

One of the primary conclusions one should reach is that while there are a number of surgeries and procedures that might on the surface appear to be excluded from an optometrist's scope, there is a significantly greater number that would be permitted. Some of these procedures might not be detected in a legislative proposal by an individual who does not have extensive training in ophthalmic surgery or even extended medical training. Regrettably, they would still be allowed.

Below is a list of procedures, surgeries and drugs that would be permitted as the legislation is drafted. Some of these might appear to a layperson as "simple" but there is actually nothing "simple" where surgical manipulation of human tissue is concerned. The Department of Health should realize that any of the listed procedures, and likely others we have not noted, would be permitted by the proposed legislation.

Surgery/Procedures:

- Cosmetic lid surgery - laser skin resurfacing, BOTOX, fillers, fat injections
- Cancer treatments for eye/adnexa - systemic chemotherapy/infusions, radiation, antibody and immune active agents
- Steroid injections around the eye - subconjunctival, sub-Tenon's, eyelid and adnexa
- YAG capsulotomies and suture cutting
- Laser Peripheral Iridotomy (LPI)
- Laser Trabeculoplasty (LTP) / SLT / ALT
- Partial thickness grafts - conjunctiva and eyelids
- Conjunctival "snips" - pingueculae, biopsy, cysts
- Conjunctival cautery for conjunctivochalasis
- Punctal cautery
- Electrolysis for lashes / hair
- Tattooing
- Tattoo removal
- Fluorescein angiography
- Indocyanine green (ICG) angiography
- Sutured biological membrane grafts
- Transpupillary thermoplasty of posterior malignancies - treating tumors in the back of the eye
- Radiation and other treatments of ocular and adnexal malignancies
- Collagen cross-linking of the cornea
- Corneal or scleral implants
- Retinal cryotherapy and diathermy for lesion destruction and repair of retinal detachments
- Paracentesis of the anterior chamber of the eye in emergency

- Vitreous paracentesis in an emergency?
- Lid lumps and bumps - biopsy and excision of eyelid tumors and growths
- Conjunctival lumps and bumps (just not full thickness and without grafts) -these heal without grafts
- Dermatochalasis surgery - blepharoplasty for excess eyelid skin
- Entropion surgery - repair of in-turning eyelid
- Ectropion surgery - repair of out-turning eyelid
- Brow pexy - brow lift
- Split thickness eyelid treatments of eyelashes - cryotherapy
- Closure of trauma - they didn't make the incision, they are just closing the hole that is there.... Closure of wounds could include cornea, conjunctiva, sclera, lid, brow, lacrimal system, skin grafts
- Periocular anesthesia blocks - peribulbar (is an injection the same as an incision, we believe that it is not?), Van Lint, Nadbath, and others
- Temporal artery biopsy
- Radiation treatment and any other non-surgical treatment of malignancies - in all ocular and periocular structures
- Jones tubes - Pyrex tubes placed through the bony orbit to permit tear drainage when the normal system is obstructed
- Nasolacrimal duct probing and TUBES, including balloon dacryoplasty

Medications:

The proposed language would also permit optometrists to prescribe all legend drugs including steroids, Schedule III-V, and Schedule II hydrocodone containing medications. These could be prescribed orally, or any other drug routes, including injections and infusions. Systemic disease with eye manifestations that could be construed to be treated by optometrists using systemic medications include but are not limited to: multiple sclerosis, rheumatoid arthritis, thyroid eye disease, myasthenia gravis, uveitis, diabetes, and others.

Nothing has really changed in terms of optometric training in the years since these drugs were prohibited in current statute by the Legislature. Optometrists do not train in settings where they get hands-on, supervised experience managing drugs in patients with disease during their education. This portion is purely didactic.

In earlier sections of WAEPS' Sunrise review response, there was mention of the statutory change in the definition of "ophthalmic surgery" – a definition originally agreed to by OPW – and the concern about removing that definition, when it has been recognized nationally as a safe standard for defining ophthalmic surgery. That is, of course, being eliminated in this bill draft.

Other:

Below are some other disturbing proposed statutory changes:

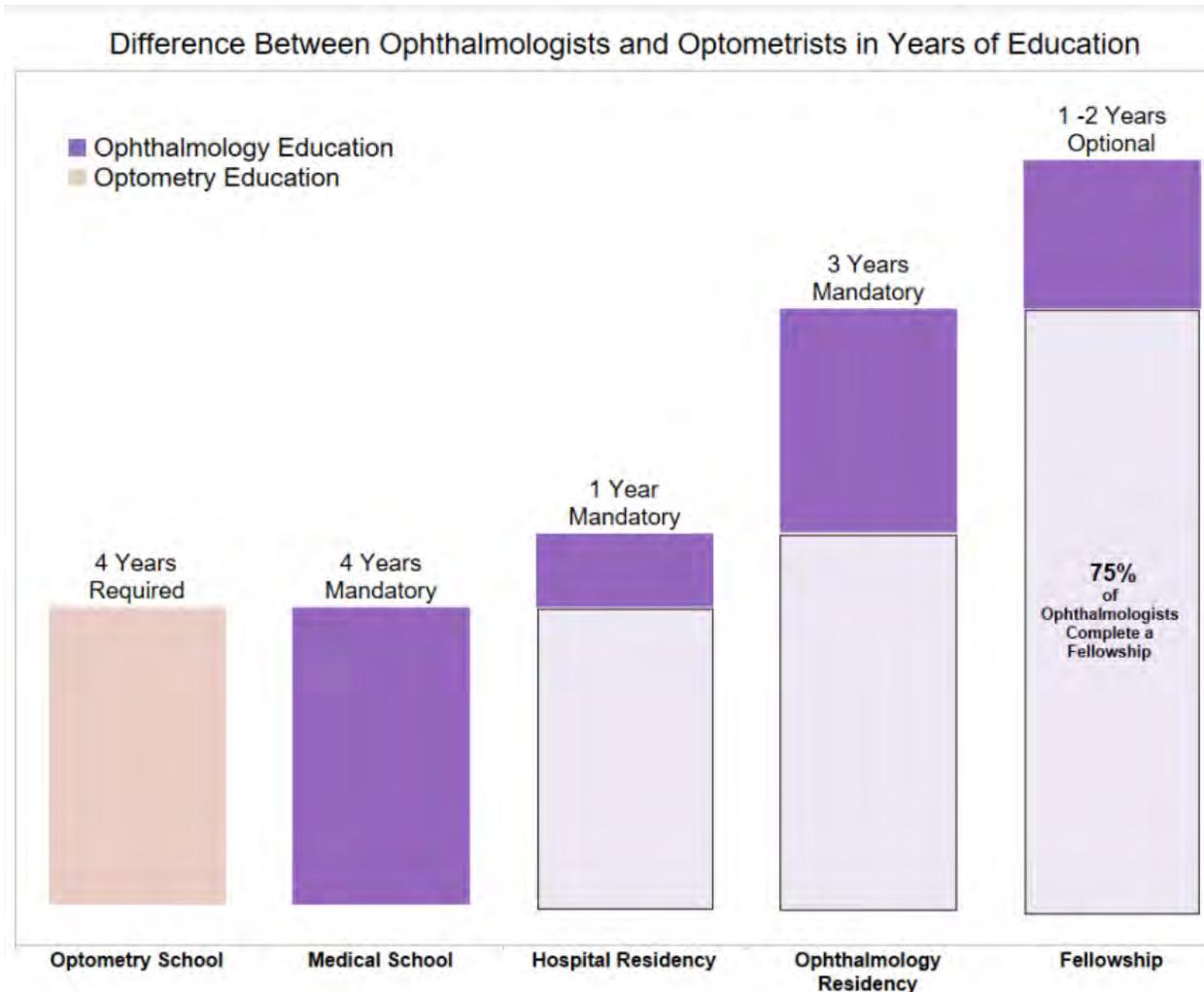
- the practice of optometry becomes defined as a surgical practice

- removal of the prohibition on optometrists prescribing oral medications in the 90 day postoperative period after ophthalmic surgery unless an optometrist is consulting with a treat ophthalmologist
- permits all injections unless specifically restricted (a change from only allowing injection of epinephrine ONLY for anaphylaxis)
- adds inoculations for systemic health reasons during a public health emergency
- allows the BOO to determine education and competency criteria for advanced procedures
- removes hours of education required for CME, as now set by the Legislature
- states that practices are in the scope of optometry if the licensee's education and training are taught by an accredited school of optometry and authorized by BOO, even if those practices are only taught in one place (Oklahoma for example)

In summary, the proposed changes to optometric practice are enormous. Striking the prohibition on optometrists performing ophthalmic surgery along with the removal of legislative oversight would remove all checks on optometrists' ability to expand their scope as far as they wish. WAEPS has grave concerns that optometric training and education do not merit this scope of practice expansion.

EDUCATION

It is critical to review the difference in education between ophthalmologists and optometrists.



Optometrists. Following an undergraduate degree, optometrists complete a four-year graduate degree in optometry in a program accredited by the Accreditation Council on Optometric Education (ACOE). The ACOE is a subsidiary of the American Optometric Association (AOA), an optometric trade organization, with no independent expertise in education. Review of online available optometric accreditation criteria shows no specific curricular requirements for knowledge of surgical management of disease. Oversight of optometric school accreditation is by an 11-person board consisting of optometrists, optometric technicians, and two public members. No medical doctors or surgeons serve in oversight of educational accreditation in optometry. Board examination is optional in optometry, and there are multiple competing boards including the American Board of Optometry, the National Board of Examiners in Optometry, the American Board of Certification in Medical Optometry, and the American Board

of Clinical Optometry. None of these boards is recognized by the American Board of Medical Specialties. Passage of boards is not required for graduation in most optometric programs. Approximately 78% of optometric graduates proceed directly to practice, while the remaining 22% undertake one year of post-graduate training. Although this is termed ‘residency’, it is not an accredited residency as recognized by the American College of Graduate Medical Education, but is again accredited by the ACOE without published guidelines of education or competency expectations.

In their supporting documents, the OPW refers to optometric student supervision by “physicians” and “attending”. These are references to teaching faculty in optometry schools, and not MDs or DOs in almost all situations.

Ophthalmologists. In contrast, ophthalmologists attend four years of medical school following undergraduate education. During the four years of medical school, future ophthalmologists receive two years of didactic training in medicine, followed by two years of hands-on clinical experience including mandatory months-long rotations in general surgery, internal medicine, emergency medicine, pediatrics and a multitude of other required medical and surgical specialties. All medical school graduates must show proficiency in surgical technique, and all must pass three levels of Board licensing examinations (Step 1, 2, and 3 of the US Medical Licensing Exams [USMLE]) which include testing in general surgery. All medical schools in the US are accredited by the Liaison Committee on Medical Education (LCME) of the American Association of Medical Colleges, which is a purely educational organization and dissociated from physician trade organizations.

Following graduation from medical school, ophthalmologists undergo an *additional four years* of residency training, which includes one year of general internship (including surgical and procedural training) and three years of ophthalmology-specific training. These three years include about 9,000 hours of training, of which 8,000 are hands-on and include performance of large numbers of supervised surgeries and procedures, with minimum numbers required for each type of ophthalmic surgery to qualify by the ACGME for graduation. Residents are given graded responsibility beginning with assisting attendings with surgical procedures to performing these procedures under direct faculty supervision. Clinical competencies are assessed and residents advanced in training only when they have met expected competency. Ophthalmology residency is accredited by the American College of Graduate Medical Education (ACGME) which oversees all postgraduate medical training in the US (and again is a purely educational accreditation organization independent of professional trade organizations).

The accreditation process is rigorous and includes direct site visits and annual audits of residency performance. Approximately 75% of ophthalmologists will pursue one or two years of additional fellowship training, typically involving intense training in advanced, subspecialty surgery. Fellowship training is accredited by the Fellowship Accreditation Council of the Association of University Professors of Ophthalmology (AUPO). Only one ophthalmology board is recognized by the American Board of Medical Specialties (the American Board of Ophthalmology [ABO]). Board certification, which is generally required for hospital operating

privileges, is a two-year process requiring the candidate to pass an intensive written exam followed one year later by passing an exhaustive all-day oral examination by board-certified ophthalmologists. Board certification must be maintained in a 10-year cycle requiring additional continuing medical education, patient safety training, two improvement in clinical outcomes projects, and additional testing and demonstration of competency. Nearly all ophthalmologists in the United States obtain and maintain ABO board certification.

In summary, with regard to education:

- All told, between medical school, internship, residency, and fellowship, the average ophthalmologist will have accumulated over 17,000 hours of clinical experience before operating independently, and will have participated in the care of over 3,000 patients, and hundreds of surgical cases with graded responsibility from observer to assistant to primary surgeon.
- Optometry schools generally provide about 2,000 hours of clinical experience with no hands-on surgical training on human subjects.
- Ophthalmologists receive over 15,000 hours of additional training compared with optometrists: much of this training is surgical. This constitutes *seven* years of 40-hour-per-week training above and beyond the non-surgical training optometrists receive.
- Medical education is accredited by independent education accreditation organizations (LCME, ACGME, AUPO) dedicated solely to quality of education and producing competent practitioners; ophthalmologist education is held to the same high standard as other branches of medicine such as neurosurgery or cardiology. Optometry education accreditation is performed by the ACOE, a subsidiary of the American Optometric Association, a professional trade organization with no other graduate educational oversight function.
- All medical doctors including ophthalmologists must pass the 3-step USMLE exams which include testing of surgical knowledge. Ophthalmology has a single Board (the ABO) recognized by the ABMS, which certifies candidates through a rigorous two year board certification process and a 10-year cycle of continuing certification. Nearly all ophthalmologists in the United States hold ABO certification. Optometry has multiple, competing boards, none of which are recognized by the ABMS, none of whom have psychometrically validated standards, and passage of national exams is not a requirement for graduation at most schools of optometry.

In states where optometric scope has expanded, optometric surgical training has typically involved attendance at a weekend course at a hotel, where perhaps 1-2 hours will be devoted to education on a particular procedure such as laser capsulotomy or periocular injection. There are no set qualifications for the instructors in these courses. By contrast, an ophthalmology resident will have spent more than 20 hours learning about and performing each of these particular procedures under senior surgeon supervision before they are considered competent to perform on their own.

The optometrists argue that they are only requesting expansion into scope for ‘low risk’ procedures, and have taken the approach of listing the procedures they will not do. There is no such thing as a ‘low risk’ surgical procedure. Any surgery carries risk for the patient, and the risk may not be proportional to the complexity of the surgery. Incorrect performance of a small eyelid biopsy, for example, may leave a positive margin for cancer and put the patient at risk for death from metastasis. Some “lumps and bumps” which appear to be a simple eyelid stye are much more dangerous; incorrectly performing an incision and drainage for such a “stye” may miss a sebaceous cell carcinoma, which is fatal if not caught and treated in a timely manner.

Incorrect performance of an injection around the eye can lead to the eye being punctured by the needle and detachment of the retina or infection inside the eye (endophthalmitis), both of which can lead to permanent blindness. Incorrect use of a laser to clean the capsule of the lens can lead to damage or dislocation of the lens implant, or retinal detachment. A large part of the training ophthalmologists receive in these areas is in the recognition of these situations and complications and learning how to manage them promptly and correctly. This simply can’t be done in a weekend course or even in one year’s education: it requires repeated exposure to these surgical situations to learn how to prevent, diagnose, and treat these potentially blinding complications.

In practical terms, if you -- the patient -- knew that the totality of surgical training received by your optometrist to take a scalpel, laser, or needle to your eye was less than one week, when the medical community mandates six additional years of training before an MD can operate independently, would you let that optometrist operate on your eye?

Russell Van Gelder, MD, PhD, Chair of the Department of Ophthalmology at University of Washington, has submitted a letter reflecting the University of Washington’s position on this question, which is included in the appendix to this document. Dr. Van Gelder concurs that the proposed training for optometrists to perform surgery under the proposed legislation is entirely inadequate, and would certainly put the citizens of Washington State at risk for harm.

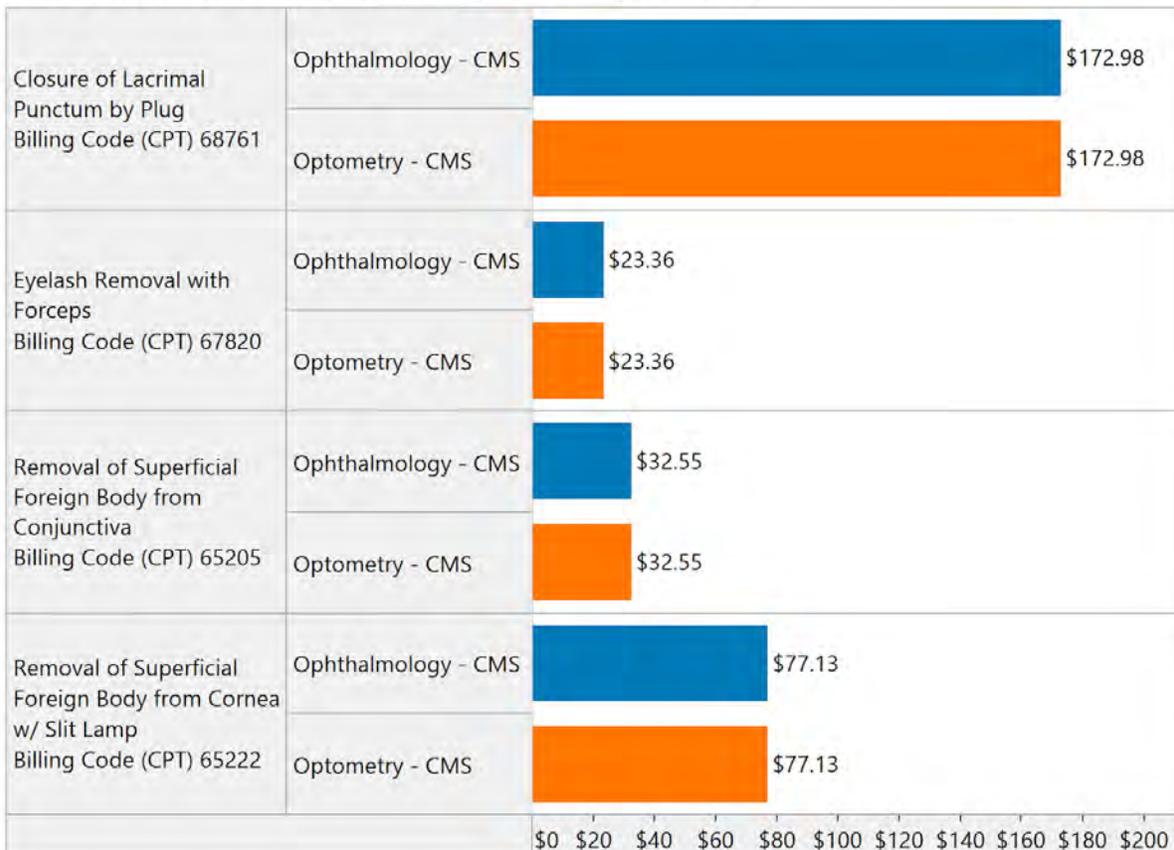
OPTOMETRY SCOPE EXPANSION WILL NOT REDUCE HEALTHCARE COSTS

Optometry is arguing that they will reduce health care costs by eliminating surgical facility fees charged by ambulatory surgery centers (ASCs) and hospital outpatient departments. They point out that optometrists don’t work in these settings and wouldn’t charge these fees, thereby saving Medicare/Medicaid money. Their argument implies that most ophthalmologists perform these types of laser procedures (YAG laser capsulotomy, elective laser or argon laser trabeculoplasty [SLT or ALT], and laser peripheral iridotomy [LPI]) in an ambulatory surgery

center or hospital outpatient department, which is not the case. Most ophthalmologists perform these procedures in their offices where there are no facility fees charged to the patient's insurance. The reimbursement for these procedures on the clinic side is higher when there is no facility fee, so the savings are less than implied (it is not simply subtracting the facility fee from the total). In the clinic setting, the doctor is actually paid more.

Furthermore, optometrists are paid exactly the same by Medicare and private insurance as are ophthalmologists: ophthalmologists and optometrists use the same CPT codes, and are reimbursed the same contracted amounts. In other words, the two specialties are paid the same. See the diagram below.

Payers May Set Different Payment Amounts for Eye Procedures but Each Payor Pays the Same Amount to Both Ophthalmologists and Optometrists



Optometry is asserting, based on a “study” by Avalon Health Economics, that they can save the state of Washington \$90 million a year through scope expansion. A simple assessment of medical economics shows that this notion is incorrect. The cost for medical services is set by a payment formula created by Medicare, not by traditional supply and demand. Each procedure and service has a specific code and a set payment. In 1986, federal law established that optometrists would be reimbursed for services by the Centers for Medicare and Medicaid Services (CMS) at the same rate as ophthalmologists. In other words, reimbursement is based

on the procedure, not the provider. Again, optometrists are paid exactly the same for any given service as an ophthalmologist.

This scale of cost-saving is unrealistic, and the authors do not provide any clear explanation from where these supposed cost-savings would come and whether those savings would come from optometrists performing surgery at all. In fact, after reviewing this same study in 2019 for a similar proposal to expand the scope of practice of optometry, the Vermont Office of Professional Regulations stated that it was not “inclined to rely on the unsupported cost savings cited by the Avalon study provided by the VOA [Vermont Optometric Association]. This study provides no explanation about the “cost-benefit analysis” that calculated the \$4.6 billion in savings, nor does it provide any additional information about what “transaction costs” or “access related improvements in health outcomes” resulting in such significant cost savings

Private insurers use the same set of codes and their payments are based upon those established by Medicare. Private insurers ALSO reimburse ophthalmologists and optometrists the same amount for medical procedures. There is no cost savings. Optometric scope expansion would only serve to increase the overall healthcare costs in our state.

On average, non-physicians order more tests because they are less sure of their diagnosis. This insecurity arises from the fact that they do not have a medical school education and surgical residency from which to draw: this lack of knowledge base leads to *increased* ordering of procedures and testing to “rule out” a problem that could be ruled out by clinical decision making alone. Moreover, their lack of education and experience can potentially result in optometrists performing unnecessary surgeries. If there is an increase in unnecessary surgeries, there is an increased cost to patients and the health care system at large. More providers, more procedures, more costs: *not less*.

Illustrating this is a 2015 study published in the Journal of the American Medical Association Internal Medicine concluded the following: advanced practice clinicians (APC's) are associated with more imaging services than primary care physicians (PCP's) for similar patients during E&M (Evaluation and Management) office visits. Expanding the use of APC's may alleviate PCP shortages. While the increased use of imaging appears modest for individual patients, it may have ramifications on care and overall costs at the population level. [Hughes DR, Jiang M, Duszak R. A Comparison of Diagnostic Imaging Ordering Patterns Between Advanced Practice Clinicians and Primary Care Physicians Following Office-Based Evaluation and Management Visits. JAMA Intern Med. 2015;175(1):101-107. doi: 10.1001/jamainternmed.2014.6349]

The argument that an increase in the number of providers (and thus an increase in competition between providers) correlates with a decrease in prices is true for other sectors of the economy, but not for healthcare. There is no competition or price comparison in medicine because the patient's insurance, a third-party payor, is paying the bill. This, coupled with the identical reimbursement for ophthalmologists and optometrists, negates the claim that an expanded scope of practice results in lower costs.

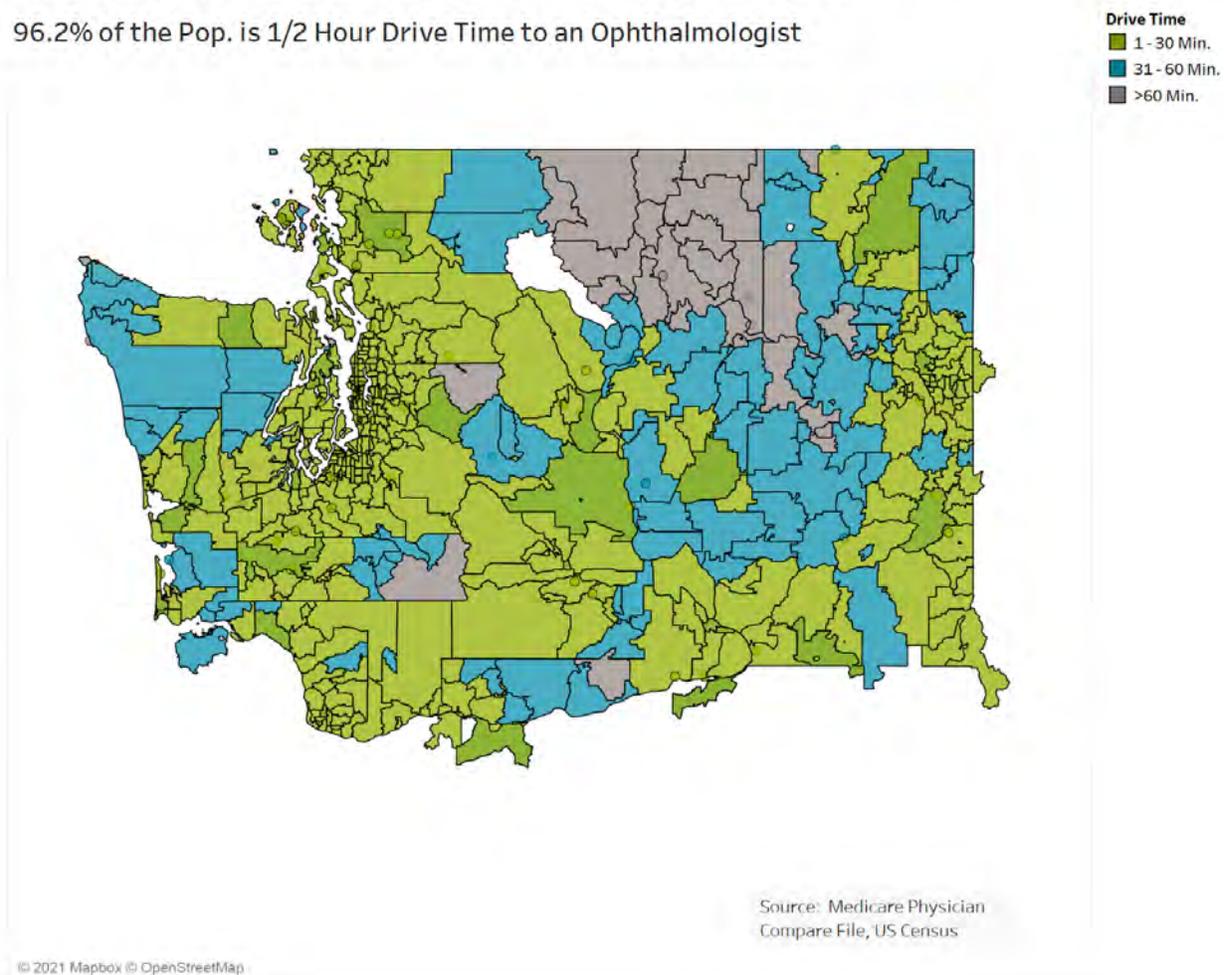
ACCESS TO CARE

There are many significant inaccuracies embodied in the OPW Sunrise Review Application. In brief, optometrists' arguments for increased scope of practice revolve around an alleged inadequate supply of ophthalmologists and a concentration of ophthalmologists only in urban areas.

First, there is no shortage of ophthalmologists in Washington. The data the optometrists provided to support their argument that there is a shortage of ophthalmologists is generalized data they reference from *national* Medicare data rather than *Washington State* specific data. Note the detailed, specific Washington State data shown below. Approximately 96.2% of Washingtonians are within a 30-minute drive time to an ophthalmologist. This is evidenced by the maps below, which are based on both Medicare data & US Census data. Optometry is trying to argue that there is an access to care issue, especially in rural areas of the state. There is no lack of access to care to an ophthalmologist in Washington State.

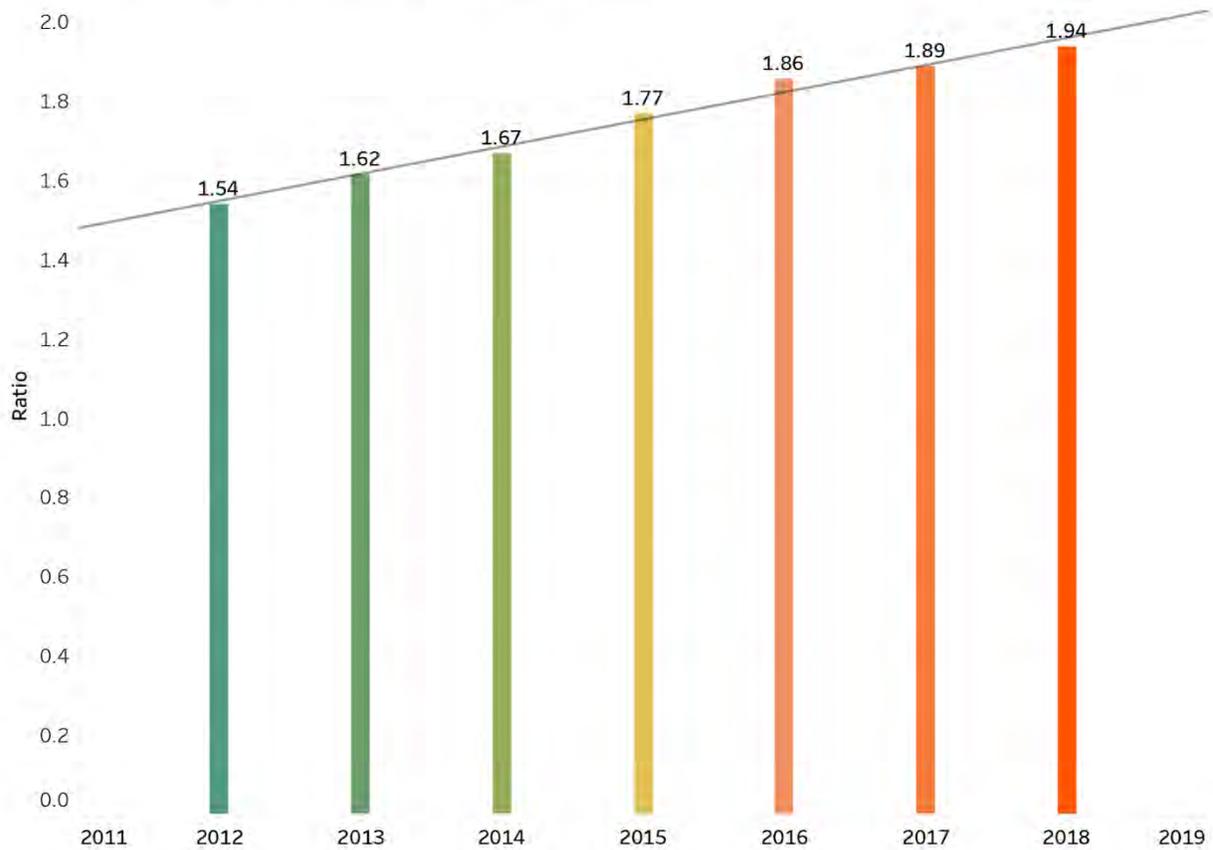
Minutes to an Ophthalmologist from WA State Zip Codes

96.2% of the Pop. is 1/2 Hour Drive Time to an Ophthalmologist



Washington optometrists claim to provide excellent access to care in rural counties. While there are shortcomings to identifying access on the county level, the Washington State Office of Financial Management identifies 9 counties as urban and 30 counties as rural. Questions arise as to how the services provided by optometrists to urban residents differ from the services provided to rural residents in the state. One metric is to compare the ratio of the total volume of Medicare Part B Services provided by Washington optometrists in urban and in rural counties over time. While the volume of services increased in both urban and rural counties from 2012 to 2018, there is a clear trend: the proportion of services provided by optometrists is shifting increasingly to urban counties. Comparing 2012 to 2018, there was a 26% increase in the urban to rural ratio of Medicare Part B Services provided by optometrists in Washington state. Optometry is trying to argue that optometrists cover more of rural Washington than ophthalmologists, while the actual data suggests that optometrists are increasingly practicing in urban areas.

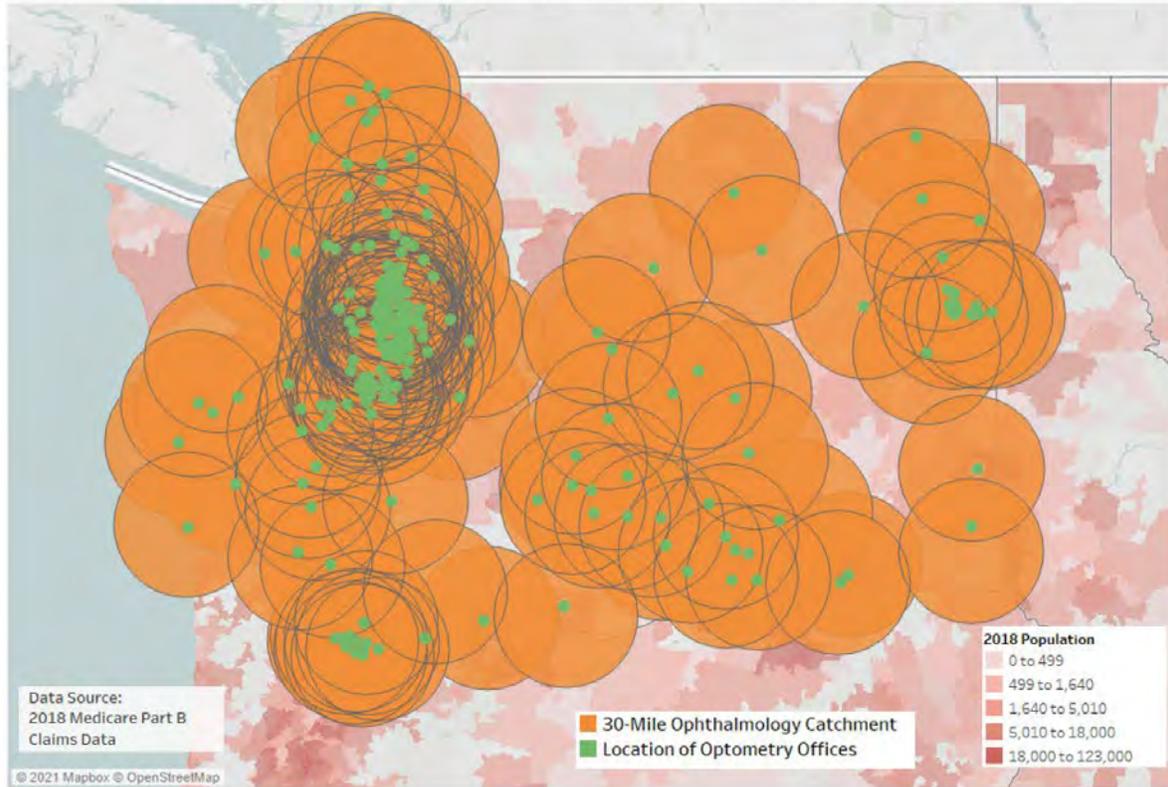
Urban to Rural County Ratio of the Total Number of Medicare Part B Services Provided by Washington Optometrists from 2012 to 2018



While optometrists claim to provide coverage in rural areas that are not served by ophthalmologists, the truth is that no optometry points of service are more than a 30 minute drive from an ophthalmologist. Most areas of our state that have a 30 or more mile drive to an ophthalmologist also have a 30 or more mile drive to an optometrist. This means that patients who live in rural Washington would have the same issue of access regardless of whether they were seeking care from an optometrist or ophthalmologist.

30 Mi. Catchment Area Surrounding Ophthalmology Points of Service and Geolocation of Optometry Points of Service

No Optometry Points of Service are More than 30 Miles to an Ophthalmologist



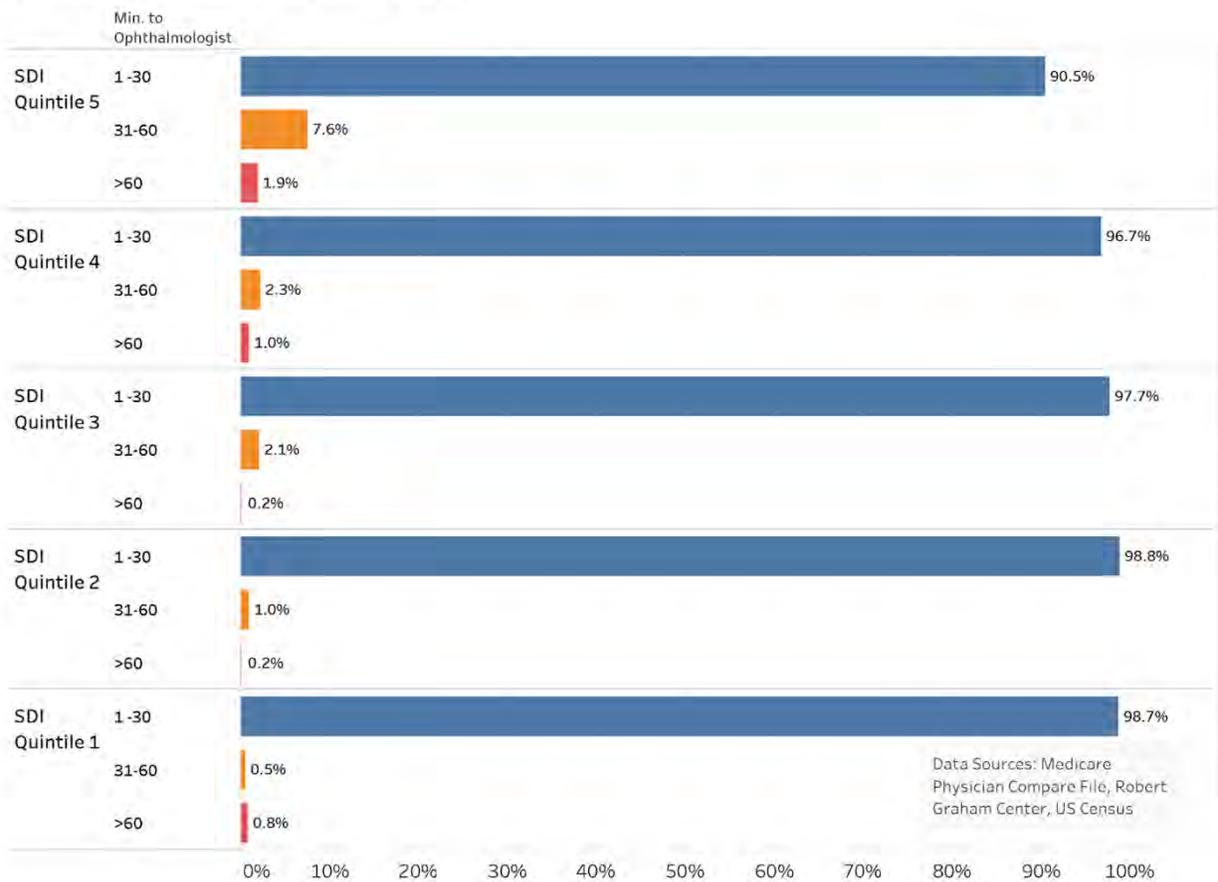
595 Routes to an Ophthalmologist from WA Zip Codes

96.2% of the Pop. is 1/2 Hour Drive Time to an Ophthalmologist



This even remains true taking into account social disparities, using the Social Deprivation Index. In brief, the next chart shows that even when comparing the least to the most socially deprived groups, the drive times end up being about the same, with the vast majority of Washingtonians not having to drive more than 30 minutes to see an ophthalmologist.

Drive Time to an Ophthalmologist Stratified by Social Deprivation Index Quintiles
(5 = Most Deprived, 1 = Least Deprived)



The OPW presents the example of Okanogan County, citing “no ophthalmologists.” This is simply not accurate. A search shows five board-certified ophthalmologists serve the residents of Okanogan County and accept Medicare. These are satellite offices that didn’t show up on the optometrists’ search of the AMA database as they were not a primary office, but they do, nonetheless, provide primary access points to ophthalmic care in Okanogan County.

Another aspect of access is the immediacy of appointments. In terms of timing and urgency of referrals, there is no difficulty in accessing ophthalmologists in Washington for urgent eye conditions. In a study commissioned by WAEPS to address this exact issue, a representative sample of WAEPS membership was contacted to see when the next available appointment was for an urgent issue. 93.2% of practices could see the patient either that same day or the next business day. Similarly, the average delay for the laser and/or eyelid surgeries (procedures that are a part of the requested expanded privileges) is less than 9 days. No reasonable person would jeopardize their vision to save days, especially since none of the indications for these laser and eyelid procedures are immediately vision threatening if not done within that short

timeframe. The only time sensitive surgical procedure that the OPW is requesting is laser peripheral iridotomy (LPI), and that is only rarely needed on an emergency basis. The majority of cases where LPI is required are treated medically first, followed by laser days later.

To see the lack of any true sustained effect of scope expansion with regards to access in rural areas, one need not look any further than states in which this scope expansion has already happened. Oklahoma enacted a surgical scope expansion in 1998, but provider maps show that optometrists have not flocked to set up practices in rural areas of that state. They remain concentrated in the same urban areas as physicians because that is where the highest concentrations of patients are.

In November of 2017, the Journal of the American Medical Association Ophthalmology (JAMA) published an analysis to determine the estimated travel time (ETT) to the nearest ophthalmologist office for persons residing in three states that have expanded the scope of practice for optometrists: Oklahoma, Kentucky, and New Mexico. The study sought to quantify the ETT to the nearest ophthalmologist for Medicare beneficiaries who received surgical care from optometrists in those states between the years of 2008 and 2014.

The authors in this study concluded that more than 40% of the residents in these three states lived within an ETT of 10 minutes to an ophthalmologist's office. This clearly shows that expanding scope to optometrists did nothing to improve patients' access rurally, especially since those surgeries were being done essentially down the street from an ophthalmologist's office.

Even nationally among the small portion of the population that resided in rural communities, most lived within an ETT of 1 hour of an ophthalmologist's office. Furthermore, most of the patients in the study who underwent surgeries by optometrists did not live in rural communities. In addition, some people in rural areas were being referred to urban optometrists an hour or more away to have these procedures when they could have had the procedure done by an ophthalmologist within a 30 minute drive of home. [Stein JD, Kapoor KG, Tootoo JL, Li R, Wagner A, Andrews C, Miranda ML. Access to Ophthalmologists in States Where Optometrists Have Expanded Scope of Practice. JAMA Ophthalmol. 2018 Jan 1;136(1):39-45. doi: 10.1001/jamaophthalmol.2017.5081. PMID: 29167903; PMCID: PMC5833600.]

Eye surgery is relatively uncommon compared with primary eye care such as fitting eyeglasses and contact lenses, and most Washingtonians already have access to an ophthalmologist nearby to treat conditions that require surgery. For example, an estimated 0.01% Washingtonians would need surgical treatment for a chalazion (inflammatory eyelid swelling from a blocked oil gland) more than 1/2 hour drive time to an ophthalmologist. An estimated 0.01% of Washingtonians would need a YAG capsulotomy more than 1/2 hour drive time to an ophthalmologist.

- Population of Washington: 7.615 Million
- Est. Medicare Population: 1,334,413
- Est. Cataract Patients: 50,092
- Est. Yag Capsulotomy Patients: 15,413
- Est. Yag Capsulotomy Patients > 30 Mn. from an Ophthalmologist: 586 (.01% of Pop.)



Data Sources: 2018 Medicare Part B Data, CMS Program Statistics, US Census

- Population of Washington: 7.615 Million
- Chalazion Incidence in Washington: 118,794
- Chalazion Patients the Present at Clinic Needing Treatment: 59,397
- Chalazion Patients Requiring Surgery: 11,879
- Chalazion Patients Requiring Surgery > 30 min from an Ophthalmologist: 451 (.01% of Pop.)



Data Sources: 2018 Medicare Part B Data, US Census, University of Iowa Department of Ophthalmology and Visual Sciences , Nascimento, Marjorie & Wanzeler, Ana & Sousa, Roberta & Satto, Larissa & Padovani, Carlos & Schellini, Silvana. (2015). Chalazion and demographic characteristics of patients in a population sample. *Revista Brasileira de Oftalmologia*. 74. 10.5935/0034-7280.20150045.

The optometric arguments cite articles by Diane Gibson, PhD. The validity and applicability of these articles is questionable and certainly not of rigorous scientific merit. The most recent of these articles was published in a trade magazine for optometrists (owned and run by the American Academy of Optometry), bringing up serious concerns of bias.

Our concerns about this information include the following. First, they fully admit that 29% of optometrists do NOT accept Medicare (compared to 6% of ophthalmologists). This obviously poses an issue in terms of access to care, if not also affordability of care for our Washingtonians 65 years of age and older.

Second, by their own admission, their database was out of date and incomplete. Verbatim from the article: “This has the potential to bias estimates of travel times to the closest providers for individuals 65 years or older...”

Moreover, Dr. Gibson points out that a weakness of the article is the inability to know if this extrapolates to the general population. “A related question is whether estimates of eye care provider availability constructed using the Medicare Provider data for the Medicare population of a state can be used by state policy makers as a reasonable approximation of availability for the total population of the state.”

On these bases, we believe that the article and the conclusions optometrists have drawn from the article have significant flaws. We don’t consider the conclusions they have drawn to be valid based on the weaknesses of both the data and the scientific process. Contrast this with the peer-reviewed article we have presented above, which came from JAMA, an acknowledged authoritative, peer-reviewed scientific publication.

PATIENT SAFETY

Optometry is arguing that “there is considerable risk to many patients with regard to urgent laser peripheral iridotomy for acute angle closure glaucoma.” Once again, this is inaccurate. As one can see from the previous graphs, very few people live more than a 30 minute drive from an ophthalmologist, and the vast majority of these people would have to make the same drive to see an optometrist.

Expanding the number of practitioners who can perform these procedures runs the risk of reducing the number of procedures any one practitioner will perform per year, which may reduce the overall skill level of those performing the procedures as there is a direct correlation between frequency of performing procedures and complications/morbidity: *low volume surgeons have higher complication rates*. [Birkmeyer JD, Stukel TA, Siewers AE, Goodney PP, Wennberg DE, Lucas FL. Surgeon volume and operative mortality in the United States. N Engl J Med. 2003 Nov 27;349(22):2117-27. doi: 10.1056/NEJMsa035205. PMID: 14645640. Wu G, Hildreth T, Phelan PS, Fraser SG. The relation of volume and outcome in trabeculectomy. Eye (Lond). 2007 Jul;21(7):921-4. doi: 10.1038/sj.eye.6702340. Epub 2006 Mar 31. PMID: 16575409.]

Patient safety is why ophthalmology residency training programs encompass more than 17,000 hours of clinical experience, 3,000 patient encounters, and strict minimums for numbers of

surgical cases as a primary surgeon in every aspect of ophthalmic care. This is about 15,000 more hours of clinical experience than a typical optometrist receives in the course of optometry school. 15,000. Ophthalmology surgical residents observe, then assist, with one-on-one intensive training for each procedure before becoming the primary surgeon on any single type of case. Optometry “surgical” training in optometry school consists mostly of observation in large groups with little one-on-one instruction and no actual surgical procedures performed, except for a handful of laser cases that only those in Oklahoma’s optometry school would have opportunity to perform. Yet optometry is claiming that surgical training is part of their curriculum nationwide.

The mission of the American Board of Ophthalmology is “to serve the public by certifying ophthalmologists through the verification of competencies.” To be board certified, an ophthalmologist must first successfully complete a 4-year ACGME-accredited residency in ophthalmology (following 4 years of medical school training), then pass both a rigorous written and oral exam. In addition, to maintain certification, every ABO certified ophthalmologist must participate in a continuing process of certification which includes maintaining a valid state license, participating in CME and self-assessment CME, a patient safety activity, a quarterly assessment of practical knowledge, tested journal reviews, and complete two practice-improvement activities designed to increase skill or to improve patient outcomes. Optometry has nowhere near this level of training and safety preparation. And you cannot carve out a handful of procedures outside the context of a full medical and surgical foundation of training.

A 2016 study in JAMA Ophthalmology illustrates the flaw in having optometrists treating patients surgically. Ineffective, incorrect, or an excessive number of treatments by inexperienced optometrists is evidenced by the Journal of the American Medical Association's 2016 investigation in Oklahoma where outcomes of laser trabeculoplasty (LTPs) performed by ophthalmologists were compared with those performed by optometrists to determine whether differences existed in the need for additional LTPs.

The result: Among the 1,384 eyes that received laser trabeculoplasty, the proportion of eyes treated by optometrists requiring additional laser trabeculoplasty in the same eye (35.9%) was more than double the proportion of those treated by ophthalmologists (15.1 %). Optometrist-treated eyes had a 189% increased risk of requiring additional laser trabeculoplasty. At the least, this leads to significantly increased costs to patients and the system, but also potentially to incorrect or ineffective treatments. [JAMA Ophthalmol. 2016;134(10):1-7. doi:10 1001/jamaophthalmol.2016.2495 Published online July 28, 2016.]

The authors concluded “considerable differences exist among the proportions of patients requiring additional laser trabeculoplasties comparing those who were initially treated by ophthalmologists with those initially treated by optometrists. Health policy makers should be cautious about approving laser privileges for optometrists practicing in other states until the reasons for these differences are better understood.”

VERMONT OFFICE OF PROFESSIONAL REGULATION

REVIEW

During the 2019 legislative session, the Vermont Optometric Association requested a similar expansion of privileges to their House Government Operations Committee for expanded scope of practice to include surgeries, including laser. Their Office of Professional Regulation (OPR), a non-partisan, non-elected entity, was tasked with research of the optometrists' claims of access, education, training, cost, etc. The OPR consulted all stakeholders and conducted extensive research for nearly a year and came to the conclusion that the "OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures. Further, OPR finds that there is little need for, and minimal cost savings associated with, expanding the optometric scope of practice to include advanced procedures. For these reasons, OPR recommends against expanding the optometric scope of practice to include the proposed advanced procedures." Please see the appendix for the OPR's full report. Included here are summary sheets for the OPR's conclusions on issues regarding patient safety, education, training, access and cost.

Vermont Office of Professional Regulation:

Study of Optometric Advanced Procedures (a.k.a. "Surgery")

Submitted to the Vermont General Assembly - January 15, 2020

Overview:

During Vermont's 2019 Legislative Session, the Vermont Optometric Association came before the House Government Operations Committee to testify in support of a proposal to expand the optometrist scope of practice to permit this profession to perform "advanced procedures."

These proposed "advanced procedures" consisted of various types of surgery on and around the eye. The Vermont Ophthalmological Society and the Vermont Medical Society adamantly opposed this proposed change in the scope of practice of optometrists out of concerns for patient safety.

The Committee determined that a study was needed to "*evaluate the safety and public health needs of enlarging the scope of practice of optometrists to include advanced procedures.*" The Vermont General Assembly directed the state's **Office of Professional Regulation** (OPR) to conduct the study.

The General Assembly instructed OPR to evaluate:

- Approaches to advanced procedures in jurisdictions outside Vermont
- Patient need for access to additional practitioners
- Effects on patient access to care
- Effects on patient safety
- Costs to the health care system
- Existing education and training for optometrists (including the degree to which it addresses training in “advanced procedures”)
- Specific clinical training for both optometrists and ophthalmologists for specific procedures.

¹ Vermont Secretary of State, Office of Professional Regulation: *Study of Optometric Advanced Procedures, January 15, 2020*: <https://legislature.vermont.gov/assets/Legislative-Reports/Optomery-Report-FINAL-2020.pdf>

KEY EXCERPTS

Vermont Office of Professional Regulation (OPR):
Study of Optometric Advanced Procedures (a.k.a. "Surgery")
Submitted to the Vermont General Assembly - January 15, 2020

On Risks to Patient Safety

"After consulting with stakeholders and conducting extensive and thorough research, **OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures.** Further, OPR finds that there is little need for, and minimal cost savings associated with, expanding the optometric scope of practice to include advanced procedures. **For these reasons, OPR recommends against expanding the optometric scope of practice to include the proposed advanced procedures.**" (page 1)

"**The Executive Director of the Oklahoma Board (of Optometry)** reported that there have been no adverse outcomes reported to the Board of Examiners by any optometry patient between 1992 and 2019. He did report that there were **two malpractice cases settled out of court and a malpractice case, self-reported** by the optometrist involved. alleging that the optometrist failed to refer a patient to an ophthalmologist in a timely manner." (page 23)

"**These reports are seemingly contradicted, however, by reports to the National Practitioner Data Bank ("NPDB"),** a federal database of medical malpractice payments and certain adverse actions taken against health care providers, including optometrists. **According to the NPDB, between the years of 1992 and 2019, there were 59 malpractice payments and adverse events reported to the NPDB for Oklahoma optometrists. This is much higher than the three cases reported by the Executive Director of the Oklahoma Board.**" (page 23)

"While the NPDB data does not offer conclusive evidence regarding whether the expanded scope of optometric practice has led to an increase in malpractice cases or adverse events, **it does indicate that the professional boards in these states do not have a full understanding of the complications, adverse actions and malpractice cases occurring in the state.**" (page 23)

“An additional challenge is that the professional board members in Oklahoma, Kentucky and Louisiana are, themselves, optometrists, who have an interest in seeing the optometric scope of practice expanded nationally. ***This coupled with the seemingly inaccurate reports of adverse events, discipline, and malpractice cases leads OPR to be reticent to rely on the reports of few to no adverse actions taken against optometrists as indicative of the safety of scope expansion.”*** (page 23)

Source: Vermont Secretary of State, Office of Professional Regulation: Study of Optometric Advanced Procedures, January 15, 2020:

<https://legislature.vermont.gov/assets/Legislative-Reports/Optomety-Report-FINAL-2020.pdf>

KEY EXCERPTS

Vermont Office of Professional Regulation (OPR):
Study of Optometric Advanced Procedures (a.k.a. "Surgery")
Submitted to the Vermont General Assembly - January 15, 2020

On Lack of Proper Education & Training

"Most significant for OPR is the ***lack of evidence*** showing that optometric education prepares optometrists to perform these proposed advanced procedures. ***Despite multiple efforts through various sources, OPR was unable to gather specific or detailed information about the curricula and courses offered by the U.S. schools of optometry in these advanced procedures. Other states attempting to gather such information have met with similar refusal to disclose detailed curricula.***" (pages 7-8)

"Even the more stringent and comprehensive optometric educational programs do not provide the level of training and experience obtained by ophthalmologists. What information is available about U.S. optometry schools shows that:

(a.) curriculums vary widely (there is no standardized course of study regarding these advanced procedures); and

(b.) courses on lasers, injections and minor surgical procedures are very limited – they are short courses, with little to no lab time, and minimal practical experiences.

Continuing education courses on advanced procedures present similar limitations. They are very short and have negligible practical experience requirements." (page 8)

"Providers who perform the proposed advanced procedures need to be trained in assessing the systemic condition of patients, to be educated on how to adjudge whether a patient is a candidate for a procedure, and to be qualified to address medical complications. ***OPR cannot conclude that optometrists have this necessary education and training. OPR is thus concerned that permitting optometrists to perform these advanced procedures poses a risk to the public's safety.***" (pages 19-20)

Source: Vermont Secretary of State, Office of Professional Regulation: Study of Optometric Advanced Procedures, January 15, 2020:

<https://legislature.vermont.gov/assets/Legislative-Reports/Optometry-Report-FINAL-2020.pdf>

KEY EXCERPTS

Vermont Office of Professional Regulation (OPR):

Study of Optometric Advanced Procedures (a.k.a. "Surgery")
Submitted to the Vermont General Assembly - January 15, 2020

On Access and Costs

"(OPR) finds that there is ***insufficient evidence*** showing a need for expanded access to care that can be addressed by expanding the optometric scope of practice. OPR acknowledges that there are patients who have experienced longer wait times than preferable and that have had to drive further than desired. However, ***the evidence shows that, in most cases, there is little delay in treatment, there is no reported detriment from the delays that do exist, and there is additional capacity.***" (page 8)

"OPR concludes that ***there will be little, if any, cost savings associated with the expansion of the scope of practice.*** Patients may be saved the additional costs of seeing a new doctor, repeating an exam, and traveling twenty minutes to see another provider. However, it is not clear to OPR that these costs savings are beneficial to the patient. ***Evidence provided by the VOS and experiences in other states show that optometrists sometimes refer patients for or perform unnecessary advanced procedures. At least in one study showed that significantly more repeated procedures were required when the initial procedure was performed by an optometrist. Thus, the initial costs savings to the patient may be outweighed by the costs of an unnecessary or repeated procedure.***" (page 9)

Source: Vermont Secretary of State, Office of Professional Regulation: Study of Optometric Advanced Procedures, January 15, 2020:

<https://legislature.vermont.gov/assets/Legislative-Reports/Optomety-Report-FINAL-2020.pdf>

APPENDIX

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American Academy of Ophthalmology Letter:



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July 15, 2021

Cori Tarzwell
Optometry Scope of Practice Sunrise Review
Lead Health Systems Quality Assurance
Division Washington State Department of Health
Olympia, Washington 98501

Dear Ms. Tarzwell:

We are writing on behalf of the American Academy of Ophthalmology. As a global community of 32,000 medical doctors, we are the world's largest association of eye physicians and surgeons, dedicated to protecting sight and empowering lives by ensuring the delivery of, and access to, the highest quality eye care. It is our concern that the proposal being considered in Washington to authorize optometrists to perform laser eye surgery, surgery on the eyelid to remove lesions and injection procedures around the eye present significant patient safety and quality of surgical care issues.

Authorizing optometrists to perform surgery would lower the high standards of surgical care in Washington. Preparation and judgement as well as the technical skills required to perform a surgical procedure are the basis of a successful surgery of any kind. This is especially true of eye surgery where the margin of error is minimal. That preparation and judgement is formed through years of medical school and residency training. The bottom line is optometrists do not leave optometry school with the type of hands-on experience and training necessary to perform eye surgery.

Lasers are surgical instruments and are specifically recognized as such by the American College of Surgeons and the American Medical Association. Lasers can cut as deeply and sharply as any knife. Lasers can cause spikes in intraocular pressure (which may require immediate operating room surgery), mild or severe inflammation of the eye, cataract formation, corneal damage, hemorrhage, and permanent visual loss.

Seemingly benign eyelid lesions may actually be carcinomas (skin cancers). Sometimes, it only becomes apparent that the lesion may be cancerous during the surgery. Improper surgical technique can lead to vision-threatening deformities of the eyelid or incomplete removal of the lesion. A surgical error of just a few millimeters with a needle can result in a punctured eyeball and catastrophic vision loss. Injecting a cancerous lesion that has not been properly diagnosed can result in the cancer spreading.

Thank you for your consideration of our patient safety and quality of care concerns.

Sincerely,



David W. Parke II, MD CEO
American Academy of Ophthalmology



Tamara R. Fountain, MD
President
American Academy of Ophthalmology

John D. Peters, MD
Secretary for State Affairs
American Academy of Ophthalmology

Russ Van Gelder, MD, PhD Letter (UW):

UW Medicine
DEPARTMENT OF
OPHTHALMOLOGY

Russell N. Van Gelder, MD, PhD
Boyd K. Bucey Memorial Chair
Professor and Chair

July 15, 2021

Cori Tarzwell, Optometrist Sunrise Review Lead
Health Systems Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504

Re: Optometrist scope of practice sunrise review

Dear Ms. Tarzwell:

Thank you for the opportunity to comment on the sunrise review of S-3085.2 regarding scope of practice extension for optometrists in Washington State. I am writing in my capacity as Chair of the Department of Ophthalmology at University of Washington School of Medicine.

If passed into law, S-3085.2/21 would grant optometrists the ability to 1.) prescribe essentially all systemic medications, and 2.) perform a number of laser and incisional surgeries on the eye and its surrounding tissues. These expansions in scope of practice for optometrists would unnecessarily threaten the welfare of the citizens of Washington. The comments outlined below articulate how, if passed, this proposal will lead to harm for the citizens of this state.

By background, I have extensive training in medical and surgical ophthalmology, ocular inflammatory diseases (uveitis), and neuroscience. I have served as a medical faculty member for over twenty years, first at the Washington University Medical School in St. Louis and since 2008 as Chair of the Department of Ophthalmology at University of Washington School of Medicine. I have also published extensively on eye function and eye disease and have served in leadership positions for national and Washington state professional associations including national ophthalmic education organizations and the American Board of Ophthalmology. My CV is attached for your reference.

Optometric education includes no training to perform surgery on the eye; ophthalmologists undergo over 10,000 hours of supervised medical and surgical training before becoming independent surgeons.

Optometrists attend an accredited optometry school for four years, during which time they take didactic courses directed at understanding the anatomy and physiology eye, diagnosing ocular disease, and providing glasses and contact lens. Following this, optometrists are eligible for licensure. Less than a quarter of optometrists pursue post-graduate training. There are no mandatory boards for assessing competency in optometry, nor is optometry recognized by the American Board of Medical Specialties.

In contrast, ophthalmologists attend four years of allopathic or osteopathic medical school, including two years of didactic training followed by two years of clinical rotations. All medical students must demonstrate proficiency in basic surgery – including understanding of aseptic technique and operating procedure – in order to graduate medical school. All medical students must take and pass the three step US Medical Licensing Exams (USMLE) before being eligible for medical licensure. Following medical school, ophthalmologists serve one year as medical or surgical interns followed by three years of ophthalmology residency. All ophthalmology residency programs in the US are accredited by the Accreditation Council of Graduate Medical Education, which reviews all programs in the country annually and has strict guidelines for the educational content of each residency.

At University of Washington, our ophthalmology residency program provides trainees with 9500 hours of training over three years in all aspects of medical and surgical care of patients with eye disease. About 1000 hours of this training is in the classroom, and the remaining 8500 hours is hands-on, supervised training in our clinics and operating rooms. Our residents perform several hundred ophthalmic surgical procedures each during this time, under full supervision of faculty ophthalmologists. Our residents report their surgical complications at a monthly quality assurance meeting, and we discuss these fully to ensure our residents understand the challenges and risks of surgical treatments. Following residency training, our graduates take the American Board of Ophthalmology (ABO) exam, which consists of a full-day written exam followed, one year later, by a full-day oral examination. The ABO is recognized by the American Board of Medical Specialties, which is the sole recognized board certification organization for medical doctors in the US. While this would seem to be a great deal of training and testing, about 80% of our graduates opt to pursue an additional one to two-year subspecialty fellowship in order to gain more training and experience in specialized surgical and medical eye care. All told, the average ophthalmologist in our state has over 10,000 hours of supervised medical and surgical training *after medical school* before they become independent surgeons.

In the few states that have expanded optometric scope in recent years, optometric surgical training for practitioners has typically been a 3-4 day ‘long weekend’ course, taught by other optometrists, covering all aspects of surgery, with no opportunity for the optometrists to perform procedures on actual patients under supervision, and no recognized certification process. This training is not at all sufficient as a substitute for the thousands of hours of supervised surgical and medical training ophthalmologists receive.

The surgical procedures permitted under the proposed legislation are not safe to perform without extensive surgical training, which optometrists do not receive. It is dangerous to allow minimally trained individuals to perform *any* surgical procedures on the eye.

S-3085.2/21 specifically precludes a number of surgical procedures from optometric scope, with the implication that the remaining procedures are low-risk and safe for optometrists to perform. *There is no such thing as a simple or low-risk surgical procedure.* I will illustrate by describing a procedure that would be allowed to be performed by optometrists under S-3085.2/21.

The term periocular injection refers to procedures in which a medication (corticosteroid, antibiotic, or anesthetic) is injected into tissues immediately next to the eye. It is typically performed in awake patients under local anesthetic, under aseptic conditions. Indications for this treatment are typically intraocular inflammation (uveitis) not responding to steroid eye drops, or administration of anesthesia.

The procedure is inherently *invasive* and *surgical*. Correct performance of this technique requires an excellent knowledge of: 1.) aseptic technique; 2.) pharmacology of these medications; and 3.) precise knowledge of ocular anatomy. On the following page is a photograph of a patient receiving a periocular injection:



Incorrect technique – being off in the location of the injection by 1 mm -- can lead to the needle puncturing the eye itself, and severe and potentially blinding complications including retinal detachment, infection of the eye or retinal hemorrhage. Recognition of these complications requires substantial training, and immediate management often requires surgical treatment. An optometrist who had such a complication would be unable to treat it.

Periocular corticosteroids will cause elevated intraocular pressure in about 30% of patients, and will cause severely elevated pressure (and potentially blinding glaucoma) in about 5%; the latter usually requires urgent surgical treatment including trabeculectomy and surgical excision of deposited steroid. Periocular corticosteroids are also highly associated with development of cataracts that can decrease the patient's vision. Cataracts require surgical treatment.

When considering periocular corticosteroid injections for a patient, there are several other treatments that could be used to treat the patient, including oral corticosteroids, intraocular injection of medications, placement of long-acting intraocular steroids by surgery, vitrectomy surgery, or treatment with immunomodulating drugs. I do not know how an optometrist who cannot offer these alternate treatments can appropriately provide risk/benefit counseling on selection of a periocular injection.

During my residency and fellowship training, I learned to perform periocular medication injections by performing over 100 injections under the direct supervision and instruction of my attending physicians. Since entering practice on my own, I have performed over 2,000 periocular injections. I have also taught this technique to over 50 residents and fellows. I typically do not allow our residents to perform this 'simple' procedure under supervision until their second year in residency.

This is the level of training that must be required before anyone approaches the eye with a needle to perform an injection. There is simply no substitute for full surgical training to prepare one to perform this technique. Further, the treating physician must be prepared for any and all complications arising from the technique, including infections, inadvertent puncture of the eye, severe glaucoma, or cataracts.

As another example, eyelid biopsy is not precluded by this bill. Such a procedure may be used for the excision of potentially malignant tumors. An incomplete excision of such a lesion can lead to metastatic cancer and death. Even after four years of surgical training, most ophthalmologists do not feel fully comfortable biopsying and excising such lesions, and refer them to specialist ophthalmologists. A procedure of this complexity should not be performed by anyone who has not had full surgical training.

And it is also important to remember that laser surgery is still surgery – whether one cuts tissue with a knife or a laser, extensive surgical training is required. Severe complications such as bleeding within the eye, markedly elevated eye pressure, and retinal detachment can result from incorrect performance of 'simple' laser procedures.

Regulatory oversight of surgical procedures should rest solely with the Washington Medical Commission.

I am particularly troubled by the provision in S-3085.2/21 granting the state board of optometry full oversight over surgery performed by optometrists. These are surgical procedures, and oversight of all surgery should rest solely with the Washington Medical Commission. Allowing a state optometric board oversight of the same procedures will create two standards of care for the citizens of Washington: a medical board which requires that all surgeons be licensed medical doctors with full accredited residency training, and an optometric board which oversees individuals performing surgical procedures with minimal training and minimal competency standards.

Members of the public may not understand the huge difference in training between optometrists and ophthalmologists. If optometrists are granted the scope to perform these procedures in Washington, unsuspecting patients may suffer potentially blinding complications that could have been prevented had a qualified surgeon performed the procedure.

Access to care will not be substantially increased by the proposed expanded scope of practice.

I will not reiterate the arguments that my colleagues at the Washington Academy of Eye Physicians and Surgeons have made regarding access to care in the State of Washington. Suffice to say that exhaustive analysis of the locations of treating ophthalmologists and optometrists in our state demonstrates that nearly all of our state's citizens have ready access to a local ophthalmologist who can safely perform surgical procedures.

Thank you again for the opportunity to comment on this draft legislation. I sincerely hope the sunrise review committee does not put the safety of our citizens' eyes in jeopardy by approving this proposal. If you have any questions, please do not hesitate to contact me at: russvg@uw.edu.

Sincerely,



Russell N. Van Gelder, MD, PhD

Boyd K. Bucey Memorial Chair

Professor and Chair, Department of Ophthalmology

Adjunct Professor, Departments of Biological Structure and Laboratory Medicine and Pathology

Director

Roger and Angie Karalis Johnson Retina Center

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WSMA Letter (original submitted by WSMA on letterhead):

July 16, 2021

Cori Tarzwell, Optometrist Sunrise Review Lead
Health Systems Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504

Re: Optometrist scope of practice sunrise review

Dear Ms. Tarzwell,

On behalf of the Washington State Medical Association (WSMA), we appreciate the opportunity to comment on the Department of Health's (Department) Sunrise Review concerning the optometry scope of practice. Ensuring access to high quality health care for all Washingtonians is a paramount priority for the WSMA. However, the draft proposal threatens the health and safety of Washingtonians who will seek out care and treatment for their vision over the course of their lifetime. For the following reasons, we strongly urge the Department to oppose the proposal.

Surgical procedures on or around the eye are exceedingly invasive and require the highest level of clinical expertise and skill

The draft language offered by the Optometric Physicians of Washington would allow for a dramatic increase in the profession's scope of practice without requisite education and training or regulatory guardrails. This includes the ability to diagnose and treat without comprehensive medical training, as well as the use of injections, scalpels, and lasers on the eyes and tissues surrounding the eyes. **All of these surgical procedures are invasive, including those that are performed with lasers.** These procedures include:

YAG Laser Capsulotomy: This procedure follows cataract surgery – sometimes immediately following surgery, sometimes years after – to clear cloudy vision. After dilating pupils and applying local anesthetic, the ophthalmologist will use a laser to create an opening in a cloudy film that has formed behind the lens implant. This restores normal vision. Complications that can arise during or after the procedure include but are not limited to inflammation, macular edema, lens implant dislocation, and retinal detachment.

Argon and Selective Laser Trabeculoplasty: In this procedure, laser energy is applied to the trabecular meshwork of patients who have high eye pressures or glaucoma. Often these patients have failed other medical therapy in terms of controlling their eye pressure at a target level. Spots of energy are placed along the meshwork and, it should be noted, overtreatment will damage the structures and limit their function – exacerbating the pressure problem. Similarly, if energy is delivered to surrounding structures, there would likely be no pressure lowering effect and damage could occur to those structures. Complications include inflammation, scar tissue formation with angle closure and subsequent glaucoma, corneal decompensation and abrasions, and cataracts.

Laser Peripheral Iridotomy: This procedure places a hole in the iris to allow free flow of aqueous fluid from behind the iris to the front of the iris, deepening the anterior chamber and preventing angle closure. Placement and size of the iridotomy are important to avoid double vision and a “second pupil,” as well as to avoid bleeding and extreme pain from hitting nerves. The energy level must be carefully selected to avoid distorting and disfiguring the pupil. In addition to complications possible with laser trabeculoplasty, iridotomy can cause intraocular bleeding, pupil distortion, double images, extreme ocular pressure elevation, and cataracts.

Scalpel surgery to remove “lumps and bumps”: Removing these lesions requires an ophthalmologist to utilize the full range of their medical and clinical knowledge to evaluate the patient, differentially diagnose, and determine if surgery is appropriate. The procedure requires local anesthesia, removal or biopsy of lesion via excision/incision/etc., and coordination with a pathologist. If malignancy is suspected, an ophthalmologist must resect widely enough to achieve clear margins but preserve function and cosmesis. They may also need to cauterize, administer adjunct treatment, address any intraoperative abnormalities, and suture or close the wound. If the sutures are not closed properly, the eyelid will not function properly. This can cause chronic problems – even blindness. Potential complications include scarring, blurred or impaired vision, dry eyes, bleeding, infection, blood clots, pain, eyelid disfiguration, anesthesia risks, and loss of eyesight.

Section two of the bill draft specifies that the practice of optometry does not include “**surgery of the eyelid for malignancies** or for incisional cosmetic or mechanical repair of blepharochalasis, ptosis, or tarsorrhaphy.” This statement is at best misleading and at worst shows a concerning lack of clinical knowledge, as the only way to know if a lesion is malignant or benign is to test the lesion once it is removed.

Injections and prescriptive authority: Ophthalmologists utilize injections to treat a number of conditions. They inject intraocularly (into the eye), periocularly, and into the subconjunctival space (under the thin layer covering the white shell of the eye), as well as into the eyelids, eyebrows, scalp, nose, and lacrimal apparatus. Additionally, ophthalmologists utilize intravenous injections and anesthesia when they perform certain surgical procedures.

This proposal would lift a ban on optometrists performing injections and infusions, as well as allowing them to prescribe oral steroids. This means optometrists would have access to anesthetics, Botox, fillers, steroids and other immune modulating medicines, and possibly chemotherapy drugs, as well as IV sedation. Complications from these injections can include infection, blindness and loss of eye, and even death, in addition to general complications due to the use of anesthesia.

These are just a few of the surgical procedures an optometrist would apparently be able to perform under this proposal if approved. **Complications that can arise during these procedures are serious and often irreversible – impacting a patient over their lifetime.** The stakes are far too high for the Department to endorse allowing anyone but an ophthalmologist – who has the appropriate training and experience – to perform these surgical procedures successfully.

Proposed educational and training requirements are not equivalent to medical or osteopathic doctors and are insufficient to ensure safe surgery and prescribing

The medical education of an ophthalmologist begins before they even enter medical school with pre-med requisites included in their bachelor’s degree programs. Once at medical school, ophthalmologists spend four years focusing on the entire human body and all of its systems – sensory, nervous, endocrine, cardiovascular, and more. A medical school’s curriculum is highly regulated by the Liaison Committee on Medical Education (LCME).

After medical school, ophthalmologists complete a year-long internship, and then spend three more years completing a postgraduate residency training where they clinically apply the knowledge and skills acquired during medical school. Many also complete another one to two years of fellowship. According to the American Medical Association (AMA), this includes 12,000

to 16,000 hours of patient care under the supervision of other medical or osteopathic physicians. **This clinical training teaches an ophthalmologist the safest and most appropriate treatments – surgical, pharmacological, and other interventions based on a patient’s medical needs – as well as training in surgical procedure, technique, and medical response.**

By comparison, an optometrist’s education is highly variable. Optometrists attend four years of post-graduate school and there is no residency requirement. The optometric education focuses on examining the eye for vision prescription, dispensing corrective lenses, and performing some eye screening functions. **Optometric education is observation-based and students receive less than 2,000 hours of hands-on clinical training.** Because injections, laser and other surgical techniques are not within the scope of practice of optometrists in most states, their education in these areas are limited to didactics, and practice on animal and model eyes, and other inanimate objects.

Application materials state that “all optometry schools teach these procedures in their curriculum” and imply that any additional training that may be required could be accomplished through continuing education courses. The Vermont Office of Professional Regulation (OPR) recently conducted a [comprehensive study](#) that considered, among other things, the claim that surgery is taught in optometric school. Their conclusions are as follows:

Even the more stringent and comprehensive optometric educational programs do not provide the level of training and experience obtained by ophthalmologists. What information is available about U.S. optometry schools shows that (a) curriculums vary widely (there is no standardized course of study regarding these advanced procedures); and (b) courses on lasers, injections and minor surgical procedures are very limited – they are short courses, with little to no lab time, and minimal practical experiences. Continuing education courses on advanced procedures present similar limitations. They are very short and have negligible practical experience requirements.

The same study also concludes that optometrists do not have the education or training to safely perform surgery, including injections and procedures with a laser. We strongly encourage the Department to reach out to the relevant professionals at the Vermont OPR to discuss the proposal that was considered there and the conclusion they reached in response.

For all of these reasons, the education and training requirements included in the proposal are insufficient and should not receive the Department’s support.

There are no uncomplicated surgeries involving the eye or tissues around the eye – increasing the scope of practice for optometrists would compromise patient safety

Of all the applicant’s claims offered in this proposal, the most concerning is the assertion that surgery on the eye is uncomplicated and essentially risk free. All of these surgical procedures are invasive, including those that are performed with lasers.

In order to mitigate the risk of complications, ophthalmologists not only need the technical skills to perform the procedure, but also the medical knowledge to know when surgery may or may not be clinically indicated. Physicians are trained in the most effective, safe and appropriate treatments, including surgical, pharmacologic, and other interventions based on each patient’s medical needs. Recognizing when the procedure should be done and when it should not be done can be as challenging and important as being able to perform the procedure.

When surgery is clinically indicated, only an ophthalmologist has the medical knowledge and training to safely conduct surgical preparation, performance of the procedure, and post-operative patient care. Most importantly, **only an ophthalmologist has the medical training to respond to an adverse event that may result from any surgery and the use of anesthesia. This includes blood clots, infection, spread of local anesthetic, and decreased heart rate – all of which can result in death.** We cannot overstate how critical this is to the safety of Washington patients.

In any scope of practice proposal, the consideration of patient safety and ensuring high quality care must be foremost. The risks associated with allowing underqualified providers to perform surgery does not, in this case, outweigh the potential benefits and do not warrant the Department's support.

The proposal fails to ensure appropriate parameters and oversight for the profession

The draft legislation offered by the applicant includes a provision that would grant the Board of Optometry "...the sole authority to determine what constitutes the practice of optometry." In our state, a health profession's scope of practice is codified in RCW and only the legislature can amend the practice act. In fact, no other board or commission in our state has the ability to set their own scope of practice. **Granting the Board of Optometry the authority to determine future scope expansions for their own profession circumvents the legislative process and removes critical checks and balances.** This is an exceedingly dangerous concept for the Department to consider endorsing.

The sunrise review application also states that "The board will continue its mission to protect public health by designating what is required to demonstrate proficiency in advanced procedures." **As optometrists do not receive adequate education and training to allow them to safely perform surgery, it follows that they are not able to appropriately design curriculum for practitioners to undergo to be able to safely perform these procedures.** Furthermore, individuals without a history of performing these surgical procedures cannot in good faith regulate a program that would teach others to do so.

Put simply, this is exemplary of a proposal that is not credible and not worthy of the Department's support.

Most rural Washingtonians live within close proximity to an ophthalmologist and all rural Washingtonians deserve access to the highest quality of care

The applicants state access to eye care as the primary reason for the proposed scope of practice expansion noting that "...the costs inherent in traveling to see specialists and establish with new providers. This includes transportation and lodging, time off of work, and even the quality of life reduction related to delayed care." The University of Washington has conducted an evaluation on this topic (attached) – evaluating access to eye care by drive time in Washington state. They studied Medicare provider utilization and payment data from the Centers for Medicare and Medicaid Services, US census geospatial data, and open street map data.

The University of Washington found that 90 percent of the population lives within 9.36 miles and 11.76 minutes of an eye care provider, and that **between 97.6% and 99.6% of optometrists practice within 1 and 2 hours of an ophthalmologist. The median distance to the nearest ophthalmologist was 1.81 miles.** They conclude that if a patient was seen by an optometrist and care had to be escalated to an ophthalmologist, then the majority of optometrists practice within close proximity to an ophthalmologist.

It is disingenuous to say that access is a widespread problem, as well as to imply that rural Washingtonians would choose convenience over the confidence of knowing that the physician operating on and around their eyes was educated and trained at the very highest level. In fact, recent polling says that 79% of United States voters oppose allowing optometrists without medical degrees to perform eye surgery (attached). **We also find the implication that rural Washingtonians somehow deserve compromised health care services at odds with the Department's and WSMA's shared mission to ensure a safer and healthier Washington.**

If the Department is interested in increasing the ophthalmologic workforce and access to care, there are a number of other policies that should be prioritized. This includes increased funding for the state's health professional student loan repayment program, securing funding for additional physician residency slots, and continuing to advance the utilization of telemedicine.

States that have expanded the optometry scope of practice still have poor health outcomes

The applicants reference the fact that a handful of other states have expanded optometrists’ scope of practice to include certain surgical procedures. This list includes Indiana which does not allow optometrists to perform surgery. Furthermore, they omit that all these states are significantly worse places to receive health care and have poorer population health than Washington. US News and World report has conducted a [comprehensive study](#) that ranks states from the best (1) to the worst (50) for health care. Among the provisions considered are access to health care, public health, and health care quality.

Washington state is ranked as the eighth best state overall to receive health care – significantly higher than states who have expanded optometric scope of practice. The rankings for Washington state, as well as the seven states that allow optometrists to perform surgery, are as follows:

<u>Best to worst states for health care</u>	<u>Rank (1-50)</u>
<u>Washington</u>	<u>8</u>
<u>Alaska</u>	<u>22</u>
<u>Wyoming</u>	<u>38</u>
<u>Kentucky</u>	<u>44</u>
<u>Louisiana</u>	<u>46</u>
<u>Oklahoma</u>	<u>48</u>
<u>Arkansas</u>	<u>49</u>
<u>Mississippi</u>	<u>50</u>

This proposal is not an access solution for Washington state. The WSMA has supported scope of practice proposals that appropriately increased access to care, including the proposal to license anesthesiologist assistants currently being reviewed by the Department. We supported the creation of a formal medical assistant profession and worked with physician assistants to modernize the PA practice act. In 2016, we supported a bill granting pharmacists the ability to be reimbursed by commercial health plans for services they provide beyond dispensing drugs.

While we are proud of our work on these policies and others, we know there is more work to be done to ensure improved access to high-quality, safe patient care. We request that the Department continue to partner with WSMA and other stakeholders to build on policies intended to improve access and increase the health care workforce, rather than supporting an inappropriate scope of practice increase.

There are few – if any – functions of the human body more important to a person’s quality of life than their ability to see the world clearly and without pain. This exceedingly dangerous proposal does not merit the Department’s support.

Thank you again for the opportunity to provide comments on the sunrise review proposal. Should you have questions, do not hesitate to contact WSMA Policy Analyst Billie Dickinson at billie@wsma.org. We appreciate your consideration and your continued partnership.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nathan Schlicher".

Nathan Schlicher, MD, JD, MBA
President, Washington State Medical Association

Cc: WSMA Executive Committee
Jennifer Hanscom, WSMA CEO
Jeb Shepard, WSMA Director of Policy
Sean Graham, WSMA Director of Government Affairs

VA Directives:

**Department of Veterans Affairs
Veterans Health Administration Policy
VHA Directive 1121(2), Amended Aug. 18, 2020
VHA Eye and Vision Care**

MYTH: “Optometrists may perform laser surgery at the U.S. Veterans Health Administration Facilities.”

FACT: Optometrists are **prohibited** from performing laser surgery at the U.S. Veterans Health Administration Facilities.

OVERVIEW:

- *VHA Directive 1132: Performance of Therapeutic Laser Eye Procedures in Veterans Health Administration Facilities*, dated May 27, 2020 was rescinded as a “stand-alone” directive prohibiting optometrists from performing laser surgery. **But the prohibition itself was not rescinded.**
- Instead, VHA **incorporated that “stand-alone” directive into a more comprehensive VHA eye care policy, VHA Directive 1121(2).** By combining these two health care directives, the Department of Veterans Affairs has maintained its longstanding policy that **only ophthalmologists may perform therapeutic laser eye procedures** in its healthcare facilities.
- **Statements that the VHA has abandoned its policy prohibiting optometrists from performing laser surgery at VHA facilities are demonstrably false!**

CURRENT VHA POLICY ON LASER EYE SURGERY:

“Therapeutic laser eye procedures in VHA are currently performed by only ophthalmologists and ophthalmology residents. To independently perform laser eye procedures, ophthalmologists must have completed an accredited ophthalmology residency approved by the Accreditation Council for Graduate Medical Education or the American Medical or Osteopathic Association, have appropriate training and experience in therapeutic laser procedures in accordance with the credentialing and privileging procedures at the VA medical facility, and be board-eligible or board certified by the American Board of Ophthalmology. Physicians who perform laser surgery must maintain currency in laser safety training provided within VA Talent Management System (TMS Laser Safety Training item #3870739) for initial granting of and maintenance of laser privileges.”¹

1. VHA Directive 1121(2), Amended August 8, 2020, Appendix G, CREDENTIALING AND PRIVILEGING, page

VA Directive on Use of Lasers - 1121(2), See Appendix G
(document page 86)

VA Directive on Laser Trabeculoplasty - 1121(2), See Appendix
B (document page 72)

Department of Veterans Affairs VHA DIRECTIVE 1121(2) Veterans Health Administration Transmittal Sheet Washington, DC 20420 October 2, 2019

VHA EYE AND VISION CARE

1. REASON FOR ISSUE: This Veterans Health Administration (VHA) directive states policy for the delivery of eye and vision care services by Department of Veterans Affairs (VA) medical facilities emphasizing the use of interdisciplinary care.

2. SUMMARY OF MAJOR CHANGES:

a. Amendment dated August 18, 2020 incorporates and rescinds VHA Directive 1132, Performance of Therapeutic Laser Eye Procedures in Veterans Health Administration Facilities, dated May 27, 2020, including:

(1) Adding the definition of Therapeutic Laser Eye Procedure.

(2) Updating responsibilities under the VA medical facility Director related to laser eye procedures.

(3) Updating Appendix G, Credentialing and Privileging, with requirements for ophthalmologists related to laser eye procedures.

b. Amendment dated June 19, 2020 corrects two ratios in Appendix F, Staffing and Productivity.

c. Major changes from prior policy include:

(1) Update of Eligibility language in paragraph 6.

(2) Update of Quality Improvement to include Patient Safety in Appendix

D. (3) Removal of Information Management.

(4) Removal of Research and Development.

(5) Transition of Appendix A, Eye Care Professions, into the body of the directive.

(6) Transition of Appendix C, Visual Impairment Prevention for Veteran Patients, into the body of the directive.

(7) Incorporation of Appendix B, Care Coordination Agreement between Optometry and Ophthalmology Sample Template and Appendix C, Care Coordination Agreement between Optometry and Ophthalmology and Primary Care or Emergency Department Sample Template.

3. RELATED ISSUES: None.

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4. RESPONSIBLE OFFICE: The Office of Specialty Care Services (10P11) is responsible for the contents of this directive. Questions may be referred to Specialty Care Services at 202-461-7163.

5. RESCISSIONS: VHA Handbook 1121.01, VHA Eye Care, dated March 10, 2011 and VHA Directive 1132, Performance of Therapeutic Laser Eye Procedures in Veterans Health Administration Facilities, dated May 27, 2020 are rescinded.

6. RECERTIFICATION: This VHA directive is scheduled for recertification on or before the last working day of October 2024. This VHA directive will continue to serve as national VHA policy until it is recertified or rescinded.

**BY DIRECTION OF THE OFFICE OF THE
UNDER SECRETARY FOR HEALTH:**

/s/ Lucille B. Beck, Ph.D.
Deputy Under Secretary for Health
for Policy and Planning

NOTE: All references herein to VA and VHA documents incorporate by reference subsequent VA and VHA documents on the same or similar subject matter.

DISTRIBUTION: Emailed to the VHA Publications Distribution List on October 3, 2019.

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October 2, 2019 VHA DIRECTIVE 1121(2)**VHA EYE AND VISION CARE****1. PURPOSE**

This Veterans Health Administration (VHA) directive is issued to facilitate the provision of eye and vision care throughout the Department of Veterans Affairs (VA) health care system. **AUTHORITY:** Title 38 United States Code (U.S.C.) 7301(b).

2. BACKGROUND

a. Increasing enrollment, especially of Vietnam era Veterans, is resulting in an increased incidence of age-related eye and vision conditions. Age-related macular degeneration (AMD), diabetic retinopathy, and glaucoma are major causes of visual impairment and blindness. In younger Veterans, trauma (both military and non-military) is a frequent cause of eye/vision problems. Accordingly, Veterans need cost-effective, readily accessible, and comprehensive eye and vision care services.

b. Prevention and treatment of visual impairment and blindness involves optical, medical, surgical, and rehabilitative eye care. The provision of these services involves coordination of the professions of primary care, optometry, and ophthalmology.

c. The goals of VHA eye and vision care are:

- (1) Provide high-quality and timely care to all eligible Veterans.
- (2) Provide patient education to Veterans and caregivers.
- (3) Support academically affiliated ophthalmology and optometry teaching programs to educate and train students, residents, and fellows.
- (4) Promote and support professional education and continuing medical education for staff, health care providers, and trainees.
- (5) Provide expertise to VA and Federal funding agencies on research issues important to Veteran eye health, access, utilization, and quality of care.
- (6) Evaluate and champion new technologies to improve access, the cost of eye care, and visual health and surgical outcomes.
- (7) Support other Federal agencies and the community in times of military necessity or national emergency.
- (8) Monitor access, utilization, quality, and cost of eye care delivered to Veterans within VHA and in the community for ongoing quality improvement.

3. DEFINITIONS

a. **Accreditation Council on Optometric Education.** The Accreditation Council on Optometric Education (ACOE) is the accrediting agency for optometric educational programs.

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b. **Low Vision and Blind Rehabilitation Continuum of Care.** The continuum of care for visually-impaired Veterans refers to vision and blind rehabilitation services ranging across multiple levels of care that may be provided at VA medical facilities, in the patient's home, and/or community. Patients are referred to the type program that best matches their functional needs.

c. **Eye and Vision Care.** Eye and vision care comprise a spectrum of needs including primary, specialty, and surgical eye and vision care services.

d. **Eye Care Provider.** An eye care provider is a credentialed and privileged optometrist or ophthalmologist.

e. **Eye Care Health Technicians.**

(1) **Ophthalmology Health Technician.** An ophthalmology health technician is a person who provides primary clinical support to ophthalmology clinics by performing eye and vision care-related clinical tasks. Ophthalmology technicians possess knowledge and skills that are certified by The Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO). **NOTE:** Refer to VA Handbook 5005/98, *Staffing—Health Technician (Ophthalmology)*, dated February 7, 2018, for qualifications.

(2) **Optometry Health Technician.** An optometry health technician is a person who provides primary clinical support to optometry clinics by performing eye and vision care related clinical tasks. Optometry technicians possess knowledge and skills that are certified by the American Optometric Association (AOA) Commission on Paraoptometric Certification, or equivalent accredited certification.

f. **Legal Blindness.** For purposes of this directive, legal blindness is defined as:

(1) Best corrected central visual acuity of 20/200 or worse in the better-seeing eye; or

(2) The widest diameter of the visual field subtends an angle of 20 degrees or less, in the better-seeing eye.

g. **Low Vision.** For purposes of this directive, low vision is defined as:

(1) Best corrected central visual acuity of 20/70 to 20/160 or worse in the better seeing-eye;

(2) Significant central or peripheral visual field loss; or

(3) A combination of visual acuity, visual field loss, contrast sensitivity loss, loss of stereopsis, or eye motility impairment that impacts patient safety or impairs or restricts one or more activities of daily living.

h. **Ocularist.** An ocularist provides the assessment, fitting, and maintenance of ocular prostheses (artificial eyes).

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i. **Ophthalmologist.** An ophthalmologist is a Medical Doctor (MD) or Doctor of Osteopathy (DO) who is licensed to independently provide primary, specialty, surgical, and laser eye care services. An ophthalmologist is medically trained and qualified to diagnose and treat all eye and visual system problems, deliver total eye care, and diagnose general diseases of the body. These treatments include, but are not limited to: cataract surgery, diabetic retinopathy laser therapy, glaucoma treatment, and macular degeneration injections. After baccalaureate education, ophthalmologists complete 4 years of medical school, 1 year of internship, 3 years of an ophthalmology residency including the management of complex ocular conditions and surgery, and often 1 to 2 years of additional fellowship training in a specific specialty.

j. **Ophthalmology Residency Review Committee.** The Ophthalmology Residency Review Committee (RRC) is the accrediting agency for ophthalmology residency training programs and is a council of the Accreditation Council for Graduate Medical Education (ACGME).

k. **Ophthalmology Trainees.**

(1) **Ophthalmology Residency.** Ophthalmology residents must complete a general postgraduate year (PGY) approved by the ACGME and a minimum of 3 years of postgraduate training in an ACGME-accredited ophthalmology training program to become eligible for certification by the American Board of Ophthalmology. All current VHA ophthalmology residencies participate in the Ophthalmology Matching Program and are affiliated with a sponsoring academic center.

(2) **Ophthalmology Fellowship.** Ophthalmology fellowships are post-residency positions to obtain additional training in an area of sub-specialty ophthalmology, including retinal surgery, glaucoma, corneal surgery, plastic surgery and neuro ophthalmology.

l. **Optician.** An optician is trained in the science, craft, and art of optics as applied to the translation, filling, and adapting of ophthalmic prescriptions, products, and accessories.

m. **Optometrist.** An optometrist is a Doctor of Optometry (OD) who is licensed to independently provide primary and specialty eye and vision care services. An optometrist is medically trained to examine, diagnose, treat, and manage diseases and disorders of the visual system, the eye and associated structures, and diagnose related systemic conditions. This includes, but is not limited to: diagnosis, treatment, and management of diabetic retinopathy, glaucoma, macular degeneration, and other eye diseases; provision of refractions for eyeglass prescriptions, eyeglasses, medically necessary contact lenses, as well as low-vision and brain injury vision rehabilitation services. Optometrists receive 4 years of Doctoral-level education and training after their baccalaureate education. Residency training is 1 year beyond attainment of the optometry degree, and fellowship training is for 1 to 2 years beyond the completion of residency training.

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n. **Optometry Trainees.**

(1) **Doctor of Optometry Candidates.** Optometry candidates are students in an ACOE-accredited school or college of optometry in either their first, second, third, or fourth professional year of training prior to being awarded the OD degree.

(2) **Residents and Fellows.** Residents and fellows are trainees who have obtained the OD degree. Residents are PGY1 trainees in a primary eye or specialty vision care residency. Fellows are PGY2 and PGY3 trainees with a specialty or research focus.

o. **Therapeutic Laser Eye Procedure.** Therapeutic laser eye procedures are surgical procedures which use medical grade lasers that produce focused energy with different types and wavelengths of light to treat a variety of eye conditions. Refractive laser surgery (LASIK, PRK) is not performed in VA medical facilities as these are elective procedures not covered by Centers for Medicare and Medicaid Services (CMS) or third-party payors. The laser beam can be used to treat diseased retina from diabetic eye disease and sickle cell disease, create openings within the iris to treat glaucoma, remove cloudy membranes after cataract surgery, treat retinal holes or tears, create incisions within the cornea to treat astigmatism or to make cataract surgery wounds, or to modify the refractive status of the eye.

p. **VA Residency Site Director.** The VA Residency Site Director implements the training program curriculum at a VA medical facility and is generally of the same discipline as that of the trainees.

q. **VHA National Eye Care Program.** The VHA National Eye Care Program is the combination of the national divisions of optometry and ophthalmology and is jointly led by the national directors of optometry and ophthalmology within Specialty Care Services (SCS). It supports the delivery of eye and vision care services throughout VHA.

r. **Vision Correction Surgery (Refractive Surgery).** Vision corrective surgery (refractive surgery) is any surgical procedure to correct disorders of refraction, including farsightedness, nearsightedness, astigmatism, and presbyopia. Laser refractive surgery and corneal crosslinking are not covered procedures within VHA, except for Veterans with service-connected keratoconus.

4. POLICY

It is VHA policy that under the VHA National Eye Care Program all eligible Veterans receive the most appropriate continuum of primary, secondary, and tertiary eye and vision care services delivered by ophthalmologists and optometrists, supported by opticians and technicians, each practicing consistent with their education, training, and privileging and working together in a collaborative and coordinated manner.

5. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health is responsible for ensuring overall VHA compliance with this directive.

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b. **Assistant Under Secretary for Health for Operations.** The Assistant Under Secretary for Health for Operations is responsible for:

(1) Communicating the contents of this directive to each of the Veterans Integrated Service Networks (VISNs).

(2) Providing assistance to VISN Directors to resolve implementation and compliance challenges in all VA medical facilities within that VISN.

(3) Providing oversight of VISNs to assure compliance with this directive, relevant standards and applicable regulations.

c. **Deputy Under Secretary for Health for Policy and Services.** The Deputy Under Secretary for Health for Policy and Services is responsible for supporting the implementation and oversight of this directive across VHA.

d. **Chief Officer, Specialty Care Services.** The Chief Officer, SCS is responsible

for:

(1) Administrative oversight of the VHA National Eye Care Program, including the component programs related to ophthalmology and optometry.

(2) Appointing the VHA National Program Director for Ophthalmology and the VHA National Program Director for Optometry.

e. **National Program Directors, VHA National Eye Care Program.** There are two National Program Directors for Eye and Vision Care:

(1) **VHA National Program Director for Ophthalmology.** The VHA National Program Director for Ophthalmology is a full-time VA ophthalmologist, appointed by and reporting to the Chief Officer, SCS, who is responsible for overseeing the National VA Ophthalmology Program and is jointly responsible with the VHA National Program Director of Optometry for overseeing the VHA National Eye and Vision Care Program.

(2) **VHA National Program Director for Optometry.** The VHA National Program Director for Optometry is a full-time VA optometrist, appointed by and reporting to the Chief Officer, SCS, who is responsible for overseeing the National VA Optometry Program and is jointly responsible with the VHA National Program Director of Ophthalmology for overseeing the VHA National Eye and Vision Care Program.

f. **Eye Care Field Advisory Committees.**

(1) **Ophthalmology and Optometry Field Advisory Committees.** Each program director will be supported by a separate Field Advisory Committee (FAC) appointed by the Chief Officer SCS at the nomination of the respective program directors of optometry and ophthalmology. Each FAC will be comprised of voting, as well as non voting members as needed for project-related sub-committees. FAC members are appointed for 3-year, staggered terms with the possibility of one re-appointment.

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(2) **Eye Care Joint Field Advisory Committee.** The National Program Directors for Ophthalmology and Optometry will jointly convene and co-chair an Eye Care Joint Field Advisory Committee comprised of 6 voting members (3 from optometry and 3 from ophthalmology FACs) that will meet as needed (at least annually) to consider eye care programmatic issues. The Eye Care Joint FAC recommendations will be reported to the Chief Officer SCS by the National Program Directors for Ophthalmology and Optometry.

g. **Veterans Integrated Services Network Director.** The VISN Director is responsible for:

(1) Ensuring that all eligible Veterans have access to eye care, vision care, and

visual rehabilitation services.

(2) Designating a VISN ophthalmology consultant and a VISN optometry consultant in concert with the respective VHA National Program Director of Ophthalmology and the VHA National Program Director for Optometry.

(3) Consulting with the VHA National Program Director for Optometry and VHA National Program Director for Ophthalmology regarding changes in eye and vision care services at VISN medical facilities.

h. **VA Medical Facility Director.** The VA medical facility Director is responsible for ensuring that:

(1) All eligible Veterans are provided:

(a) Eye and vision care services that include comprehensive eye examinations, preventative eye care, necessary periodic specialty eye and vision care, surgical eye care, rehabilitation care, and associated patient education, as defined by clinical practice guidelines published by the American Optometric Association (AOA) and the American Academy of Ophthalmology (AAO).

(b) Prosthetic devices as needed, including spectacles, special contact lenses, ocular prostheses, low-vision devices, and associated rehabilitation services.

(2) The eye clinic is designed to be a safe environment for patients and staff as described in VA Handbook 7610.3, Chapter 233, Eye Clinic, dated May 31, 2017, and in the Prototype for Standardized Design and Construction of Community-Based Outpatient Clinics at <https://www.cfm.va.gov/til/prototypes.asp>.

(3) Necessary space and resources (equipment, supplies, support services) are provided to eye clinics to optimize access.

(4) Operating room space, time, resources, and internal processes are available to provide high-quality surgical care to Veterans.

(5) An organizational structure is in place that supports the delivery of eye and vision care services by optometrists and ophthalmologists consistent with their education,

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training, and privileging and allows for the professional autonomy appropriate to independently licensed medical staff providers and which is necessary for the education of trainees and to meet student and residency accreditation requirements for

training.

(6) Care coordination agreements are in place between primary care and eye care (optometry and ophthalmology) and between optometry and ophthalmology.

NOTE: Refer to Appendices B and C for more information.

(7) Required diagnostic services are available including:

(a) Laboratory;

(b) Radiology;

(c) Pathology;

(d) Fundus photography;

(e) Ophthalmic ultrasound;

(f) Pachymetry;

(g) Optical coherence tomography (OCT); and

(h) Visual fields (perimetry).

(8) Recommended services are available including:

(a) Fluorescein angiography;

(b) Fundus Auto-Fluorescence (FAF) imaging; and

(c) Electro-diagnostics testing.

(9) Information technology resources are available including: Veterans Health Information Systems and Technology Architecture (VistA) applications; computer systems; equipment to scan, send, and copy paper medical records; and biomedical information technology such as computer-assisted ophthalmic biomedical devices and equipment, including direct linkage of image transfer from devices into the electronic health record (EHR) where available.

(10) Surgical services appropriate to the Veteran are available either within the VA medical facility, academic partner, or community care. **NOTE:** Refer to VHA Directive 1220, *Facility Procedure Complexity Designation Requirements to Perform Invasive Procedures in Any Clinical Setting*, dated May 13, 2019.

(11) Ensuring that privileges to perform laser eye procedures are granted to ophthalmologists who have completed the requirements as described in this directive.

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Most VHA ophthalmology sections should provide one or more types of laser eye surgeries.

(12) Academic affiliations for optometry and ophthalmology are established and supported in accordance with VHA Directive 1400.09(1), Education of Physicians and Dentists, dated September 9, 2016, and VHA Handbook 1400.08, Education of Associated Health Professions, dated February 26, 2016, including appointing a representative from each affiliated school or college of optometry and medicine to the local VA or VISN affiliation partnership council or equivalent educational council.

(13) Support for continuing professional and staff education is provided in the form of meeting space and time for rounds, lectures and other interprofessional learning activities and meetings.

(14) Appropriate support for eye and vision care research.

i. **VA Residency Site Directors for Optometry and for Ophthalmology.** The VA Residency Site Director for Optometry and the VA Resident Site Director for Ophthalmology are responsible for the following for their respective training programs:

(1) Developing a local educational program based on national standards and the educational plan of the residency or training program director, and which ensure that core curricular objectives are met.

(2) Implementing the training program curriculum for their discipline at a VA medical facility.

(3) Site logistics and ensuring that trainees are oriented to VA medical facility policies and practices; details of rotations, schedules; objectives are communicated to trainees; and evaluations of trainees, preceptors, supervisors, and training facilities are performed.

(4) Maintaining appropriate trainee supervision. Refer to Appendices H and I for education and training guidelines.

(5) Ensuring ophthalmology residents complete mandatory training as described in VHA Directive 1039(2), Ensuring Correct Surgery and Invasive Procedures, dated November 28, 2018, before beginning a surgical rotation.

6. ELIGIBILITY

All Veterans enrolled in the VA health care system are eligible for eye and vision care services through VHA, regardless of service connection status. However, not all Veterans are eligible for prosthetic devices, such as eyeglasses. If a VA medical facility

cannot directly provide the appropriate eye care services to an eligible Veteran or the Veteran meets eligibility for community care, the Veteran may elect to receive services through the community care program. **NOTE:** Refer to VHA Notice 2019-12, Veterans

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Community Care Program, dated June 6, 2019, and Public Law 115-182 VA Mission Act of 2018, dated January 3, 2018.

7. PREVENTION OF VISUAL IMPAIRMENT AND BLINDNESS

a. AMD, diabetic retinopathy and glaucoma are leading causes of blindness identified by the National Eye Institute of the National Institutes of Health (NIH). In many cases, visual impairment and blindness can be prevented or reduced by early diagnosis and medical and surgical treatment.

b. The AOA Clinical Practice Guidelines (<https://www.aoa.org/optometrists/tools-and-resources/clinical-care-publications/clinical-practice-guidelines>) and the AAO Preferred Practice Patterns (<https://www.aoa.org/about-preferred-practice-patterns>) provide current guidance for the management of diabetic retinopathy, glaucoma, and AMD.

8. CARE COORDINATION

Care coordination agreements must be established between primary care and eye care (optometry and ophthalmology) and between optometry and ophthalmology at each VA medical facility. **NOTE:** Refer to Appendices B and C for care coordination sample templates.

a. **Care Coordination Agreement between Primary Care and Optometry and Ophthalmology.** There are many eye conditions that necessitate referral by primary care providers to eye care providers. A care coordination agreement for referral from primary care to eye care (optometry and ophthalmology) to screen, evaluate, and manage patients should include:

(1) An annual consultation or referral to eye care for Veterans with diabetes (applies mainly to new patients not already under Eye Care Service diabetic recall). Referral should be expedited if there is new vision loss or symptoms. If serial examinations have not revealed any diabetic retinopathy, the time interval can be extended by the eye care provider to 2 years.

(2) Consults or referrals for Veterans with visual symptoms, eye injuries, surveillance for known eye diseases (glaucoma, AMD, cataract) or monitoring for ocular toxicity in chronic use of certain medications (such as hydroxychloroquine

(Plaquenil)), as indicated.

b. **Care Coordination Agreement between Ophthalmology and Optometry.** A care coordination agreement must exist between optometry and ophthalmology to facilitate Veteran-centric care between these services. Typical care coordination agreements between ophthalmology and optometry involve referral of patients with AMD, diabetic retinopathy, glaucoma, and low vision or legal blindness and are based on current, nationally-accepted standards of both eye care professions. The care coordination agreement should not affect or alter the clinical privileges that have been granted to optometrists or ophthalmologists or restrict the ability of patients to have

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access to care provided by optometry or ophthalmology within their granted clinical privileges. The care coordination agreement should address:

(1) AMD;

(2) Diabetic Retinopathy;

(3) Glaucoma; and

(4) Low Vision Rehabilitation Care. **NOTE:** Refer to VHA Handbook 1174.05, *Outpatient Blind and Vision Rehabilitation Clinic Procedures*, dated July 1, 2011, and VHA Handbook 1174.03, *Visual Impairment Services Team Program Procedures*, dated November 5, 2009.

(5) For patients consulted between optometry and ophthalmology for eye disease, the patient may be discharged back to the referring provider for continuing care, when appropriate.

c. **Clinical Care Review (Ongoing Professional Practice Evaluation or Focused Professional Practice Evaluation) for Ophthalmology and Optometry.**

(1) A routine review of clinical care of patients diagnosed with AMD, diabetic retinopathy, glaucoma, and low vision or legal blindness should be conducted by the VA medical facility optometry and ophthalmology services (optometry reviews optometry and ophthalmology reviews ophthalmology) to evaluate timeliness of referral and patient outcomes. These disease-specific review processes should be incorporated as part of the Ongoing Professional Practice Evaluation (OPPE) program or Focused Professional Practice Evaluation (FPPE) in the case of new hires or problem-oriented prospective reviews at each VA medical facility. These disease-specific, evidence-based reviews shall be based on current, nationally-accepted standards of care (e.g., American Academy of Ophthalmology Preferred Practice Patterns at <https://www.aao.org/about-preferred-practice-patterns> and the American Optometric Association Clinical Practice

Guidelines at <http://www.aoa.org/optometrists/tools-and-resources/clinical-care-publications/clinical-practice-guidelines>).

(2) These disease-specific reviews are to be used by the respective service chiefs of optometry and ophthalmology and the medical staff executive committee for initial privileging and re-privileging decisions.

(3) VA medical facilities with a single eye care provider (optometrist or ophthalmologist) should make arrangements with the respective optometry or ophthalmology VISN lead or a VA medical facility with optometry or ophthalmology eye care providers to conduct the review, as appropriate.

d. Review of Coordination of Care by Ophthalmology and Optometry.

(1) A semi-annual review of the adequacy and timeliness of care coordination will be performed by a joint meeting of optometry and ophthalmology for a minimum of six

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patients diagnosed with AMD, diabetic retinopathy, glaucoma, low vision and/or legal blindness that are managed by both services. This non-punitive and confidential review is conducted within the context of quality assurance (38 U.S.C. 5705) and is intended to improve both care coordination between the eye care services and patient outcomes. This meeting can also review systems of care.

(2) VA medical facilities with a single eye care provider (optometrist or ophthalmologist) should make arrangements with the respective optometry or ophthalmology VISN leads or VA medical facility with optometry or ophthalmology eye care providers to conduct the review, as appropriate.

9. TRAINING

See Appendices H and I for training information.

10. RECORDS MANAGEMENT

All records regardless of format (e.g., paper, electronic, electronic systems) created in this directive shall be managed per the National Archives and Records Administration (NARA) approved records schedules found in VA Records Control Schedule 10-1. Questions regarding any aspect of records management should be addressed to the appropriate Records Manager or Records Liaison.

11. REFERENCES

a. Pub. L. 115-82.

- b. Title 38 Code of Federal Regulations (CFR) Sections 17.30 and 17.38.
- c. 38 CFR 17.149.
- d. 38 U.S.C. 5705.
- e. VA Handbook 5005, Staffing, Part II, Chapter 3, Title 38 Appointments, dated November 22, 2017.
- f. VA Handbook 5005/58, Staffing, Part III, Appendix M, How to Process a Promotion for Optometrist, dated June 14, 2012.
- g. VA Handbook 5005/92, Staffing, Part II, Chapter 3, Section C, Professional Standards Board, dated November 22, 2017.
- h. VA Handbook 5007/46, Pay Administration, Part VI, Chapter 2, Recruitment and Relocation Incentives, dated April 22, 2013.
- i. VA Handbook 5007/46, Pay Administration, Part VI, Chapter 3, Retention Incentives Other than For Closure or Relocation of Employing Office, Facility, or Organization, dated April 22, 2013.

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- j. VA Handbook 5017/15, Employee Recognition and Awards, Part V, Title 38 Special Advancements and Cash Awards, dated June 3, 2019.
- k. VA Handbook 7610.3, VHA Space Planning Criteria: Chapter 233, Eye Clinic, dated May 31, 2017.
- l. VHA Directive 1021, Education Debt Reduction Program, dated May 21, 2012.
- m. VHA Directive 1034, Prescribing and Providing Eyeglasses, Contact Lenses, and Hearing Aids, dated October 24, 2019.
- n. VHA Directive 1039(2), Ensuring Correct Surgery and Invasive Procedures In and Out of the Operating Room, dated November 28, 2018.
- o. VHA Directive 1103, Prevention of Retained Surgical Items, dated March 5, 2016.
- p. VHA Directive 1116(2), Sterile Processing Services, dated March 23, 2016.
- q. VHA Directive 1131(3), Management of Infectious Diseases and Infection Prevention and Controls Program, dated November 7, 2017.

r. VHA Directive 1182, Vocational Rehabilitation: Chapter 31 Benefits Timely Access to Health Care Services, dated April 2, 2015.

s. VHA Directive 1190, Peer Review for Quality Management, dated November 21, 2018.

t. VHA Directive 1220(1), Facility Procedure Complexity Designation Requirements to Perform Invasive Procedures in Any Clinical Setting, dated May 13, 2019.

u. VHA Directive 1231(1), Outpatient Clinic Practice Management, dated October 19, 2019.

v. VHA Directive 1400, Office of Academic Affiliations, dated November 9, 2018.

w. VHA Directive 1400.01, Supervision of Physician, Dental, Optometry, Chiropractic, and Podiatry Residents, dated November 7, 2019.

x. VHA Directive 1400.09(1), Education of Physicians and Dentists, dated September 6, 2016.

y. VHA Directive 1401, Billing for Services Provided by Supervising Practitioners and Physician Residents, dated July 29, 2016.

z. VHA Directive 1601, Non-VA Medical Care Program, dated January 23, 2013.

aa. VHA Directive 2009-038, VHA National Dual Care Policy, dated August 25, 2009.

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bb. VHA Directive 2011-040, Referral to Inpatient Blind Rehabilitation Centers and Calculation of the Waiting Time Prior to Admission, dated December 7, 2011.

cc. VHA Directive 2012-030, Credentialing of Health Care Professionals, dated October 11, 2012.

dd. VHA Directive 6300, Records Management, dated October 22, 2018. ee. VHA Notice 2019-12, Veterans Community Care Program, dated June 6, 2019. ff. VHA Handbook 1100.19, Credentialing and Privileging, dated October 15, 2012.

gg. VHA Handbook 1173.05, Aids for the Blind and Visually Impaired, dated October 27, 2008.

- hh. VHA Handbook 1173.1, Eligibility, dated November 2, 2000.
- ii. VHA Handbook 1173.12, Prescription Optics and Low-Vision Devices, dated May 31, 2005.
- jj. VHA Handbook 1174.03, Visual Impairment Services Team Procedures, dated November 5, 2009.
- kk. VHA Handbook 1174.05, Outpatient Blind and Vision Rehabilitation Clinic Procedures, dated July 1, 2011.
- ll. VHA Handbook 1400.03, Veterans Health Administration Educational Relationships, dated February 16, 2016.
- mm. VHA Handbook 1400.04, Supervision of Associated Health Trainees, dated March 19, 2015.
- nn. VHA Handbook 1400.08, Education of Associated Health Professions, dated February 26, 2016.
- oo. VHA Handbook 1601A.04, Benefits Overview, dated February 16, 2016.
- pp. VA/DoD Clinical Practice Guidelines: Management of Diabetes Mellitus in Primary Care (<https://www.healthquality.va.gov/guidelines/CD/diabetes/>).
- qq. VA National Center for Patient Safety (<http://vaww.ncps.med.va.gov/index.html>).
NOTE: *This is an internal VA Web site not available to the public.*
- rr. VA Office of Academic Affiliations (<https://www.va.gov/OAA/index.asp>).
- ss. VA Office of Construction and Facilities Management. Prototype for Standardized Design and Construction of Community-Based Outpatient Clinics (CBOCs) (<https://www.cfm.va.gov/til/spclRqmts.asp>).

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- tt. VA Office of Research and Development (<https://www.research.va.gov>).
- uu. VHA Office of Productivity, Efficiency and Staffing (OPES) Eye Care Provider RVU Productivity Recommendations (<http://opes.vssc.med.va.gov/Pages/Default.aspx>). **NOTE:** *This is an internal VA Web site that is not available to the public.*
- vv. Accreditation Council for Graduate Medical Education (ACGME), Ophthalmology Residency Review Committee

(<http://www.acgme.org/Specialties/Overview/pfcetid/13/Ophthalmology>).

ww. Accreditation Council for Graduate Medical Education (ACGME), Program Requirements for Graduate Medical Education in Ophthalmology (http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/240_ophthalmology_2017-07-01_TCC.pdf. **NOTE:** *This linked document is outside of VA control and may or may not be conformant with Section 508 of the Americans with Disabilities Act.*)

xx. Accreditation Council on Optometric Education (<http://www.aoa.org/optometrists/for-educators/accreditation-council-on-optometric-education>).

yy. American Academy of Ophthalmology Preferred Practice Patterns (<http://one.aaof.org/guidelines-browse?filter=preferredpracticepatternsguideline>).

zz. American Optometric Association Optometric Clinical Practice Guidelines, (<http://www.aoa.org/optometrists/tools-and-resources/clinical-care-publications/clinical-practice-guidelines>).

aaa. American Optometric Association Commission on Paraoptometric Certification (<https://www.aoa.org/paraoptometrics/certification?sso=y>).

bbb. Guideline for Disinfection and Sterilization in Healthcare Facilities, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services (http://www.cdc.gov/hicpac/pdf/guidelines/Disinfection_Nov_2008.pdf. **NOTE:** *This linked document is outside of VA control and may or may not be conformant with Section 508 of the Americans with Disabilities Act.*)

ccc. Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO) (<http://www.jcahpo.org/>).

ddd. National Eye Institute of NIH (<https://nei.nih.gov/>).

eee. National Eye Institute of the National Institutes of Health, National Eye Health Education Program Glaucoma Recommendations (<http://www.nei.nih.gov/nehep/programs/glaucoma/detection>).

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APPENDIX A

SPACE AND EQUIPMENT

1. PLANNING

Facilities should refer to the latest version of VA Handbook 7610.3, VHA Space Planning Criteria: Chapter 233, Eye Clinic: Ophthalmology and Optometry Services, dated May 31, 2017, and the Prototype for Standardized Design and Construction of Community-Based Outpatient Clinics for guidelines regarding design and construction of new eye care clinics, alteration of existing clinics, and eye care equipment requirements that may be accessed at <https://www.cfm.va.gov/til/space.asp> and <https://www.cfm.va.gov/til/prototypes.asp>. The VHA National Eye Care Program is also available for consultation. Co-location of ophthalmology and optometry or co-location of optometry and primary care is recommended.

2. KEY SPACES

a. **Administrative.** An office needs to be provided for a full-time chief optometrist and/or a full-time chief ophthalmologist. Staff clinicians may have individual or shared offices. Offices for secretaries, technical support, and students may be provided as space permits.

b. **Clinical.** It is recommended that a basic eye clinic consist of the following:

(1) Exam-treatment (E-T) rooms (2.5 E-T rooms for each 1.0 full-time equivalent employee optometrist or ophthalmologist) with refractive and eye health instrumentation (minimum 130 net square feet for each E-T room) that can accommodate wheelchair patients.

(2) Low-vision examination, training, or storage room.

(3) Visual fields room with non-automated and automated instruments.

(4) Photography room with fundus and slit-lamp camera units that produce digital images.

(5) Pre-testing room for use by technician for preliminary testing.

(6) Eyeglass fitting, display, and dispensing room (if in concept of

operations). c. **Educational Program Space.**

(1) At least one fully-equipped E-T room for each trainee is recommended in addition to the space required of the attending ophthalmologist(s) and/or optometrist(s).

(2) There needs to be space available to conduct seminars, lectures, case conferences, and grand rounds.

(3) State-of-the-art equipment is recommended for education programs.

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d. **Tomography/Imaging Room(s)**. Other imaging devices may include optical coherence tomography (OCT), corneal topography, specular microscope, wavefront analyzer, or tear osmolarity, depending on the level of services provided. More than one room may be required to conduct ocular diagnostic imaging studies.

e. **Photography Room**.

f. **Ultrasound Room**. This room provides complete ultrasound instrumentation with diagnostic A and B modes. It is used for disease diagnosis and management and is essential if cataract surgery is to be performed.

g. **Procedure Room**. This room is for any treatment that requires surgical intervention that is deemed an in-office procedure. This room must contain standard emergency equipment. Procedures commonly performed in this room are: tarsorrhaphy; excisions (chalazia, pterygia, external lid lesions); intraocular injections; insertion, removal, and repair of sutures; blepharoplasty; and simple entropion or ectropion repair.

h. **Clean Utility or Supply Room**.

i. **Soiled Utility Room**.

j. **Laser Room**. The Argon, Diode, Selective Laser Trabeculoplasty (SLT), Neodymium: Yttrium Aluminum Garnet (Nd:YAG), and Carbon Dioxide (CO₂) rooms contain separate laser or combination units consisting of laser cart(s), slit-lamp delivery system(s), contact lenses for laser application, and safety equipment. Lasers and accompanying instrumentation may need either special power or cooling requirements. **NOTE: Lasers are used by ophthalmology in treatment of numerous ocular problems; e.g., diabetic retinopathy, glaucoma, retinal tear.**

k. **Low-Vision/Polytrauma Training Room**. This room is used to provide vision rehabilitation care such as patient education and eye care counseling sessions; in which patients learn how to use prescribed low-vision aids in order to perform everyday skills, activities of daily living, and improve overall functional independence.

l. **Electrodiagnosis Room**. The electrodiagnosis room accommodates visual digitized equipment for conducting electro-oculographic, electroretinographic, and visual-evoked cortical-potential testing of retina, optic nerve, and visual pathway functioning with analysis.

m. **Additional Space**. Additional space may be required and consist of the following functional areas which may be combined or shared:

- (1) Reception area.

(2) Waiting area.

(3) Public toilet (wheelchair accessible, may be unisex).

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(4) Consultation and viewing room.

(5) Patient education and contact lens dispensing room. (6) Equipment and supplies storage area or alcove. (7) Medication preparation room.

(8) Staff toilet.

(9) Wheelchair storage area or alcove.

CARE COORDINATION AGREEMENT BETWEEN OPTOMETRY AND OPTHALMOLOGY SAMPLE TEMPLATE

The following is a care coordination agreement sample template between optometry and ophthalmology to facilitate appropriate and timely referral and/or consultation of patients consistent with current, nationally-accepted standards of both optometry and ophthalmology. This agreement should improve the coordination of patient care between these professions and should not affect or alter the clinical privileges that have been granted to providers or restrict patient access to optometry or ophthalmology.

1. PURPOSE

This care coordination agreement is intended to:

- a. Coordinate efforts between providers to deliver Veteran-centric care.
- b. Facilitate appropriate and timely referral of patients from optometry to ophthalmology for care of age-related macular degeneration (AMD), diabetic retinopathy, and glaucoma, and to facilitate discharge back from ophthalmology to optometry for continuing care, as appropriate. These referrals may not require a face to-face examination; an electronic consult or personal discussion documented within the electronic health care record may be sufficient.
- c. Ensure that optimal eye and vision care is provided to eligible Veterans through a collaborative approach to diagnosis, treatment, and management of eye and vision care by both optometry and ophthalmology.
- d. Provide appropriate and timely referral of patients for low vision rehabilitation care.
- e. Veterans should be educated about their disease progress and the range of appropriate treatment options.

2. CONSULT REQUEST AND REFERRAL

- a. **Prior to Consult Request.** A note documented by optometry or ophthalmology is to be available for ophthalmology or optometry to view in the electronic health record (EHR).
- b. **Results of Consult Request.** Optometry or ophthalmology is to complete the consult through the EHR.
- c. **Referral Back to Original Referring Section or Service.** For patients

consulted between optometry and ophthalmology for eye care, the patient should be sent back to the referring provider for continuing care when it is appropriate to do so.

3. AGE-RELATED MACULAR DEGENERATION

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a. An ophthalmology consult or referral is warranted for but not limited to: age related macular degeneration (AMD) patients with active (clinically significant) choroidal neovascularization, new onset of macular edema threatening vision, or new onset of metamorphopsia or AMD-related decreased vision for consideration of ophthalmological intervention (laser, surgery, injection).

b. **Age-Related Eye Disease Study Vitamins.** Both optometry and ophthalmology should prescribe vitamin supplementation for AMD patients found to have “high risk” physical findings, as recommended by Age-Related Eye Disease Study (AREDS-2) criteria. The definition of high-risk, non-exudative AMD can be any one of the following:

- (1) Extensive intermediate size drusen.
- (2) One or more large soft drusen (approximately 120 microns (um), approximate size of retinal artery at the optic nerve head).
- (3) Non-central geographic atrophy in at least one eye.
- (4) Category 3/4 AMD (vision loss secondary to AMD).
- (5) Exudative (wet) AMD in at least one eye.

4. DIABETIC RETINOPATHY

a. An ophthalmology consult or referral for evaluation and treatment is warranted for but not limited to: clinically significant macular edema, severe non-proliferative retinopathy, proliferative retinopathy, neovascularization, diabetic-related vitreous hemorrhage, or clinically significant progression of diabetic ocular disease for consideration of ophthalmological intervention (laser, surgery, injection) or monitoring.

b. **Definition of Clinically Significant Macular Edema.** It can be any one of the following, by Early Treatment Diabetic Retinopathy Study criteria:

- (1) Retinal edema or thickening within 500 microns of foveal avascular zone.
- (2) Hard exudates within 500 microns of fovea with associated retinal

edema.

(3) Retinal edema measuring more than greater than 1 disc diameter within 1 disc diameter of fovea.

c. **Definition of Severe Non-Proliferative Diabetic Retinopathy.** It can be any one of the following by Early Treatment Diabetic Retinopathy Study (ETDRS) criteria:

(1) Severe (greater than) 20 intraretinal hemorrhages in four quadrants. (2) Venous beading in two quadrants.

(3) Intraretinal microvascular anomaly in one quadrant.

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5. GLAUCOMA

a. An ophthalmology consult or referral for evaluation and treatment is warranted for but not limited to: angle closure glaucoma (prior to, or after, medical stabilization of intraocular pressure, as appropriate), active neovascular glaucoma, clinically-significant glaucoma progression (e.g., retinal nerve fiber layer or visual field loss or instability) despite appropriate medical treatment, documented clinically-significant non-compliance or instability on medical therapy, or when considering initiation of a fourth glaucoma medication for consideration of ophthalmological intervention (laser, surgery, injection), or monitoring. Patients should be made aware of laser trabeculoplasty as an alternative treatment option.

b. Expedited consults are warranted for:

(1) Acute angle closure glaucoma.

(2) Active neovascular glaucoma.

6. LOW-VISION REHABILITATION CARE

a. Patients seen by either optometry or ophthalmology who meet the requirements of “low vision” or “legal blindness” need to be referred for low-vision care. A consult is required to optometry at VA medical facilities where ophthalmology is not able to provide this care. In cases where a patient can be referred to a low vision clinic that falls within the oversight of Blind Rehabilitation Service (BRS), the referral process should follow the guidelines established for the BRS continuum of care. Legally-blind patients and those with excess disability are to be referred to, and registered with, a visual impairment services team (VIST) coordinator for extensive blindness rehabilitation services. Patients who are legally blind, but retain vision, can benefit from

a low-vision evaluation and prescription of low vision devices while waiting to be seen at a VA BRS program. **NOTE:** Refer to VHA Handbook 1174.05, *Outpatient Blind and Vision Rehabilitation Clinic Procedures*, dated July 1, 2011, and VHA Handbook 1174.03, *Visual Impairment Services Team Program Procedures*, dated November 5, 2009.

b. **Definition of Low Vision.** Low vision is defined as:

(1) Best corrected central visual acuity of 20/70 to 20/160, or worse in the better seeing eye;

(2) Significant central and/or peripheral visual field loss; or

(3) A combination of visual acuity, visual field loss, contrast sensitivity loss, loss of stereopsis, or eye motility impairment that impacts patient safety or impairs or restricts one or more activities of daily living.

c. **Definition of Legal Blindness.** Legal blindness is defined as:

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(1) Best corrected central visual acuity of 20/200, or worse in the better seeing eye; or

(2) The widest diameter of the visual field subtends an angle of 20 degrees, or less, in the better seeing eye.

7. URGENT CONSULT REQUESTS

When a consult request to ophthalmology is urgent, optometry is to contact ophthalmology directly to verbally discuss the patient findings and coordinate the plan of action for the patient. If an ophthalmologist is unavailable, the on-call ophthalmologist or resident should be contacted or the patient should be referred to a community ophthalmologist, as needed.

8. CLINICAL CARE REVIEW (ONGOING PROFESSIONAL PRACTICE EVALUATION AND FOCUSED PROFESSIONAL PRACTICE EVALUATION) FOR OPHTHALMOLOGY AND OPTOMETRY

a. There is to be periodic (at least every 6 months) clinical review (optometry reviews optometry and ophthalmology reviews ophthalmology) of patients who are diagnosed with AMD, diabetic retinopathy, glaucoma, and low vision and/or legal blindness based on current, nationally-accepted standards. These focused and ongoing professional practice evaluation (FPPE AND OPPE) reviews are to be incorporated into the ongoing review of each practitioner's professional practice and

used by the respective service chiefs of optometry and ophthalmology and the medical staff executive committee for initial privileging and re-privileging decisions. This disease specific evidence-based review needs to include:

(1) For AMD, evidence of patient education on the risks/benefits of AREDS recommendations for preventing disease progression based upon the severity and type of macular degeneration, as indicated.

(2) For diabetic retinopathy, evidence of retinopathy severity and patient education about prevention of disease progression, as indicated. **NOTE: If the Veteran qualifies for screening through the national Teleretinal Imaging Screening Program, there is a quality assurance program that reviews ongoing eye care provider (optometrist or ophthalmologist) competence.**

(3) For glaucoma, evidence of annual optic nerve head evaluation, intraocular pressure measurement, and visual fields examination or documentation that visual field testing was not possible or results were unobtainable, as well as documentation concerning disease stability or progression.

(4) For low vision and/or legal blindness, evidence of referral for low vision rehabilitation care, as indicated.

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b. Six selected charts of patients seen by ophthalmology are reviewed by ophthalmology and six selected charts of patients seen by optometry are reviewed by optometry.

c. VA medical facilities with a single eye care provider (optometrist or ophthalmologist) are to make arrangements with the respective optometry or ophthalmology VISN lead or a VA medical facility with optometry or ophthalmology eye care providers to conduct the review, as appropriate.

9. COORDINATION OF CARE REVIEW BY OPHTHALMOLOGY AND OPTOMETRY

a. A semi-annual review of the adequacy and timeliness of care coordination will be performed by a joint meeting of optometry and ophthalmology for a minimum of six patients diagnosed with AMD, diabetic retinopathy, glaucoma, low vision and/or legal blindness that are managed by both services. This non-punitive and confidential review is conducted within the context of quality assurance (Title 38 United States Code (U.S.C.) 5705) and is intended to enhance care coordination between the eye care services as well as improve systems of care and patient outcomes.

b. A minimum of six randomly selected charts (three from patients predominantly seen by optometry and three from patients predominantly seen by ophthalmology) of patients with low vision and/or legal blindness, AMD, diabetic retinopathy, or glaucoma need to be reviewed for referral appropriateness according to the care coordination agreement. **NOTE:** *Optometrists and ophthalmologists can use VHA identifiers 220, 407, 408, 437, 438, and 439 (as appropriate) with International Classification of Diseases Clinical Modification–10th edition (ICD-10-CM) codes E10, E11, E13 (diabetic retinopathy), H35 (degeneration of macula and posterior pole), and H40 (glaucoma). To identify low-vision patients in ophthalmology and optometry clinics (407 and 408 respectively), the H54.8 and H54.2 (blindness and low vision) and H53 (visual field defects) ICD-10 codes may be used in combination with E10, E11, E13, H53, and H40. An alternative method to identify low-vision and legally-blind patients in ophthalmology clinics is to review patients scheduled in a retina clinic utilizing previously mentioned ICD-10 codes. Ophthalmologists and optometrists should work with the local business office to develop and implement 439 identifier, low-vision care within every VHA eye clinic (optometry and ophthalmology), as indicated where 220, 437, 438, and VA blind rehabilitation center services are not available.*

Concurrence:

Chief, Optometry Section or Service _____

Date _____ Chief, Ophthalmology Section or

Service _____ Date _____ Chief of

Staff _____ Date _____

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APPENDIX C

**CARE COORDINATION AGREEMENT BETWEEN OPTOMETRY AND
OPHTHALMOLOGY AND PRIMARY CARE OR THE EMERGENCY
DEPARTMENT SAMPLE TEMPLATE**

The following is a care coordination agreement between optometry and ophthalmology (the eye care specialists) and primary care (the requesting provider) or the emergency department (the requesting provider) sample template. It is intended to provide a framework for the consultation of patients for eye and vision care services.

1. PURPOSE

a. **Urgent and Emergent Referral.** Urgent and emergent referrals are to be made for, but are not limited to, the following conditions:

- (1) Sudden loss of vision (including transient loss).
- (2) Sudden shade in vision, or new onset of flashes or floaters.
- (3) Sudden onset of diplopia (double vision).
- (4) Sudden eye lid droop (ptosis). If associated with facial weakness refer to neurology.
- (5) Painful red eye in a contact lens wearer.
- (6) Red eye with significant visual symptoms or significant pain.
- (7) Trauma to the eye or periorbital area sufficient to cause pain or visual symptoms.

b. **Other Conditions.** Other conditions that warrant eye care specialist consultation include, but are not limited to:

- (1) Cataracts.
- (2) Systemic disease with ocular manifestations.
- (3) Age-related macular degeneration (AMD).
- (4) Uncorrected refractive error.
- (5) Presumed visual impairment.
- (6) Systemic medications with ocular toxicity.
- (7) Lid disorders.
- (8) Eye motility disorders.
- (9) Vision examination for a drivers' license.

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- (10) Glaucoma.

c. **Recommendations for Patients with Diabetes.**

Condition	Initial Exam
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Type 1	5 years after diagnosis
Type 2	At diagnosis
Prior to Pregnancy (Type 1 or 2)	Prior to conception and early in 1 st Trimester
With Retinopathy	Every 1 year
No Retinopathy	Every 2 years

NOTE: Type 1 or Type 2 diabetes patients may meet criteria to be screened in the Teleretinal Imaging Screening Program as opposed to an eye examination (see section 16 paragraph f for information about the Teleretinal Imaging Screening Program and section 7 paragraph 3 for ocular funduscopic examination recommendations for diabetic patients in the Department of Veterans Affairs (VA)-Department of Defense (DoD) Diabetes Clinical Practice Guidelines that may be viewed at: <http://www.healthquality.va.gov/>). Consults to both should not be placed. Initial exams for patients with or without retinopathy can be performed more frequently if indicated by the provider.

2. ORDERING CONSULTS

a. **Consult Requests.** Primary care providers and other requesting providers must utilize the electronic consultation package in the electronic health record (EHR) for initiating any request for consultation.

(1) The request must state:

(a) A presumptive diagnosis or clear question or problem to be addressed. (b) Pertinent information including onset of symptoms, visual impact, etc. (c) A time frame for the urgency of completion of the consult.

(2) For urgent consults, the primary care provider must contact the eye clinic during working hours and the on-call eye care specialist after hours.

(3) Inpatient consultation needs to be of an urgent nature with rare exception. All routine or screening exams must be scheduled accordingly. Contact the eye clinic (optometry or ophthalmology) or on-call eye care specialist after hours.

NOTE: There are guidelines for the performance of comprehensive eye examinations on adults based on the American Academy of Ophthalmology's Preferred Practice Patterns and the American Optometric Association's Clinical Practice Guidelines. The most important criteria remain symptoms and risks.

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b. **Recommendations for Patients with No Risk Factors.** These are recommendations and are not to be considered mandatory.

Age (years)	Frequency of Evaluation
Over 65 years	Every 1-2 years*
55-65 years	Every 1-3 years*
40-54 years	Every 2-4 years*
Under 40 years	Every 2-10 years

*More frequently if indicated by provider.

c. **Patients with Higher Risk Factors for Glaucoma.** These are recommendations and not considered to be mandatory.

Intraocular Pressure	More than (>) 21 millimeters of Mercury (mmHg)
Family History	Positive family history of glaucoma
Race	African American or Hispanic or Latino
Ocular Trauma	Positive history of ocular trauma

3. CONTACTS FOR EYE CLINICS

- a. **Ophthalmology Clinic.** Facility contact information must be provided. b. **Chief of Ophthalmology.** Facility contact information must be provided. c. **On-call (For After Hours).** Facility contact information must be provided. d. **Optometry Clinic.** Facility contact information must be provided. e. **Chief of Optometry.** Facility contact information must be provided. f. **On-call (For After Hours).** Facility contact information must be provided. 4.

COMMUNICATION OF QUESTIONS

The EHR consult package allows for the ongoing addition of comments that automatically flags back to the requesting provider and eye care specialist provider. It is

expected that more complex situations and potential problems with consults are addressed with a good faith attempt at verbal contact with the requesting provider. Requesting providers and eye care specialists are expected to have accurate and up-to-date contact information readily available to facilitate access by potential consultants.

5. CO-MANAGED (DUAL CARE) CARE PATIENTS

a. VA primary care or requesting providers and eye care specialists are frequently asked to act as parallel providers to general and specialist physicians in the community as part of the Veteran's Health Administration (VHA) National Dual Care policy. Providers should instruct patients that patients are responsible for keeping VA

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appointments and bringing all outside records with them to the VA appointments to become part of the VA record. **NOTE:** Refer to VHA Directive 2009-038, VHA National Dual Care Policy, dated August 25, 2009, for more information.

b. Co-management is not safe for some ocular conditions that require frequent visits, multiple medications, and/or treatments.

c. Primary care or requesting providers will have instances when a patient previously co-managed by dual care has failed co-management. In this event, it is recommended that patients receive their care through VA for safety and continuity reasons. VA eye care specialists are expected to acknowledge and accept referrals that may appear, on the surface, to duplicate an external care authority to review and assist with stabilization or clarification of the eye care specialty plan of care. Providers should advise the patient to follow-up with the VA eye care specialist depending on the clinical need.

6. RESTRICTIONS ON CONSULTATIONS

a. Consult requests are not needed from a primary care provider for direct scheduling of routine vision testing and eye care services appointments for Veterans if local policy and eye clinic capacity permits.

b. All patients, including those with urgent care consults, should be encouraged to be vested with a VA primary care provider, except in situations when the patient is service-connected for eye conditions and chooses not to receive primary care at a VA facility.

c. Some eye care services are not available within VA, such as refractive laser surgery, cosmetic procedures, contact lenses, unless determined to be medically necessary by a VA eye care provider, etc. These consults are denied and the reason for denial given to the Veteran.

7. INTERFACILITY OR INTRA-VETERANS INTEGRATED SERVICE NETWORK CARE

When a specialist determines that care for a unique non-emergent problem must occur outside [provide facility name], they are expected to forward the referral, rather than cancelling or otherwise deferring it back to the requesting provider to attempt to triage the patient care need.

8. COMMUNITY CARE CONTRACTING

[This section needs to be filled out according to local protocol or left out per local facility preference.]

9. OUTSIDE RECORDS OR A TRANSFER OF CARE

Patients frequently present to establish care at VA solely to achieve specialty care for a new or chronic medical problem, either in transfer from or parallel to another health

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care system. While requesting providers must establish the patient and do any appropriate pre-work for eye care specialty review, they must also attempt to acquire any and all necessary outside records to facilitate consultative care. When the patient has been evaluated by the eye care specialist, if there are presumed to be additional records or imaging studies needed to assist in the patient's care, it is expected that the eye care specialist clearly indicates to the patient exactly what is still needed and how to get those records directly to the relevant specialist for review.

Concurrence:

_____ Date _____

Chief, Primary Care

_____ Date _____

Chief, Optometry Section or Service

_____ Date _____

Chief, Ophthalmology Section or Service

_____ Date _____

Chief of Staff

PATIENT SAFETY AND QUALITY IMPROVEMENT

1. QUALITY IMPROVEMENT PROGRAM

The Quality Improvement program at each Department of Veterans Affairs (VA) medical facility should include evaluation and improvement of eye and vision care services. Quality indicators will be based on clinical practice guidelines published by national optometric and ophthalmic organizations and other appropriate bodies, such as The Joint Commission, the National Eye Institute of National Institutes of Health, and the American National Standards Institute, Inc.

2. PEER REVIEW

Eye and vision care services provided to Veterans by VA eye care providers are subject to quality management and peer review according to Veterans Health Administration (VHA) Directive 1190, Peer Review for Quality Management, dated November 21, 2018.

3. OPHTHALMIC SURGERY PATIENT SAFETY

VA medical facilities must ensure that Veterans obtaining ophthalmic surgery have care that adheres to VHA Directive 1039(2), Ensuring Correct Surgery and Invasive Procedures In and Out of the Operating Room, dated November 28, 2018. This includes requiring that patient identification is verified, surgical laterality and site are identified and marked by a physician or other privileged provider, informed consent is obtained, a "time-out" is performed, and that all implantable devices are confirmed as described in VHA Directive 1039(2) before starting any operation or invasive procedure. Ophthalmic surgery includes injections, and laser and incisional procedures performed either in the clinic or in the operating room. Surgical safety also includes prevention of retained surgical items and providers should adhere to VHA Directive 1103, Prevention of Retained Surgical Items, dated March 5, 2016. Surgical privileges are granted and updated by the facility credentialing committee.

INFECTION CONTROL AND PREVENTION

1. INFECTION CONTROL AND PREVENTION

VHA eye clinics (optometry and ophthalmology) must comply with VHA Directive 1131(3), Management of Infectious Diseases and Infection Prevention and Controls Program, dated November 7, 2017.

2. REUSABLE MEDICAL EQUIPMENT

VA eye care providers must adhere to VHA Directive 1116(2), Sterile Processing Services (SPS), dated March 23, 2016, for use and reprocessing of reusable medical equipment (RME) in VHA eye clinics when performing ophthalmic surgical or non surgical procedures. The use of disposable devices for performance of select ophthalmic procedures (tonometry, gonioscopy, etc.) is encouraged where there is limited SPS support, such as at Community-Based Outpatient Clinics (CBOCs) or other remote VA medical facilities.

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APPENDIX F

STAFFING AND PRODUCTIVITY

a. The VA Office of Productivity, Efficiency, and Staffing (OPES) provides relative value unit (RVU) productivity recommendations for optometry and ophthalmology. Acceptable annual net RVU productivity ranges (adjusted for labor mapping) for optometry and for ophthalmology should fall between the 25th and 75th percentile compared to other VA medical facilities with similar Medical Center Group (MCG) complexity. The optometry and ophthalmology RVU productivity recommendations may be viewed on the VHA OPES website at: <http://opes.vssc.med.va.gov/Pages/Default.aspx>. **NOTE:** *This is an internal VA web site that is not available to the public.*

b. A full-time clinical staff optometrist with adequate support personnel has 1,700 to 3,000 patient visits per year (1,200 to 1,700 unique patients) for provision of primary optometric eye and vision care services. The number of visits is dependent upon complexity of care provided and the availability of adequate space, equipment, and clinical and administrative support staff. These patient and RVU productivity expectations include supervised student and resident workload and exclude patients requiring extensive contact lenses, low-vision, and vision rehabilitation services. If the ratio of health technicians to optometrists is less than 1:1, then these RVU productivity expectations may be greatly reduced.

c. A full-time clinical staff ophthalmologist with adequate support personnel has 1,800 to 4,000 patient visits per year (1,300 to 1,800 unique patients) and performs 150 to 300 surgical procedures per year, including laser and injection surgery, eye cultures, biopsies, and oculoplastic procedures. The productivity expectations for ophthalmologists vary by subspecialty and training and are dependent on surgical support resources, availability of clinic support personnel and clinic space, operating room time, anesthesiology, whether eyeglasses are dispensed in the clinic, and the number of part-time and community care ophthalmologists. These productivity expectations include supervised student and resident workload. If the ratio of health technicians to ophthalmologists is less than 2:1, these productivity expectations may not be applicable.

CREDENTIALING AND PRIVILEGING

1. OPHTHALMOLOGISTS

a. All ophthalmologists requesting privileges must be board-certified/board eligible in ophthalmology. Ophthalmology physicians that do not meet these criteria may be allowed to work in the eye clinic if they have appropriate credentials, knowledge, experience, and are approved by the Chief of Ophthalmology. The applicant must possess and maintain a full, active, current, and unrestricted license to practice in any United States State or Territory to be eligible for appointment, except as provided in VHA Directive 2012-030, Credentialing of Health Care Professionals, dated October 11, 2012. **NOTE:** *Resident physicians cannot be credentialed and privileged as independent licensed practitioners.*

b. Therapeutic laser eye procedures in VHA are currently performed by only ophthalmologists and ophthalmology residents. To independently perform laser eye procedures, ophthalmologists must have completed an accredited ophthalmology residency approved by the Accreditation Council for Graduate Medical Education or the American Medical or Osteopathic Association, have appropriate training and experience in therapeutic laser procedures in accordance with the credentialing and privileging procedures at the VA medical facility, and be board-eligible or board certified by the American Board of Ophthalmology. Physicians who perform laser surgery must maintain currency in laser safety training provided within VA Talent Management System (TMS Laser Safety Training item #3870739) for initial granting of and maintenance of laser privileges. **NOTE:** *For more information on Laser Safety Training, see www.tms.va.gov/SecureAuth35/. This is an internal VA Web site that is not available to the public.*

c. Ophthalmology residents are trained to perform laser eye surgery under supervision of an attending ophthalmologist who is credentialed and has current laser privileges at the VA medical facility.

2. OPTOMETRISTS

As members of the medical staff, all optometrists must be credentialed and privileged by the VA medical facility for the care which they provide and are supervising. Credentialed and privileged optometrists are responsible for the care of all patients examined by optometric trainees. Optometric fellows, who have successfully completed residency training, must be credentialed and privileged and may supervise optometry students and residents. Credentialing and privileging must adhere to VHA Handbook 1100.19, Credentialing and Privileging, dated October 15, 2012, and VA Handbook 5005/57, Part II, Chapter 3, Section B, Credentialing and Licensure, dated June 14, 2012.

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APPENDIX H

EDUCATION AND TRAINING OF OPTOMETRY TRAINEES (RESIDENTS, FELLOWS, STUDENTS)

1. RECRUITMENT

Residency and fellowship positions are advertised in accordance with Department of Veterans Affairs (VA) medical facility guidelines. The national optometry residency match (ORMatch), within the National Matching Services, Inc., is used for selection and matching of candidates to residency programs. Once matched, VA medical facility Human Resources appoints the optometry resident(s) or fellow(s) according to VA Title 38 appointment procedures. **NOTE:** Refer to VA Handbook 5005/92, Part II, Chapter 3, Title 38 Appointments, dated November 22, 2017, and VA Handbook 5005, Staffing, Part II, Chapter 3, Appendix G5, Optometrist Qualification Standard, dated April 15, 2002.

2. ESTABLISHING AFFILIATIONS BETWEEN VA MEDICAL FACILITIES AND OPTOMETRY SCHOOLS

a. An affiliation agreement must exist between the local VA medical facility and the closest Accreditation Council on Optometric Education (ACOE)-accredited school or college of optometry before starting a program of clinical education. If the nearest optometry school does not desire an affiliation, another ACOE-accredited school or college of optometry may be chosen. On occasion, multiple affiliations with accredited schools and colleges of optometry may be possible for the education of Doctor of Optometry (OD) candidates. Affiliation agreements must be consistent with Veterans Health Administration (VHA) Handbook 1400.08, Education of Associated Health Professions, dated February 26, 2016.

b. VA staff optometrists serving as supervising or attending optometrists must be eligible for appointment to the optometry faculty of the affiliated school or college prior to consideration of any affiliation agreement.

c. Once an affiliation is established with an ACOE-accredited school or college, only optometry students in their third and final professional (fourth) years and postgraduate year (PGY)1, PGY2, and PGY3 trainees should have direct patient care responsibilities. Individuals in earlier professional years can assume supportive roles.

d. A representative from each affiliated school or college of optometry must be appointed to the local VA medical facility and Veterans Integrated Service Network (VISN) Affiliation Partnership Council, Deans' Committee, Management Assistance Council, or comparable Education Council as described in VHA Handbook 1400.03, Veterans Health Administration Educational Relationships, dated February 16, 2016.

3. SUPERVISION OF RESIDENTS AND STUDENT TRAINEES IN OPTOMETRIC EDUCATION PROGRAMS

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a. Supervision of residents refers to the authority and responsibility that VA staff optometrist(s) exercise over the care delivered to patients by optometry residents. Such authority is applied by observation, consultation, and direction, and includes the imparting of knowledge, skills, and attitudes by the practitioner to the resident. VHA residency training programs must ensure that residents are adequately supervised at all times, and that supervision is documented as described in VHA Directive 1400.01, Supervision of Physician, Dental, Optometry, Chiropractic, and Podiatry Residents, dated November 7, 2019. As part of the training program, residents need to be given progressive responsibility.

b. The supervision of student trainees is the responsibility of VA staff optometrist(s) with faculty appointments at the affiliated ACOE-accredited school or college of optometry. Trainees in any professional year prior to being awarded the OD degree must be educated and supervised within a specific optometric educational curriculum. The determination of a trainee's ability to provide care to patients depends upon documented evaluation of the student's clinical experience, judgment, knowledge, and technical skills.

4. BILLING REQUIREMENTS FOR OPTOMETRIC EDUCATION PROGRAMS

a. There are differences between the requirements for educational supervision of residents and the documentation necessary to bill for services provided by attending optometrists and residents. **NOTE: Refer to VHA Directive 1401, Billing for Services Provided by Supervising Practitioners and Physician Residents, dated July 29, 2016 for more information.**

b. Specific payers, such as the Centers for Medicare and Medicaid Services (CMS) or other third-party insurers, apply specific guidelines for documentation of patient care services that are acceptable for purposes of third-party billing.

c. CMS guidelines must be met regarding billing third-party payers for services performed by optometry residents within a properly supervised environment. The billing must be made through the supervising optometrist's name and credentials.

5. REPORTING RELATIONSHIPS FOR OPTOMETRIC EDUCATION PROGRAMS

a. Residents and fellows report to the respective VA staff optometrist residency or fellowship program coordinator or director of the program in which they are enrolled.

b. Candidates in any professional year prior to being awarded the OD degree report to the VA staff optometrist externship or internship program coordinator or director of the program in which they are enrolled.

6. EVALUATION OF OPTOMETRY RESIDENTS

a. Residents are evaluated on the basis of clinical judgment, knowledge, technical skills, humanistic qualities, professional attitudes, behavior, and overall ability to

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manage the care of patients. The resident must receive at least two interim and one final performance evaluation.

b. If at any time a resident's performance is judged to be detrimental to the care of a patient(s), action must be taken immediately to ensure the safety of the patient(s). The VA staff optometrist residency program coordinator or director must promptly provide written notification of the resident's unacceptable performance or conduct to the program director of the ACOE-affiliated school or college of optometry.

c. At least semi-annually, each resident is given the opportunity to complete a confidential written evaluation of staff practitioners and the quality of the resident's training. Such evaluations are to include the adequacy of clinical supervision by the staff practitioners.

d. All written evaluations of residents and staff practitioners must be conducted in accordance with VHA Directive 1400.01, Supervision of Physician, Dental, Optometry, Chiropractic, and Podiatry Residents, dated November 7, 2019 and kept on file consistent with VA medical facility policy and VHA Directive 6300, Records Management, dated October 22, 2018.

7. SCHEDULING AND PRODUCTIVITY CONSIDERATIONS FOR OPTOMETRIC EDUCATION PROGRAMS

a. The educational goals and objectives of any optometric education program must be compatible with those of the VA medical facility; however at least a half day per week must be dedicated solely for educational activities, ideally without the scheduling of patients. VA staff optometrists need to allow or arrange for emergency coverage during this time.

b. VA staff optometrists must ensure that overall productivity meets program goals as defined by the VHA National Program Director for Optometry.

8. STAFFING NEEDS FOR OPTOMETRIC EDUCATION

PROGRAMS a. Staffing Ratio.

Programs with trainees assigned should have at least 1.0 full-time equivalent (FTE) staff optometrist(s). There should be frequent interaction, usually monthly with the VA staff optometrist serving as the education program coordinator or director and the Associate Chief of Staff (ACOS) for education, designated education officer, or equivalent VA official. Programs with less than 1.0 FTE optometric professional staff may not be able to provide the proper level of clinical supervision or properly educate optometric trainees in an integrated program that meets specific curricular goals and objectives. The preceptor (staff optometrist) to trainee ratio needs to be 1:3 for OD professional degree students, 1:4 for PGY1 trainees, and 1:5 for PGY2 and beyond optometric trainees.

b. Support Staff.

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The VA Residency Site Director should be assisted by an administrative assistant. Optometric clinical education programs should have adequate support staff in order to properly manage administrative complexities, including reports, evaluations, syllabuses, scheduling, and other correspondence.

c. Intergovernmental Personnel Act Agreement.

Additional staffing can be obtained through an Intergovernmental Personnel Act (IPA) agreement between the VA medical facility and a State or local government agency, an institution of higher learning, an Indian Tribal government, or any other eligible organization to meet VA education and training program needs.

9. TRAINEE REQUIREMENTS AND FUNDING SUPPORT

a. **Students, Candidates, and Trainees.** Optometric students or candidates assigned to VA external rotations must:

(1) Be appointed according to VA Handbook 5005, Staffing, Part II, Chapter 3, dated December 17, 2015.

(2) Be enrolled in an ACOE-accredited program.

(3) Come from school(s) or college(s) of optometry with an affiliation agreement with the VA medical facility.

(4) Be appointed on a without compensation (WOC) basis.

b. **Resident Trainees.** Optometric residents must:

(1) Be appointed according to VA Handbook 5005, Part II, Chapter 3 and Appendix G5.

(2) Be citizens of the United States.

(3) Be graduates with the OD degree resulting from a course of education in optometry from an ACOE-accredited school or college of optometry or an optometry school (including foreign schools) accepted by the licensing body of a State, territory, or Commonwealth of the United States, or in the District of Columbia as qualifying for full and unrestricted licensure.

(4) Obtain licensure in a State, territory, or Commonwealth of the United States, or in the District of Columbia before completion of the first year of VA residency. **NOTE:** *The license does not have to be from the State where the residency program is located.*

c. **Fellowship Trainees.** Optometric fellows must:

(1) Be appointed according to VA Handbook 5005, Part II, Chapter 3 and Appendix G5.

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(2) Be citizens of the United States.

(3) Have successfully completed an ACOE-accredited optometric residency program.

(4) Possess a full and unrestricted license to practice optometry in a State, territory, or Commonwealth of the United States, or in the District of Columbia before the beginning of the fellowship. **NOTE:** *The license does not have to be from the State where the fellowship program is located.*

d. **Funding.** Allocation of funding for residency and fellowship positions is determined by the Office of Academic Affiliations (OAA) in collaboration with the VHA National Program Director for Optometry.

e. **Salary.** Salary rates for optometry residents and fellows are determined by the OAA.

f. **Insurance.** Optometry residents and fellows are eligible for VA group health and life insurance benefits.

10. SPACE AND EQUIPMENT NEEDS FOR PATIENT CARE IN OPTOMETRIC EDUCATION PROGRAMS

See Appendix A.

11. ACCREDITATION OF OPTOMETRIC EDUCATION PROGRAMS

a. All optometric education provided at VA must be accredited by the appropriate accrediting body. ACOE is the accrediting body for the schools and colleges of optometry and for their residency programs. The ACOE requires optometry residency programs to be affiliated with an ACOE-accredited school or college of optometry. VHA follows the requirements of accrediting and certifying bodies for each associated health discipline and maintains accreditation by The Joint Commission and other health care accreditation bodies, unless these requirements conflict with Federal law or policy.

(1) For programs with only OD candidates, accreditation of the school or college of optometry by the ACOE includes all clinical training programs provided to optometry students prior to graduation.

(2) For specific programs involved in the education of PGY1 trainees, the ACOE must be consulted by the VA medical facility in order to be accredited. The VA staff optometrist residency program coordinator or director, in concert with one or more representatives of the affiliated school or college of optometry, prepares annual reports, self-studies, and other information required to secure and maintain ACOE accreditation of the specific program.

(3) New programs must be recommended by the VHA National Program Director for Optometry and approved by OAA before starting a residency program.

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b. **Seeking and Maintaining Accreditation.** Through a site visit, the ACOE evaluates programs based on self-studies submitted by the VA staff optometrist residency program coordinator or director in concert with the affiliated school or college of optometry. The ACOE reviews adherence of the program to stated accreditation guidelines, goals, objectives, resolution of prior conditions, and overall program quality before granting accreditation status. The ACOE may accredit a residency program for a period not to exceed eight years before the next scheduled site visitation of the program. **NOTE:** *If the ACOE denies the accreditation request, OAA will not fund the program.*

c. **Accreditation with Conditions.** Programs which do not meet accreditation standards, but have sufficient redeeming qualities and characteristics to show a reasonable likelihood that accreditation will ultimately be granted, may receive accreditation with conditions.

d. **Payment of Accreditation Fees.** The payment of annual accreditation fees billed by the ACOE is the responsibility of each VA medical facility. Programs which have had their accreditation status canceled due to nonpayment of accreditation fees are ineligible to receive future optometric residency funding by the OAA until

their accreditation status is restored.

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APPENDIX I

**EDUCATION AND TRAINING OF OPHTHALMOLOGY TRAINEES (RESIDENTS,
FELLOWS, STUDENTS)**

1. RECRUITMENT

a. Ophthalmology residents (postgraduate year (PGY)2-4) are physicians with a current United States medical license who have completed a PGY1 internship accredited by either the Accreditation Council for Graduate Medical Education (ACGME) or the Royal College of Physicians and Surgeons of Canada. Residents are enrolled in a 3-year postgraduate training program with an ophthalmology academic affiliate (sponsoring institution) under the supervision of a credentialed ophthalmologist for medical and surgical treatment of basic, intermediate, advanced and urgent eye care problems.

b. Ophthalmology fellows (PGY5-6) are American Board of Ophthalmology board certified or board-eligible ophthalmologists pursuing additional training in a specific ophthalmology discipline, such as retina, glaucoma, cornea, neuro-ophthalmology, oculoplastic surgery, pediatric or strabismus surgery, ocular pathology or ocular immunology.

c. Residents are recruited by the academic affiliate and must be matched through the nationwide ophthalmology matching program. The selection of residents is the responsibility of the academic affiliate according to its affiliation agreement with the Veterans Health Administration (VHA). Once matched, the local Department of Veterans Affairs (VA) medical facility Human Resources office appoints the ophthalmology resident(s) according to VA procedures for Title 38 appointments. **NOTE:** Refer to VA Handbook 5005, Part II, Chapter 3, dated December 17, 2015.

d. Fellows are recruited by the fellowship sponsor. Once selected, the local VA medical facility human resources director or designee appoints the ophthalmology fellow(s) according to VA procedures for Title 38 appointments. **NOTE:** Refer to VA Handbook 5005, Part II, Chapter 3, and VA Handbook 5005, Part II, Chapter 3, Appendix G2). OAA residency training funds cannot be used to support these positions as they are limited to funding ACGME-accredited programs.

2. EDUCATIONAL AFFILIATION AGREEMENTS

a. An educational affiliation agreement must be signed by the VA medical facility Director and the corresponding medical school affiliate and/or sponsoring institution of the training program. VA affiliation agreement templates must be used (<https://www.va.gov/oaagreements.asp>).

b. In addition, there must be a program letter of agreement (PLA) between the program sponsor and the VA medical facility. The PLA must be renewed at least every 5 years and contain all the information listed in the ophthalmology program requirements by the ACGME and the Residency Review Committee, including the identification of faculty who will assume educational, supervisory, and evaluative

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responsibility for the ophthalmology residents. **NOTE:** The PLA must be drafted jointly by the residency program director and the VA residency site director.

3. SUPERVISION

a. The attending physician faculty must have current certification in ophthalmology by the American Board of Ophthalmology, or possess qualifications acceptable to the review committee. Supervision refers to the authority and responsibility that staff

practitioners exercise over the care delivered to patients by residents. Such authority is applied by observation, consultation, and direction, and includes the imparting of knowledge, skills, and attitudes by the practitioner to the resident. VHA residency training programs must ensure adequate supervision is provided for residents at all times. An attending ophthalmologist must be physically present in outpatient clinics or procedural suites in which residents are involved in the care of VA patients.

b. Each resident must be supervised, depending on the individual resident's abilities and level of training (i.e., PGY 2, 3, or 4).

c. Direct supervision by an attending ophthalmologist is required for all residents performing surgery. Ophthalmologists must be directly involved in the supervision of all surgical cases, including entering an appropriate pre-operative note or addendum to the resident's note; signing the operative report; and determining the level of resident participation based on experience level and demonstrated capability. Exceptions to direct supervision are rare and are based on the best care for the patient (such as an emergency case being started while the attending is traveling to the VA medical facility).

d. Attending ophthalmologists must be credentialed and privileged by the VA medical facility in accordance with VHA Handbook 1100.19, Credentialing and Privileging, dated October 15, 2012, to provide the care which they are supervising.

e. All supervision must meet the stated criteria for supervision of all physicians' training, including documentation and demonstration of direct supervision as described in VHA Directive 1400.01, Supervision of Physician, Dental, Optometry, Chiropractic, and Podiatry Residents, dated November 7, 2019.

4. LEVELS OF RESPONSIBILITY

a. Progressive responsibility may be given to residents as part of their training program. **NOTE: Refer to** VHA Directive 1400.01, Supervision of Physician, Dental, Optometry, Chiropractic, and Podiatry Residents, dated November 7, 2019.

b. The Chief of Ophthalmology determination of a resident's ability to accept responsibility for performing procedures or activities without a staff practitioner present must be based on the resident's clinical experience, judgment, knowledge and technical skills in agreement with the residency program director. Such evidence may be obtained from the affiliated university, evaluations by staff practitioners or program coordinator, and other clinical practice information.

c. Documentation of levels of responsibility must be filed in the resident's record or folder that is commonly maintained in the office of the residency program director at the academic affiliate.

5. EVALUATION OF OPHTHALMOLOGY RESIDENTS

a. Supervisor ophthalmologists evaluate residents based on each resident's clinical judgment, knowledge, technical skills, humanistic qualities, professional attitudes, behavior, and overall ability to manage the care of patients. Evaluation of the resident's performance in ongoing rotations is to be conducted at least quarterly.

b. If at any time a resident's performance is judged by their supervisor to be detrimental to the care of a patient, action must be taken immediately to ensure the safety of the patient. The VA residency site director must promptly provide written notification of the resident's unacceptable performance or conduct to the affiliate program director or the department or division chairperson.

c. Each resident is given the opportunity to complete a confidential written evaluation of staff practitioners and the quality of the resident's training annually. Such evaluations are to include the adequacy of clinical supervision by the staff practitioners.

d. All written evaluations of residents and staff practitioners must be kept on file in a location in accordance with local facility policy, VHA Directive 1400.01, Supervision of Physician, Dental, Optometry, Chiropractic, and Podiatry Residents, dated November 7, 2019, and VHA Directive 6300, Records Management, dated October 22, 2018.

6. STAFFING NEEDS FOR OPHTHALMOLOGY EDUCATION PROGRAMS

Ophthalmology staffing must be sufficient to maintain appropriate ophthalmology resident training and supervision. Either VA full-time equivalent (FTE) or part-time equivalent, contractors, or volunteer(s) with faculty appointments from the academic affiliate may be recruited to obtain appropriate staff to provide training and resident supervision.

7. SPACE AND EQUIPMENT NEEDS FOR PATIENT CARE IN OPHTHALMOLOGY EDUCATION PROGRAMS

See Appendix A.

8. ACCREDITATION OF OPHTHALMOLOGY RESIDENT TRAINING

a. ACGME is responsible for accreditation of ophthalmology residency training programs. Residency programs affiliated with VA must be accredited by ACGME.

b. The program accreditation is the responsibility of the academic institution.

c. VHA expects the academic affiliate or sponsoring institution to obtain appropriate accreditation through the ACGME.

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d. The Facility Office of the Associate Chief of Staff (ACOS) for Education or similar office must provide data the residency program requires to support the application for continued accreditation of the program to the academic affiliate or sponsoring institution.

e. VHA must participate, as requested by the sponsoring institution, in the ophthalmology Residency Review Process (RRC) process.

STAFF DEVELOPMENT

1. QUALIFICATION STANDARDS

Nationwide qualification standards are in effect for all optometry personnel actions in accordance with the Department of Veterans Affairs (VA) Optometrist Qualification Standard. **NOTE:** Please see *VA Handbook 5005, Part II, Appendix G5, Optometrist Qualification Standard, dated April 15, 2002*. The VA Physician Qualification Standard for ophthalmology personnel actions is in VA Handbook 5005, Part II, Appendix G2, Physician Qualification Standard, dated December 17, 2015.

2. OPTOMETRY PROFESSIONAL STANDARDS BOARD

A centralized professional standards board for optometry in VHA Central Office must determine the initial grade and step for new appointees and promotion and special advancement requests based upon published qualification standards. This board, in which the majority of members are optometrists, functions in accordance with VA policy. **NOTE:** Please see *VA Handbook 5005/8, Part II, Appendix H4, Procedures for Appointing Optometrists, dated June 22, 2004; VA Handbook 5005/58, Part III, Appendix M, How to Process a Promotion for Optometrist, dated June 14, 2012; and VA Handbook 5005/92, Part II, Chapter 3, Section C, Professional Standards Boards, dated November 22, 2017*.

3. SPECIAL ADVANCEMENTS

Clearly defined criteria for special advancement for performance and special advancement for achievement are used for all optometry personnel actions; which must be submitted to the Optometry Professional Standards Board according to VA policy. **NOTE:** Please see *VA Handbook 5017/15, Employee Recognition and Awards, Part V, Title 38 Special Advancements and Cash Awards, dated June 3, 2019*.

4. RECRUITMENT AND RELOCATION INCENTIVES

VA medical facilities have the ability to authorize recruitment and relocation incentives for optometrists and ophthalmologists. **NOTE:** Please see *VA Handbook 5007/46, Part VI, Chapter 2, Recruitment and Relocation Incentives, dated April 22, 2013*.

5. RETENTION INCENTIVES

Optometrists and ophthalmologists are eligible for retention incentives and may be authorized by the local VA medical facility within established VA policy. **NOTE:** Please see *VA Handbook 5007/46, Part VI, Chapter 3, Retention Incentives Other Than for Closure or Relocation of Employing Office, Facility or Organization, dated April 22,*

2013.

6. EDUCATION DEBT REDUCTION PROGRAM

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Optometrists and ophthalmologists are eligible to participate in the Education Debt Reduction Program as detailed in VHA Directive 1021, Education Debt Reduction Program, dated May 31, 2012, and VHA Handbook 1021.01, Education Debt Reduction Program Procedures, dated May 31, 2012.

7. CLINICAL SKILLS AND SCHOLARLY PURSUITS

Eye care providers are encouraged to participate in clinical skills enhancement activities and scholarly pursuits. Each VA medical facility is to facilitate and accommodate the temporal and general resource needs for eye care providers to advance professionally. Appropriate activities include: attendance and completion of educational training courses and programs in clinical areas, academic pursuits leading to faculty appointments, professional organization involvement with officer or committee responsibilities, pursuit of special meritorious recognition from recognized professional organizations, research and publication endeavors, training program development or responsibilities, and national eye care provider program responsibilities.

8. CONTINUING EDUCATION

Eye care providers are required to obtain Continuing Medical Education (CME) for license renewal and re-privileging. Local VA medical facilities typically fund and grant authorized absence on an annual basis. Funding consisting of tuition, travel, and per diem is to be provided to ophthalmologists, to the extent allowed by 38 U.S.C. 7411, which authorizes reimbursement of a maximum of \$1,000 per year to any full-time board-certified physician appointed under 38 U.S.C. 7401(1). Authorized absence may be granted, inclusive of travel time, to attend CME meetings. **NOTE:** Refer to VA Handbook 5015/1, paragraph 9, dated June 25, 2010, and VHA Directive 1049 Reimbursement of Continuing Professional Education Expenses for Full-time Board Certified Physicians and Dentists, dated August 28, 2018.

9. ADMINISTRATION

To promote development of future administrative leaders, VA medical facilities should include eye care providers in administrative activities at the local facility or higher level.

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APPENDIX K

PARTICIPATION IN SPECIAL VHA PROGRAMS**1. EYE CARE CLINICAL PROGRAMS OF EXCELLENCE**

Eye care clinical programs of excellence provide clinical training, education, and research opportunities to develop optometrists and ophthalmologists with advanced competency skills. Department of Veterans Affairs (VA) medical facilities that effectively integrate the spectrum of eye care practitioners and ancillary personnel to provide comprehensive primary, secondary, and tertiary eye and vision care, may apply for designation as an eye care clinical program of excellence.

2. VISUAL IMPAIRMENT CENTER TO OPTIMIZE REMAINING SIGHT PROGRAM

The VA Optometric Service Visual Impairment Center to Optimize Remaining Sight (VICTORS) program provides team-based low-vision rehabilitation services to significantly visually-impaired Veterans from a large service area covering numerous VA facilities, as in a Veterans Integrated Service Network (VISN).

3. BLIND REHABILITATION SERVICE

Blind Rehabilitation Service (BRS) provides inpatient and outpatient blind and vision rehabilitation programs, adjustment to blindness counseling, patient and family education, and assistive technology. BRS continuum of care includes intermediate and advanced low vision clinics, outpatient blind rehabilitation clinics with lodger/hotel capability, and in-depth inpatient blind rehabilitation center-based programs. For severely disabled visually impaired Veterans, BRS specialists provide in-home and in community care and BRS visual impairment services team (VIST) coordinators provide case management to maximize adjustment. A staff optometrist or ophthalmologist provides clinical low-vision care and functions as an interdisciplinary team member within the BRS inpatient and outpatient clinical programs.

4. POLYTRAUMA SYSTEM OF CARE

The polytrauma system of care provides comprehensive medical and rehabilitation care for complex and severe polytrauma injuries and manages Veterans with severe and lasting injuries that return to their VISN area and local VA medical facilities for ongoing care. Ophthalmology, optometry, low-vision, and vision rehabilitation services in collaboration with physical medicine and rehabilitation services should be available at polytrauma rehabilitation centers, network sites, and within polytrauma support teams at local VA medical facilities to care for polytrauma patients with eye and vision related problems. **NOTE:** *Polytrauma is defined as injury to several body areas or organ systems that occur at the same time and where one or more is life threatening. Due to severity and complexity of injuries, polytrauma may result in physical, cognitive, psychological, or psychosocial impairments and functional disabilities. Traumatic brain*

injury (TBI) frequently occurs in polytrauma in combination with other disabling conditions such as amputation, auditory and visual impairments, spinal cord injury, post traumatic stress disorder, and other medical problems.

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5. DEPARTMENT OF DEFENSE-VA VISION CENTER OF EXCELLENCE

Section 1623 of Public Law 110-181, the National Defense Authorization Act for Fiscal Year 2008, requires that the Department of Defense (DoD) establish a center of excellence to address the prevention, diagnosis, mitigation, treatment, and rehabilitation of eye injuries and vision dysfunction in service members and Veterans; and that the DoD collaborate to the maximum extent possible with the VA in pursuit of this mission.

The Veterans Health Administration (VHA) core Vision Center of Excellence staff is composed of optometry, ophthalmology, blind rehabilitation, and support personnel.

6. OCULAR TELEHEALTH

a. **Teleretinal Imaging Screening Program.** The Teleretinal Imaging Screening Program provides screening for diabetic eye disease through teleconsulting. An appropriately trained and clinically-privileged optometrist or ophthalmologist interprets digital retinal imaging to determine whether the patient passed the screening, needs to be rescreened, or needs a comprehensive eye examination. This is sufficient to satisfy the clinical reminder for eye care required for screening patients with diabetes mellitus; however, teleretinal image screening does not replace a comprehensive eye examination by an optometrist or ophthalmologist. The quality of services provided by the Teleretinal Imaging Screening Program is measured through an on-going quality assurance program for imagers and readers.

b. **Technology-based Eye Care Service.** The Technology-based Eye Care Service (TECS) program provides eye screening for Veterans in rural and underserved communities. This includes diabetic teleretinal image screening, as well as additional visual screening tests. This is sufficient to satisfy screening for select eye disease conditions; however the TECS program screening does not replace a comprehensive eye exam performed by an optometrist or ophthalmologist.

7. ENVIRONMENTAL PROGRAMS

The VA medical facility environmental program is responsible for the safety needs of employees. Optometrists or ophthalmologists provide appropriate eye and vision care services, such as procurement of safety glasses and task analyses of workplace visual demands.

8. VOCATIONAL REHABILITATION PROGRAMS

Veterans enrolled in a vocational rehabilitation program are eligible to receive eye and vision care services and related prosthetic devices. **NOTE:** Refer to VHA Directive 1182, *Vocational Rehabilitation: Chapter 31: Benefits Timely Access to Health Care Services*, dated April 2, 2015.

9. MOBILE CLINICS

Specially-outfitted mobile vans may provide screening and primary care services to Veterans located at a significant distance from the nearest VA medical facility.

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Optometrists or ophthalmologists provide screening and primary eye and vision care services within these mobile clinics as needed.

10. HEARING AID SPECTACLES

Optometrists and ophthalmologists work cooperatively with audiologists in the fitting of spectacle mounted hearing aids for eligible Veterans.

11. HOMELESS CARE

Optometrists and ophthalmologists provide appropriate eye and vision care services to meet the needs of Veterans utilizing VHA "Stand Down" or other similar programs for homeless Veterans.

K-3

Research

Original Investigation

Comparison of Outcomes of Laser Trabeculoplasty Performed by Optometrists vs Ophthalmologists in Oklahoma

Joshua D. Stein, MD, MS; Peter Y. Zhao, MD; Chris Andrews, PhD; Gregory L. Skuta, MD

[Invited Commentaries](#)

IMPORTANCE Oklahoma is one of the few states where optometrists have surgical privileges to perform laser trabeculoplasty (LTP). Optometrists in other states are lobbying to obtain privileges to perform LTP and other laser procedures. Little is known whether outcomes of patients undergoing this procedure by optometrists are similar to those undergoing LTP by ophthalmologists.

OBJECTIVE To compare outcomes of LTPs performed by ophthalmologists with those performed by optometrists to determine whether differences exist in the need for additional LTPs.

DESIGN, SETTING, AND PARTICIPANTS This retrospective longitudinal cohort study used a health care claims database containing more than 1000 eyes of Medicare enrollees with glaucoma who underwent LTP in Oklahoma from January 1, 2008, through December 31, 2013. For each procedure, the data specify the type of eye care professional who performed the LTP. The rate of LTPs performed by ophthalmologists that required 1 or more additional LTPs in the same eye was compared with the rate of LTPs performed by optometrists. Regression models determined factors affecting risk of undergoing more than 1 LTP in the same eye.

MAIN OUTCOMES AND MEASURES Proportion of enrollees requiring additional LTPs, hazard ratio with 95% CIs of undergoing additional LTPs.

RESULTS A total of 1384 eyes of 891 eligible patients underwent LTP from January 1, 2008, through December 31, 2013. There were 1150 eyes that received LTP (83.1%) by an ophthalmologist and 234 eyes (16.9%) that had the procedure performed by an optometrist. The mean (SD) age at the initial LTP was 77.7 (7.5) years for enrollees with ophthalmologist performed LTP and 77.6 (8.0) years for those with optometrist-performed LTP ($P = .89$). Among the 1384 eyes receiving LTP, 258 (18.6%) underwent more than 1 LTP in the same eye. The proportion of eyes undergoing LTP by an optometrist requiring 1 or more subsequent LTP

session (35.9%) was more than double the proportion of eyes that received this procedure by an ophthalmologist (15.1%). Medicare beneficiaries undergoing LTP by optometrists had a 189% increased hazard of requiring additional LTPs in the same eye compared with those receiving LTP by ophthalmologists (hazard ratio, 2.89; 95% CI, 2.00-4.17; $P < .001$) after adjusting for potential confounders.

CONCLUSIONS AND RELEVANCE Considerable differences exist among the proportions of patients requiring additional LTPs comparing those who were initially treated by ophthalmologists with those initially treated by optometrists. Health policy makers should be cautious about approving laser privileges for optometrists practicing in other states until the reasons for these differences are better understood.

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E1

Research **Original Investigation** Comparison of Laser Trabeculoplasty Outcomes in Oklahoma



laser trabeculoplasty (LTP) is a

common procedure that

can effectively decrease intraocular pressure in patients with primary and some secondary forms of open angle glaucoma. It can augment the ability to lower intraocular pressure in patients who are already taking glaucoma medications and is useful in patients who have difficulty administering eye drops or with medication adherence. In fact, LTP may be a more cost-effective option for treating glaucoma than medication, especially for patients who have difficulty with adherence.^{1,2} The advent of selective LTP contributed to a 46% increase in this procedure among Medicare beneficiaries from January 1, 2002, through December 31, 2009.³

Ophthalmologists have been performing LTP since 1979 when the procedure was first developed by Wise and Witter.⁴ Recently, optometrists have been lobbying state legislatures for expanded privileges so they may perform LTP. In Oklahoma, optometrists were given permission to perform LTP on patients with glaucoma in 1998.⁵ More recently, legislation was passed in Kentucky and Louisiana allowing optometrists to perform laser ocular surgical procedures.^{6,7} Ophthalmologists learn how to perform LTP during residency training. The Accreditation Council for Graduate Medical Education mandates that graduating residents perform a minimum of 5 LTPs.⁸ Case logs show that the average ophthalmological resident performs 14 LTPs and 83 other laser procedures during residency training.⁹ In Oklahoma, training of optometrists to perform lasers involves a 2-day course, "Laser Therapy for the Anterior Segment," which is held at the Northeastern State University Oklahoma College of Optometry. This course consists of 9 hours of lectures and 4 hours of laboratory sessions, including gonioscopy, LTP, laser iridotomy, and capsulotomy.¹⁰

To our knowledge, there has never been a study comparing outcomes of LTP performed by ophthalmologists vs procedures performed by optometrists. Using a health care claims database containing more than 1000 eyes of Medicare beneficiaries with glaucoma who underwent LTP in Oklahoma, we compared outcomes of those receiving this procedure by ophthalmologists vs optometrists.

Figure 1. STROBE Sample Selection Figure

- 151517 Medicare beneficiaries enrolled in Traditional Medicare sometime during 2008-2013 (20% sample) and either residing or receiving treatment in Oklahoma
- 122182 Aged 65-95 y, known sex and race/ethnicity
- 16492 At least 1 glaucoma code (ICD-9-CM code 365.xx)
- 891 At least 1 LTP performed among 1384 eyes
- 8 Enrollees (10 eyes) missing urban status excluded from adjusted model

Identification of beneficiaries eligible for current study from 20% Medicare claims database. ICD-9-CM indicates *International Classification of Diseases, Ninth Revision, Clinical Modification*; LTP, laser trabeculoplasty.

Key Points

Question Are there differences in the frequency and likelihood of undergoing additional laser trabeculoplasty

among Medicare enrollees in Oklahoma who underwent this procedure by an ophthalmologist vs others who underwent the procedure by an optometrist?

Findings Among the 1384 eyes receiving laser trabeculoplasty, the proportion of eyes treated by optometrists requiring additional laser trabeculoplasty in the same eye (35.9%) was more than double the proportion of those treated by ophthalmologists (15.1%). Optometrist-treated eyes had a 189% increased risk of requiring additional laser trabeculoplasty.

Meaning Future work seems warranted to substantiate whether the differences identified affect clinical outcomes and costs.

thalmologists vs enrollees undergoing LTP by optometrists. These analyses may help guide health policy makers in other states who are trying to decide whether to give optometrists privileges to perform laser procedures.

Methods

Data Source

We used a 20% nationally representative sample of Medicare claims to identify beneficiaries undergoing LTP. The data base contained information including *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)*¹¹ diagnosis codes, *Current Procedural Terminology (CPT-4)*¹²

procedure codes, National Provider Identifier numbers to identify specific eye care professionals, and service dates for all encounters. Claims data were merged with Medicare denominator files for information on enrollment dates in Medicare and demographic characteristics of the beneficiaries. Data were linked by a patient identifier, allowing longitudinal, person-specific analysis from January 1, 2008, through December 31, 2013. A similar data source was used previously to study patients with ocular diseases.^{13,14} The University of Michigan institutional review board approved this study, which used deidentified claims data.

Study Sample

We identified all individuals with any form of glaucoma (*ICD 9-CM* code 365.xx) who underwent 1 or more LTP (*CPT-4* code 65855) from January 1, 2008, through December 31, 2013, in Oklahoma (Figure 1). *Current Procedural Terminology* codes do not distinguish argon LTP, selective LTP, and micropulse LTP; therefore, beneficiaries who underwent any of these procedures were included. Individuals younger than 65 and older than 95 years were excluded as were enrollees in Medicare Advantage plans because our data source does not fully describe all care received by persons in such plans. Procedures that were submitted for payment but not paid and those missing eye laterality were also excluded. Each claim specifies whether an ophthalmologist or optometrist performed the LTP and whether it was performed on the right or left eye. Bilateral codes were counted as separate procedures for each eye.

Statistical Analysis

All analyses were performed using SAS software, version 9.4 (SAS Inc) and R, version 3.2.3 (R Foundation for Statistical Computing). Characteristics of the study population were summarized using means (SDs) for continuous variables and frequencies and percentages for categorical variables. For all inference procedures, $P < .05$ (Kaplan-Meier method, Wald test, and Cox proportional hazards regression model) was considered statistically significant.

Receipt of Additional LTPs

The primary outcome was receipt of additional LTPs in the same eye. This outcome was identified as another record of *CPT-4* code 65855 on a separate date on the same eye as the initial procedure. Subsequent LTPs could have been performed by the same eye care professional or an ophthalmologist or optometrist other than the health care professional who performed the initial procedure. The unit of observation was the eye, but a clustering term was included to allow for the correlation between eyes of the same beneficiary.¹⁵ Observations were right censored at the end of eligibility.

We calculated product limit estimates (with robust SEs) of the time to the second LTP as a function of the type of initial eye care professional (ophthalmologist or optometrist). These estimates were compared at 6 months and 3 years with Wald tests. We used proportional hazards regression models (created by generalized estimating equations to allow for correlated observations) to determine a single estimate of the effect of the key predictor variable: type of eye care professional who performed the initial LTP. An additional model was created adjusting for age at initial LTP, sex, race/ethnicity, where the enrollee lived (urban, large rural, or small rural town), and year of the procedure. In a separate model, we studied whether an interaction between race/ethnicity (non-Hispanic white vs black, Hispanic, American Indian, and persons of other races/ethnicities) and type of eye care professional performing the initial LTP affected the hazard of undergoing additional LTPs.

Receipt of Incisional Glaucoma Surgical Procedures After LTP

Finally, we determined the proportion of patients receiving LTP by each type of eye care professional who subsequently underwent incisional glaucoma surgery (trabeculectomy or glaucoma drainage-device insertion) during the follow-up.

Results

A total of 1384 eyes of 891 eligible patients underwent 1 or more LTPs in Oklahoma during the study period. There were 1150 eyes that received LTP (83.1%) by an ophthalmologist and 234 eyes (16.9%) that had the procedure performed by an optometrist. A total of 493 patients (55.3%) underwent LTP at least once in both eyes. The number of LTPs performed by ophthalmologists ranged from 1 to 277 procedures; 57 ophthalmologists performed this procedure at least once. Optometrists each performed from 1 to 38 LTP procedures; 23 optometrists performed LTP at least once. The most common ICD-9-CM glaucoma diagnosis code listed on the date of the initial LTP was 365.11 (1206 [87.1%]) and was similar for both types of eye care professionals (975 [86.6%] of patients with an ophthalmologist performed LTP and 231 [89.7%] with an optometrist performed procedure). All enrollees in both groups were observed for up to 72 months. The median time from study eligibility to the first LTP was 28.8 months for patients first treated by ophthalmologists and 20.0 months for patients first treated by optometrists. The median times from the first LTP to the end of follow-up were 31.3 and 42.4 months, respectively. The mean (SD) age at the initial LTP was 77.7 (7.5) years for enrollees with ophthalmologist-performed LTP and 77.6 (8.0) years for those with optometrist-performed LTP ($P = .89$). The proportions of white, black, and other patients receiving LTP by ophthalmologists vs optometrists were 85.2% vs 75.5% ($P = .004$), 8.2% vs 10.8% ($P = .33$), and 6.5% vs 13.7% ($P = .004$), respectively (Table 1). Twenty-five enrollees (2.8%) received bilateral LTP on the same day.

Among the 1150 eyes undergoing LTP by an ophthalmologist, 174 (15.1%) received 1 or more LTPs on the same eye during the follow-up. Of the 234 eyes treated with LTP by optometrists, 84 (35.9%) underwent 1 or more additional LTPs on the same eye during follow-up ($P < .001$). Figure 2 displays the distribution of time to second procedure. Second procedures within

6 months were much less common when the first procedure was performed by an ophthalmologist (3.9%) vs an optometrist (24.9%) ($P < .001$). The difference persisted with time, for example, 17.7% vs 34.3% at 3 years ($P < .001$).

We also studied the timing of the additional LTPs by the 2 eye care professional groups relative to the 10-day global period (ie, the immediate post-LTP period, when charges for normal postoperative care are included in the global surgical procedure fee). For patients first treated by ophthalmologists, no additional procedures occurred during the global period, and the probability of a subsequent LTP between 11 and 30 days was 1.1% (95% CI, 0.7%-1.9%). For patients first treated by optometrists, the probability of subsequent LTPs in the global period was 0.4% (95% CI, 0.1%-3.0%) and between days 11 and 30 was 10.3% (7.0%-15.0%).

For the 174 eyes that received LTP by ophthalmologists that required additional laser treatment, 155 (89.1%) received the subsequent LTP by the same ophthalmologist, 13 (7.5%) by a different ophthalmologist, and 6 (3.4%) by an optometrist. Among the 1150 eyes initially treated by ophthalmologists, 21 (1.8%) underwent 3 or more LTPs on the same eye. In comparison, for the 84 eyes that received LTP by optometrists that required additional LTPs, 73 (86.9%) received the subsequent LTP by the same optometrist, 5 (6.0%) by a different optometrist, and 6 (7.1%) by an ophthalmologist. Of the 234 eyes treated initially by optometrists, 11 (4.7%) underwent 3 or more LTPs on the same eye.

After adjustment for potential confounding factors, eyes that received LTP by optometrists had a 189% greater hazard for a subsequent LTP in the same eye during follow-up (hazard ratio, 2.89; 95% CI, 2.00-4.17; $P < .001$) compared with those undergoing LTP by an ophthalmologist. Female patients had a 43% increased hazard of undergoing a subsequent LTP in the same eye during follow-up (hazard ratio

an Ophthalmologist or Optometrist

Characteristic	Overall	an Ophthalmologist LTP Initially by	an Optometrist	P Value
Individuals, No.	891	752	139	
Eyes, No.	1384	1150	234	
Patient age, mean (SD), y	77.7 (7.6)	77.7 (7.5)	77.6 (8.0)	.89
Sex, No. (%)				
Male	345 (39)	294 (39)	51 (37)	.59
Female	546 (61)	458 (61)	88 (63)	
Race, No. (%)				
White	746 (84)	641 (85)	105 (76)	
Black	77 (9)	62 (8)	15 (11)	
Hispanic	7 (<1)	6 (<1)	1 (<1)	.02
Native	57 (6)	40 (5)	17 (12)	
Other	4 (<1)	3 (<1)	1 (<1)	

mean (SD)^a 2010.3 (1.7) 2010.4 (1.7) 2009.9 (1.6) .001
 Year of first procedure,

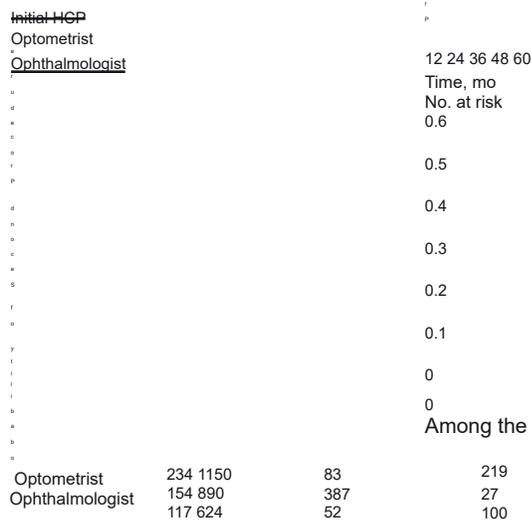
Year of first procedure,
 No. (%)

2008 171 (19.2) 135 (18.0) 36 (26.0) 2009 168 (18.9) 137 (18.2) 31 (22.3)
 2010 147 (16.5) 120 (16.0) 27 (19.4) .04
 2011 148 (16.6) 131 (17.4) 17 (12.2) 2012 135 (15.2) 120 (16.0) 15 (10.8)
 2013 122 (13.7) 109 (14.4) 13 (9.4)

Abbreviation: LTP, laser trabeculoplasty.

^a The average of the 1384 dates of the initial LTP.

Figure 2. Time to Second Laser Trabeculoplasty in Same



Kaplan-Meier estimates of cumulative incidence for each group. Data are clustered because of some beneficiaries having both eyes studied. The study lasted 72 months: follow-up began at the first laser trabeculoplasty. Therefore, there was none at risk at month 72. HCP indicates health care professional.

tio, 1.43; 95% CI, 1.02-2.01; $P = .04$). There was no association between age (hazard ratio, 1.04 per 10 years; 95% CI, 0.84-1.28) at initial LTP ($P = .72$), between black, Hispanic, or American Indian individuals, and persons of other races/ethnicities vs white ($P = .79$; hazard ratio, 1.06; 95% CI, 0.71-1.57), or between large rural vs urban residence of the patient ($P \geq .15$; hazard ratio, 0.75; 95% CI, 0.48-1.17) and between small rural vs urban residence of the patient ($P \geq .15$; hazard ratio, 0.73; 95% CI, 0.48-1.12) and the hazard of additional LTPs (Table 2). The

Eye for Beneficiaries Receiving Initial Treatment by Ophthalmologists and Optometrists

interaction model used to investigate whether race/ethnicity affected the hazard ratio of additional LTPs for ophthalmologist-performed vs optometrist-performed LTP was not statistically significant.

by ophthalmologists, 49 (4.3%) subsequently underwent incisional glaucoma surgery. By comparison, of the 234 eyes that underwent LTP by an optometrist, 5 (2.1%) subsequently underwent such surgery.

Discussion

In this analysis of more than 1000 eyes of Medicare beneficiaries with glaucoma who underwent LTP in Oklahoma from

January 1, 2008, through December 31, 2013, we note substan

tial differences additional LTPs underwent the ophthalmologist in the receipt of by patients who procedure by an compared with an optometrist. After adjustment for demographic and other factors, patients who underwent LTP by an optometrist had an approximate 2-fold higher likelihood of undergoing additional LTPs in the same eye compared with others who received this procedure by an ophthalmologist. Most additional LTPs performed by optometrists were done soon after the initial procedure and were performed by the same optometrist as the initial LTP.

Although this study highlights major differences in outcomes of patients undergoing subsequent LTPs after the initial procedure performed by ophthalmologists and procedures performed by optometrists, it is difficult with claims data to discern the reasons for the differences observed. Possible explanations include differences in the sociodemographic char

Table 2. Factors Affecting the Hazard of Requiring Additional Laser Trabeculoplasty^a

Factor Model Hazard Ratio (95% CI)^b P Value Initial LTP by an OD vs initial LTP by an EyeMD Crude 2.58 (1.84-3.61) <.001 Initial LTP by an OD vs initial LTP by an EyeMD Adjusted 2.89 (2.00-4.17) <.001 Each year later LTP was initially performed (eg, 2013 vs 2012) Adjusted 1.03 (0.92-1.16) .57 Female vs male Adjusted 1.43 (1.02-2.01) .04 Other races vs white Adjusted 1.06 (0.71-1.57) .79 Each additional decade of age Adjusted 1.04 (0.84-1.28) .72 Large rural town vs urban Adjusted 0.75 (0.48-1.17) .20 Small rural town vs urban Adjusted 0.73 (0.48-1.12) .15

Abbreviations: EyeMD, ophthalmologist; LTP, laser trabeculoplasty; OD, optometrist.

^a The adjusted model included all of the covariates listed in the table: whether the LTP was performed by an optometrist (vs an ophthalmologist), calendar year the LTP was performed, sex, race/ethnicity, age, and patient residence.

The interpretation of the calendar year of the initial LTP is as follows: Persons who underwent their initial LTP in 2013 had a 3.4% increased hazard of

requiring additional LTPs compared with those who had their initial LTP in 2012. This difference was not statistically significant. SEs were adjusted for clustering because of some beneficiaries having both eyes studied. P values and 95% CIs are from robust Wald procedures.

^b Hazard ratios are calculated from crude and adjusted proportional hazards regression models for time to event (second procedure in same eye).

acteristics of ophthalmologists' vs optometrists' patients and how each group responds to LTP, differences in disease severity between the 2 groups, differences in selection of patients who are appropriate candidates for LTP between the 2 types of eye care professionals, and differences in how the LTP was performed, including the type of laser used, laser settings, amount of the drainage angle treated in one setting, or whether the procedure was performed properly. Unfortunately, without access to clinical data, such as the preoperative and postoperative intraocular pressure levels, gonioscopy findings, and records describing how the procedures were performed, it is impossible to identify which of these or other factors are contributing to the observed differences in receipt of subsequent LTPs between the groups.

Another possible explanation for differences observed may be that ophthalmologists can perform incisional surgery on patients with failed LTP, whereas optometrists, who cannot do so, may perform additional LTPs. Likewise, because incisional glaucoma surgery is reimbursed more than LTP, this could influence decision making. However, we doubt that this factor is contributing much to the differences observed because a subset of ophthalmologists routinely performs incisional glaucoma surgery, whereas most eye care professionals (optometrists and comprehensive ophthalmologists) would refer patients to glaucoma subspecialists for surgery and thus not benefit financially from recommending incisional surgery vs additional LTPs. Furthermore, few patients in both groups underwent incisional glaucoma surgery during the follow-up; therefore, it is unlikely that this is a major factor responsible for the differences in additional LTPs between the 2 groups.

Some of the patients undergoing LTP by optometrists may reside in communities where access to incisional glaucoma surgery is limited, which may explain some of the differences. Moreover, despite the fact that all the patients in this analysis had Medicare, patients of ophthalmologists may have been better able to make the copayments of incisional glaucoma surgery compared with those receiving care by optometrists. Additional research is needed to study these various potential explanations.

The success of LTP depends on various patient-related and health care professional-related factors. Laser trabeculoplasty has been most effective in patients with primary open angle glaucoma, exfoliation glaucoma, and pigmentary glaucoma.¹⁶⁻¹⁸ Other glaucoma types, such as angle-closure and angle-recession glaucoma, usually respond poorly to LTP. The degree of angle pigmentation can also affect the success of the procedure and risk for intraocular pressure increases after LTP.^{19,20} Experience and expertise of the eye care professional can also affect outcomes because the effectiveness of LTP requires proper identification of the angle structures to treat. Although, to our knowledge, this is the first study that directly compared LTP performed by ophthalmologists vs optometrists, Lowry et al²¹ showed that LTP performed by attending ophthalmologists was more effective than procedures performed by resident physicians, suggesting that experience in performing the procedure is important.

An interesting finding from these analyses is that many of the patients who underwent additional LTPs by optometrists did so soon after the initial LTP, whereas additional LTPs among patients treated by ophthalmologists tended to occur much later after the initial procedure. One can speculate the reasons for the differences observed. One possibility is that the optometrists performing this procedure may have been more cautious, scheduling the procedure into 2 or more sessions to try to limit postoperative inflammation or intraocular pressure increases.^{22,23} Alternatively, to maximize reimbursement, some optometrists may schedule LTP into more than 1 session, with the timing of subsequent LTPs after the 10-day global period of the initial procedure. The large increase in additional LTPs for the patients undergoing the procedure by optometrists immediately after the global period suggests that this may be a contributing factor, although we are unaware of any reports indicating that optometrists systematically practice in this manner. A third possibility is that because the pressure-decreasing effect of LTP may take several weeks to months to occur, ophthalmologists may be more aware that it may take some time to observe the effect of the initial LTP before proceeding with additional LTPs. However, we know of no studies directly comparing the knowledge level about LTP of these

Research Original Investigation Comparison of Laser Trabeculoplasty Outcomes in Oklahoma longer-term outcomes. Finally, the data come

from claims submitted by ophthalmologists and optometrists, and not from patient self-report, which may be less reliable.³⁰

Our study has several limitations. First, claims data lack clinical details, such as intraocular pressure levels before or after LTP, slitlamp and gonioscopy findings, or details of how the procedures were performed. Second, our study focused on Medicare beneficiaries. It is unclear whether the findings would be similar for younger patients or those with other forms of health insurance. Third, there may be systematic differences between the patients receiving care by ophthalmologists and those by optometrists, including differences in disease severity between the groups. Unfortunately, there were not enough eyes that were coded with the new glaucoma severity codes to assess for this difference. One would expect that patients with more severe glaucoma would be receiving their care by ophthalmologists and thus would be more, not less, likely to require additional LTPs. Although we adjusted our models for some confounding factors, including age and race/ethnicity, there are other unmeasured confounders not included in claims data.

Based on the findings of these analyses, we urge state legislatures and health policy makers to be cautious about giving optometrists privileges to perform LTP in other states until additional research is performed to better delineate the reasons for the differences in the use of additional LTP we are observing in Oklahoma. Furthermore, researchers should determine the effect that these differences have on costs of care and, most important, on clinical outcomes such as disease progression.

To our knowledge, this is the first study to examine differences in outcomes of LTP between patients receiving care by ophthalmologists and those by optometrists. A strength of this study is its large diverse population of patients with glaucoma enrolled in Medicare throughout Oklahoma. We are not only including patients receiving care at one particular academic institution or by a small group of eye care professionals but are also including patients who underwent LTP performed by 57 ophthalmologists and 23 optometrists. We had longitudinal follow-up for several years after the initial LTP to compare the

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- Comparison of Laser Trabeculoplasty Outcomes in Oklahoma **Original Investigation** Research
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Research

JAMA Ophthalmology | **Original Investigation**

Access to Ophthalmologists in States Where Optometrists Have Expanded Scope of Practice

Joshua D. Stein, MD, MS; Kapil G. Kapoor, MD; Joshua L. Tootoo, MS; Ruiyang Li, MS; Alan Wagner, MD; Chris Andrews, PhD; Marie Lynn Miranda, PhD

IMPORTANCE As the United States considers how to best structure its health care services, specialty care availability is receiving increased focus. This study assesses whether patients lack reasonable access to ophthalmologists in states where optometrists have been granted expanded scope of practice.

OBJECTIVE To determine the estimated travel time (ETT) to the nearest ophthalmologist office for persons residing in states that have expanded scope of practice for optometrists, and to quantify ETT to the nearest ophthalmologist for Medicare beneficiaries who received surgical care from optometrists in those states between 2008 and 2014.

DESIGN, SETTING, AND PARTICIPANTS This study used data from the 2010 US census, a 2016 American Academy of Ophthalmology member database, and a data set of claims data for a random sample of 20% of beneficiaries enrolled in Medicare nationwide from 2008 to 2014 (n=14 063 725). Combining these sources with geographic information systems analysis, the ETT to the nearest ophthalmologist office was calculated for every resident of Kentucky, Oklahoma, and New Mexico. This study also assessed ETT to the nearest ophthalmologist for Medicare beneficiaries in those states who had received surgery from an optometrist from 2008 to 2014. Data analyses were conducted from July 2016 to July 2017.

MAIN OUTCOMES AND MEASURES The proportion of residents of Kentucky, Oklahoma, and New Mexico who live within an ETT of 10, 30, 45, 60, or 90 minutes of the nearest ophthalmologist office.

RESULTS The study included 4 339 367 Kentucky residents, 3 751 351 Oklahoma residents, and 2 059 179 New Mexico residents. Of these, 5 140 547 (50.6%) were female. Racial/ethnic composition included 7 154 847 people (70.5%) who were white, 640 608 (6.3%) who were black, and 1 418 246 (14.0%) who were Hispanic. The mean (SD) age was 37.8 (22.8) years. More than 75% of residents in the 3 states lived within an ETT of 30 minutes to the nearest ophthalmology office, and 94% to 99% of residents lived within an ETT of 60 minutes to the nearest ophthalmology office. Among Medicare beneficiaries who received surgery by optometrists, 58.3%, 51.1%, and 46.9% in Kentucky, Oklahoma, and New Mexico, respectively, lived within an ETT of 30 minutes from the nearest ophthalmologist office.

CONCLUSIONS AND RELEVANCE In the states where optometrists have expanded scope of practice, most residents lived within an ETT of 30 minutes of the nearest ophthalmologist office, as do half of Medicare beneficiaries who received surgical care from optometrists. These results can help inform policy makers when weighing the pros and cons of scope of practice expansion for optometrists.

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Research **Original Investigation** Access to Ophthalmologists in States With Expanded Scope of Optometrist Practice | In the past decade, there

have been attempts to convince

health policy makers to expand the scope of practice of optometrists.¹ Members of the optometric community have sought privileges to perform laser surgeries, minor eyelid procedures, and intraocular injections.^{2,3} A key argument often cited is that many patients reside in communities with few ophthalmologists available to perform these interventions, and that access to care will be improved by permitting optometrists to perform these procedures.²

There are more practicing optometrists in the United States than ophthalmologists, so one would expect that patients have easier access to an optometrist than to an ophthalmologist.¹ In fact, Lee et al⁴ demonstrated that, nationally, the median estimated travel time (ETT) to the nearest optometrist office is slightly less than the median ETT to the nearest ophthalmologist office, and most of the US population lives within an ETT of 14 minutes to the nearest optometrist office and 26 minutes to the nearest ophthalmologist office.⁴ To our knowledge, however, it is unknown how accessible ophthalmologists are in the states where optometrists have expanded surgical scope of practice, and whether the optometrists who perform surgical procedures are practicing in communities with limited access to ophthalmologists in those states.

To fill in these gaps, this study analyzes the ETT to the nearest ophthalmologist office for residents of Kentucky,^{2,3} where optometrists have had expanded scope of practice since 2011; Oklahoma,⁵ where optometrist scope of practice expansion occurred in 1998; and New Mexico,⁵ where expansion has been in place since 2006. In addition, the study explores the ETT to the nearest ophthalmologist for Medicare beneficiaries residing in these states who underwent surgical procedures by optometrists.

Methods

This study used data from the 2010 US census,⁶ a 2016 American Academy of Ophthalmology (AAO) member database,⁷ and a data set of claims data⁸ for a random 20% sample of benefi-

ciaries enrolled in Medicare from 2008 to 2014. These data sets were combined with geographic information systems analysis to determine ETTs.

Ethics

This study was approved by the University of Michigan Institutional Review Board. The study was exempt from requirements for informed consent procedures because it used deidentified data exclusively.

US Census Bureau Data

To estimate the populations of residents living within specific drive times to the nearest ophthalmologist, we accessed 2010 US census block-level data⁶ for Kentucky, Oklahoma, and New Mexico. census blocks are polygonal features that serve as the base unit for all nested US census area units and are the smallest unit of measure used to report complete data about basic demographic characteristics (such as total population by age, sex, and race/ethnicity) per geographic location.^{9,10} This source

Key Points

Question What is the estimated travel time to the nearest ophthalmologist office for persons living in states that have expanded the scope of practice of optometrists?

Findings This population-based cohort study of 10 149 897 residents of Oklahoma, Kentucky, and New Mexico found that more than 75% live within 30 minutes' estimated travel time of the nearest ophthalmologist office, and 94% to 99% of residents live within 60 minutes of the nearest ophthalmologist office. Roughly half of Medicare beneficiaries in these states who received surgery from optometrists between 2008 and 2014 lived within 30 minutes of the nearest ophthalmologist.

Meaning These results may help inform policy makers when weighing the pros and cons of expanding optometrist scope of practice.

contains information on the number of persons living in a given census block and the demographic profiles of those residents.

Analyses of ETT were based on centroids, the geographic centers of census blocks. Zip code tabulation areas (ZCTAs), which aggregate multiple census blocks, were also used. These are simplified areal representations of US Postal Service zip code service areas, constructed such that their boundaries precisely align with those of census blocks. Both centroids and ZCTAs were used to calculate ETTs to ophthalmologist offices.

American Academy of Ophthalmology Member Database

The American Academy of Ophthalmology (AAO) is the largest professional ophthalmology specialty society in the world. It has more than 32 000 members, including more than 17 000 who practice in the United States.¹¹ An estimated 93% of ophthalmologists in the United States are AAO members (J. Aguirre, CAE, written communication, November 2016). The AAO conducts a biennial member survey that seeks the primary office address and additional practice addresses of all member physicians. In addition, members are contacted quarterly and encouraged to update their member profiles on the AAO website, which likewise allows a member to list a primary office

address and addresses for other practice locations. The organization provided a snapshot of this dynamic database in August 2016.

Medicare Claims Data

Data on Medicare enrollees were obtained from the US Centers for Medicare and Medicaid Services.⁸ This national database included a random sample of 20% of Medicare beneficiaries with Parts A, B, and D coverage from January 1, 2008, through December 31, 2014 (n = 14 063 725). Because the database had incomplete data on persons with noncontinuous enrollment and Medicare Advantage plan enrollees, these persons were excluded. From this data source, we identified all beneficiaries residing in Kentucky, Oklahoma, and New Mexico.

The database uses *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)* codes¹² to identify all ocular and nonocular diagnoses and *Current Procedural Terminology* codes¹³ to identify all diagnostic and therapeutic procedures performed on each beneficiary during the

period included in the data set. In addition, the database included information on demographic information on each Medicare beneficiary (eg, sex, age, and race/ethnicity) and the type of health care professional who provided care at each clinical encounter. This database has been used previously to study patients with ocular diseases.¹⁴⁻¹⁶

Analyses

All data analyses were conducted from July 2016 to July 2017. The AAO database was used to identify the primary and all secondary office addresses for every AAO member licensed to practice in Kentucky, Oklahoma, and New Mexico. Since some patients travel across state lines to neighboring states to receive eye care, the office addresses of all AAO members prac

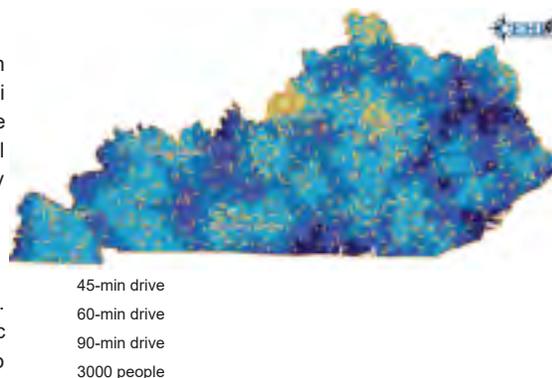


Figure 1. Estimated Travel Time to the Nearest Ophthalmologist Office for Residents of Kentucky

30-min drive
 ticing in states adjacent to the states of
 interest were identified (for Kentucky:
 Indiana, Ohio, Illinois, West Virginia,

Tennessee, and Virginia; for Oklahoma:
 Texas, Arkansas, Mis
 50 Miles

Number of procedures performed by
¹³
 7
 optometrists who have performed at least 5 procedures
 in 2008-2014 per dataset

souri, Kansas, New Mexico, and Colorado; for New Mexico:
 Texas, Oklahoma, Colorado, Arizona, and Utah; the nation of
 Mexico, although adjacent to New Mexico, was not included).
 All office addresses were geocoded to the street level using the
 ArcMap feature of ArcGIS version 10.3x (Environmental
 Systems Research Institute). The ETT from each 2010 US

census block centroid within Kentucky, Oklahoma, and New
 Mexico to the nearest ophthalmologist office was calculated via
 ArcGIS Network Analyst Extension. The Streetmap Pre mium
 2014 feature of ArcGIS was used as a reference data base for
 geocoding and network calculation. Calculated ETTs were
 network-based, which means the study assumed travel by car
 on roads and adherence to specified speed limits. If the nearest

ophthalmologist office was in a neighboring state, the model assumed that persons who resided in the states of interest would cross state lines.

The key outcome was the proportion of total persons residing in each state who lived within ETTs of 10, 30, 45, 60, and 90 minutes by car from the census block centroid to the nearest ophthalmologist office. In addition, we determined ETTs of 10, 30, 45, 60, and 90 minutes, stratified by age, race/ethnicity, and urban vs rural residential status. Designation of urbanicity was determined through the US Department of Agriculture's Rural-Urban Commuting Area Codes.¹⁷ Vector maps created in ArcMap depict service areas in each state where the ETT to the nearest ophthalmologist office is within 10, 30, 45, 60, and 90 minutes.

Next, the model used the Medicare claims database to identify the office locations of all optometrists in the 3 states who had performed any of these procedures at least 5 times in the period between January 1, 2008, and December 31, 2014: laser trabeculoplasty, laser capsulotomy, laser peripheral iridotomy, intraocular injection, and eyelid lesion removal. The model determined what proportion of optometrist offices where these procedures were performed at that frequency were located in census blocks with population-weighted centroids within ETTs of 10, 30, 45, 60, and 90 minutes to the nearest ophthalmologist office. Finally, the number of Medicare beneficiaries in these 3 states who received 1 or more of the above mentioned surgeries by an optometrist from 2008 through 2014 was determined, as was the proportion of these patients

Areas of Kentucky where the estimated travel time to the nearest ophthalmologist office is within 30, 45, 60, or 90 minutes. Gold dots indicate locations with more than 3000 residents. Circles reflect numbers of optometrist-performed procedures at that location from 2008 through 2014.

who were living in census blocks with a population-weighted centroid within ETTs of 10, 30, 45, 60, and 90 minutes to the

nearest ophthalmologist office.

Results

Kentucky

Based on the 2010 US census, 4 339 367 persons lived in Kentucky in 2010.⁶ In the AAO database, the number of office addresses of ophthalmologists practicing in Kentucky was 217, with another 887 offices of ophthalmologists within 90 minutes' drive time of the Kentucky border in surrounding states. The population in Kentucky within ETTs of 10, 30, 60, and 90 minutes to the nearest ophthalmologist office numbered 1 834 742 (42.3%), 3 385 205 (78.0%), 4 284 905 (98.7%), and 4 337 550 people (99.96%), respectively (Figure 1). Table 1 shows the ETT from each 2010 US census block centroid to the nearest ophthalmologist office for residents of all states of interest, stratified by age and race/ethnicity. Among the 3 823 864 residents living in urban communities, 1 828 346 (47.8%) lived within an ETT of 10 minutes to the nearest ophthalmologist office; for the 515 503 residents who lived in rural parts of the state (12% of the state population), 482 536 (93.6%) lived within an ETT of 60 minutes to the nearest ophthalmologist office (Table 2).

Oklahoma

Based on the 2010 US census, 3 751 351 persons lived in Oklahoma.⁶ The number of office addresses of ophthalmologists practicing in Oklahoma was 177, with another 523 ophthalmologist offices were within 90 minutes' drive time of the Oklahoma border in surrounding states. In Oklahoma, 1 907 332 (50.8%) of residents lived within 10 minutes (ETT) to the nearest ophthalmologist office; the corresponding numbers were 2 983 285 (79.5%), 3 590 860 (95.7%), and 3 687 215 (98.3%) for

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Research Original Investigation Access to Ophthalmologists in States With Expanded Scope of Optometrist Practice Table 1. Estimated Travel Time

to the Nearest Ophthalmologist in All 3 States, Stratified by Age and Race/Ethnicity

ETT to Nearest Ophthalmologist, minutes	Kentucky No. (%) Total	Population		Persons Younger Than 65 Years	Persons Older Than 65 Years
		Non-Hispanic White	Non-Hispanic Black Hispanic		
10	1 834 742 (42.3)	1 431 802 (38.2)	249 317 (74.9)	74 511 (56.1)	1 592 659 (42.3)
30	3 385 205 (78.0)	2 429 317 (65.7)	442 140 (76.5)	45 4 003 794 (92.3)	2 423 083 (64.4)
45	4 284 905 (98.7)	3 692 687 (86.2)	332 459 (99.8)	132 484 (99.7)	3 714 673 (98.8)
60	4 337 550 (99.9)	3 692 687 (86.2)	332 459 (99.8)	132 484 (99.7)	3 714 673 (98.8)
90	4 337 550 (99.9)	3 692 687 (86.2)	332 459 (99.8)	132 484 (99.7)	3 714 673 (98.8)
Total	4 339 367	3 745 655	333 075	132 836	3 761 140

Oklahoma

10 1 907 332 (50.8) 1 226 124 (47.6) 207 928 (76.4) 222 053 (66.9) 1 670 368 (51.5) 236 964 (46.8) 30 2 983 285 (79.5) 2 029 408 (78.8) 250 267 (92.0) 271 619 (81.8) 2 599 072 (80.1) 384 213 (75.8) 45 3 444 605 (91.8) 2 359 204 (91.6) 261 908 (96.3) 295 244 (88.9) 2 986 327 (92.0) 458 278 (90.4) 60 3 590 860 (95.7) 2 454 365 (95.3) 268 429 (98.7) 310 561 (93.5) 3 108 898 (95.8) 481 962 (95.1) 90 3 687 215 (98.3) 2 527 871 (98.2) 271 285 (99.7) 318 745 (96.0) 3 189 923 (98.3) 497 292 (98.1) Total (No.) 3 751 351 2 575 381 272 071 332 007 3 244 637 506 714

New Mexico

10 1 118 620 (54.3) 492 854 (59.1) 25 604 (72.2) 512 427 (53.7) 963 091 (53.9) 155 529 (57.1) 30 1 696 341 (82.4) 706 830 (84.8) 33 297 (93.9) 811 859 (85.2) 1 478 100 (82.7) 218 241 (80.2) 45 1 870 422 (90.8) 764 792 (91.7) 34 397 (97.0) 887 046 (93.0) 1 629 235 (91.2) 241 187 (88.6) 60 1 946 258 (94.5) 789 382 (94.7) 34 749 (98.0) 914 795 (96.0) 1 694 171 (94.8) 252 087 (92.6) 90 2 024 793 (98.3) 819 503 (98.3) 35 297 (99.5) 942 525 (98.9) 1 758 645 (98.4) 266 148 (97.8) Total (No.) 2 059 179 833 810 35 462 953 403 1 786 924 272 255

Abbreviation: ETT, estimated travel time.

residents within ETTs of 30, 60, and 90 minutes, respectively (Figure 2). Among the 3 431 538 residents living in urban areas of Oklahoma, 1 902 789 (55.5%) lived within an ETT of 10 minutes of the nearest ophthalmologist office; for the 319 813 residents living in rural parts of the state (8.5% of the state population), 264 560 (82.7%) lived within an ETT of 60 minutes to the nearest ophthalmologist office (Table 2).

New Mexico

Based on the 2010 US census, New Mexico had 2 059 179 residents in 2010.⁶ The total number of AAO-documented office addresses of ophthalmologists practicing in the state was 107; another 122 ophthalmologist offices in the surrounding states were within 90 minutes of the border. The New Mexicans living within ETTs of 10, 30, 60, and 90 minutes by car to the nearest ophthalmologist office were 1 118 620 (54.3%), 1 696 341 (82.4%), 1 946 258 (94.5%), and 2 024 793 (98.3%), respectively (Figure 3). Among the 1 928 316 New Mexico residents living in urban areas, 1 117 641 (58.0%) lived within 10 minutes' ETT to the nearest ophthalmologist office; among the 130 863 rural residents of the state (6.4% of the population), 87 010 (66.5%) lived within an ETT of 60 minutes to an ophthalmologist office (Table 2).

Locations of Surgery-Performing Optometrist Offices Relative to Ophthalmologist Offices

This study found that 34 optometrists had performed 5 or more surgeries each in the defined time period in Kentucky. Of their

368 procedures, 59 (16.0%) were performed at offices in ZCTAs with population-weighted centroids within 10 minutes' ETT to the nearest ophthalmologist office; 215 (58.4%) were within an ETT of 30 minutes of an ophthalmologist office, and 366 (99.5%) were within an ETT of 60 minutes. In Oklahoma, 64 optometrists performed at least 5 such surgeries. Of the 887 total surgeries performed, 148 (16.7%) were done at offices in ZCTAs with population-weighted centroids within an ETT of 10 minutes to an ophthalmologist office; 444 (50.1%) were within 30 minutes, and 779 (87.8%) were within 60 minutes. The 5 optometrists who performed at least 5 surgeries each in New Mexico performed 23 procedures in total; none occurred at offices in ZCTAs with population-weighted centroids within an ETT of 10 minutes of an ophthalmologist office; 5 (21.7%) and 15 (65.2%) of the procedures were performed within an ETT of 30 and 60 minutes, respectively, of an ophthalmologist office.

Residential Locations of Patients Receiving Optometrist Performed Surgery Relative to Ophthalmologist Offices

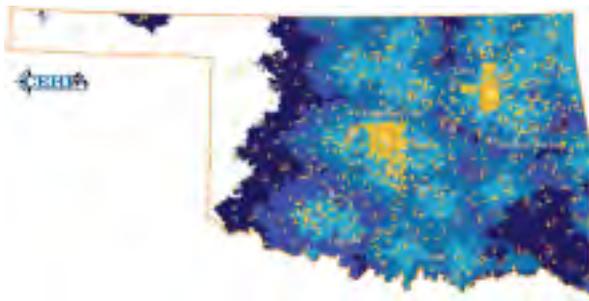
Among the 237 patients in Kentucky who underwent 1 or more surgeries performed by optometrists, 41 (17.3%) lived in ZCTAs with population-weighted centroids within an ETT of 10 minutes of the nearest ophthalmologist office, 138 (58.3%) were within 30 minutes' ETT, and 235 (99.2%) were within 60 minutes' ETT. Among the 519 patients in Oklahoma who underwent surgery by optometrists, 86 (16.6%) lived in ZCTAs with population-weighted centroids within 10 minutes of an ophthalmologist office, 265 (51.1%) were within 30 minutes, and 451 (86.9%) were within 60 minutes. Among the 32 persons

Table 2. Estimated Travel Time to the Nearest

ETT to Nearest Ophthalmologist, minutes	Residents, No. (%)	
	Urban	Rural

Kentucky
 10 1 828 346 (47.8) 6396 (1.2) 30 3 252 645 (85.1) 132 560 (25.7) 45 3 677 833 (96.2) 325 961 (63.2) 60 3 802 369 (99.4) 482 536 (93.6) 90 3 823 408 (99.9) 514 142 (99.7)

Total (No.) 3 823 864 515 503 Oklahoma
 10 1 902 789 (55.5) 4543 (1.4)



45-min drive
60-min drive
90-min drive
3000 people

50 miles Number of procedures performed by 72

30-min drive
60 3 264 300 (96.9) 264 560 (82.7) 90 3 393 537 (98.9) 293 678
(91.8) Total (No.) 3 431 538 319 813 New Mexico

24
15
5 procedures in 2008-2014 per dataset 1

10 1 117 641 (58.0) 979 (0.8) 30 1 669 749 (86.6) 26 592 (20.3)
45 1 809 152 (93.8) 61 270 (46.8) 60 1 859 248 (96.4) 87 010
(66.5) 90 1 915 590 (99.3) 109 203 (83.4) Total (No.) 1 928 316
130 863

Abbreviation: ETT, estimated travel time.

in New Mexico who had optometrist-performed ocular sur-
geries, 1 (3%) lived in ZCTAs with population-weighted cen-
troids within an ETT of 10 minutes to an ophthalmologist; 15
(46.9%) were within 30 minutes, and 23 (71.9%) were within an
ETT of 60 minutes.

Discussion

Using data from the US Census Bureau, an AAO member da
Areas of Oklahoma where the estimated travel time to the nearest
ophthalmologist office is within 30, 45, 60, or 90 minutes. Gold dots
indicate locations with more than 3000 residents. Circles reflect
numbers of optometrist-performed procedures at that location from
2008 through 2014.

est ophthalmologist office for persons residing in 3 states where

4
2
Number of procedures performed by
optometrists who have performed at least

optometrists have a scope of practice expanded to include sur-
gery. In all 3 states, more than 40% of the population live within
an ETT of 10 minutes to the nearest ophthalmologist office;
roughly three-quarters live within an ETT of 30 minutes, and
more than 90% live within an ETT of 45 minutes.

This study also examined access to ophthalmologists for
persons of different races/ethnicities, ages, and residential sta-
tus (urban vs rural) in these 3 states. When analyses were strati-
fied to assess access to ophthalmologist offices by race/
ethnicity, we found that, in all 3 states, more than 75% of non
Hispanic white, non-Hispanic black, and Hispanic people live
within an ETT of 30 minutes of the nearest ophthalmologist
office, and greater than 94% of persons in these racial/ethnic
groups live within an ETT of 60 minutes of an ophthalmolo-
gist office. Likewise, the proportions of people younger than 65
years and those 65 years or older in each of the 3 states re-
siding within an ETT of 30 minutes of an ophthalmologist

50 miles
5 procedures in 2008-2014 per dataset

Areas of New Mexico where the estimated travel time to the nearest
ophthalmologist office is within 30, 45, 60, or 90 minutes. Gold dots
indicate locations with more than 3000 residents. Circles reflect
numbers of optometrist-performed procedures at that location from
2008 through 2014.

Figure 3. Estimated Travel Time to the Nearest Ophthalmologist
Office for Residents of New Mexico



30-min drive
45-min drive
60-min drive
90-min drive
3000 people

ranged from 75.8% to 82.7%, and the proportions within an
ETT of 60 minutes ranged from 93% to 99%. The proportion of
residents of rural communities who live within an ETT of 60
minutes of the nearest ophthalmologist office is 94% for
Kentucky, 83% for Oklahoma, and 67% for New Mexico. For
optometrists who performed 5 or more surgeries, 0.5%, 12.2%,
and 34.8% for Kentucky, Oklahoma, and New Mexico, respec-
tively, occurred in locations where the ETT to an ophthalmolo-
gist exceeded 1 hour. Similarly, 0.8%, 13.1%, and 28.1% of per-
sons receiving surgical services from an optometrist in

database, and a Medicare database, we assessed ETT to the near

Kentucky, Oklahoma, and New Mexico, respectively, lived in ZCTAs with population-weighted centroids exceeding an ETT of 60 minutes to the nearest ophthalmologist office.

In considering the expansion of optometrist scope of practice to include surgery, policymakers must weigh multiple factors. First, ophthalmologists have considerably more training, experience, and expertise in performing laser procedures, injections, and eyelid procedures compared with optometrists, which might translate into higher quality of care.^{18,19} Prior research by our group identified that Medicare patients with glaucoma residing in Oklahoma who underwent laser trabeculectomy by an optometrist had a 189% increased likelihood of requiring additional laser in the same eye compared with those who were treated with lasers by an ophthalmologist (35.9% vs 15.1%; hazard ratio, 2.89; 95% CI, 2.00-4.17; $P < .001$).¹⁶ While claims data alone cannot clarify why so many more patients who were treated by optometrists required additional laser procedures, 1 possibility is that the surgical care quality differs between optometrists and ophthalmologists.¹⁶

Second, what constitutes good access depends on drive time, the sorts of insurance that each practice accepts, the number of days per week when surgeries are performed, and the surgical procedure wait time. These quality-of-care and access factors must be assessed and subsequently balanced in deciding whether to expand optometrists' surgical scope of practice.

There are some similarities, but also a few key differences, between the present analysis and a related study by Lee et al.⁴ Both studies used data from the US Census Bureau and Medicare claims data and geographic information systems analysis to estimate network-based ETT from population centroids to ophthalmologist and optometrist offices. While Lee et al⁴ identified eye care clinician office locations based on Medicare claims record data, we identified ophthalmologist office locations using AAO member data. Although many AAO members practicing in the states of interest accept Medicare and thus would be captured in both data sets, there might be some AAO members who do not routinely care for Medicare enrollees; there are also other ophthalmologists who care for Medicare beneficiaries but are not AAO members. The Medicare data that Lee et al⁴ used also captured only the primary office location of each clinician who cared for Medicare enrollees, whereas the AAO member database used in this study can capture multiple locations where an ophthalmologist practices. Unlike the analysis by Lee et al, the calculations of the present study allowed for the possibility that patients can cross state lines to access the nearest ophthalmologist office. (The importance of this consideration to ETTs is exemplified by northern Kentucky, where residents can travel for care to Cincinnati, Ohio, which has many practicing ophthalmologists). Although the studies have some differences in their methods, both clearly demonstrate that most patients residing in the 3 states of interest live close to the office of at least 1 ophthalmologist.

The present study highlights how tapping into big data can be very useful to help answer questions on population health and guide decision making by health policy makers. More over, by identifying communities where a sizable number of

persons reside (gold dots in Figures 1-3), yet access to ophthalmologists is limited (dark blue and white areas in Figures 1-3), researchers can assist local health care professionals in these communities to implement teleophthalmology²⁰ to screen patients for sight-threatening ocular diseases and identify those who would most benefit from traveling 60 to 90 minutes to an ophthalmologist office for care. Another option policymakers might explore to improve ophthalmologic care access would be to offer financial incentives to ophthalmologists to open offices in underserved locations, in a manner similar to the bonus payments that the US Centers for Medicare and Medicaid Services provides to primary care practitioners who choose to practice in geographic areas where a shortage in primary care health access exists.²¹

Limitations

This study has limitations. First, the AAO database lacks information on the types of health insurance each ophthalmologist accepts; thus, our analyses could not account for this. Ophthalmologists listed in the AAO member database might not see patients with certain health insurance types or those who lack health insurance. If some patients possess a form of health insurance that the nearest ophthalmologist office does not accept, they might need to drive further to receive care.

Second, the AAO database captures the primary office address of each ophthalmologist. Ophthalmologists can provide additional office addresses, but this is optional. For this reason, there might be additional office locations of ophthalmologists that were not considered, which would result in an overestimation of distance to the nearest ophthalmologist office.

Third, when calculating ETTs to the nearest ophthalmologist office, the present study assumed that patients traveled by car and not by public transportation or other means. Excluding these alternate means of transportation could result in travel time estimates that are higher or lower than reported here.

Fourth, the data sources used for this study can identify only the subset of clinicians who performed the procedures of interest. Optometrists without a record of performing any of these procedures might have opted not to participate in expanded scope of practice activities, lacked patients seeking such procedures, or lacked the necessary equipment to serve these patients. Likewise, some ophthalmologists practicing in these states may be subspecialists who do not routinely perform certain procedures, lack the equipment to perform these procedures, or do not care for Medicare enrollees. Although this study could not account for these factors, we recognize they can affect access to care.

Finally, this study uses the most recent census data available, as well as the most recent AAO member database and Medicare database; however, the data from these sources were not from the same years. However, since the population of resi

dents and eye care providers in these 3 states did not change substantially from 2008 to 2016, it is doubtful that these differences in data sets substantially affected the findings of this study.

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Access to Ophthalmologists in States With Expanded Scope of Optometrist Practice Original Investigation Research Optometrists did not live in rural

communities. These sorts of

Conclusions

This study provides information about access to ophthalmologists in states with expanded scope of practice for optometrists. More than 40% of the residents in all 3 states live within an ETT of 10 minutes to an ophthalmologist office; even among the small segment of the population in these states who reside in rural communities, most live within an ETT of 1 hour to an ophthalmologist office. In addition, most patients who underwent surgeries by optom

analyses provide researchers and health policy makers with a stronger basis for evaluating whether legislation expanding the scope of practice of optometrists in these states is achieving its stated purpose, which was to expand access. We encourage all states to perform similar analyses to help assess access to ophthalmologists, as these analyses can help health policy makers with making more informed decisions about whether the potential benefits of expanding scope of practice outweigh the potential tradeoffs in quality of care.

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**VERMONT SECRETARY OF STATE
OFFICE OF PROFESSIONAL REGULATION**

STUDY OF OPTOMETRIC ADVANCED PROCEDURES

During the 2019 Legislative Session, the Vermont Optometric Association (“VOA”) came before the House Government Operations Committee (the “Committee”) to testify in support of a proposal to expand the optometrist scope of practice to permit this profession to perform “advanced procedures” (“proposed advanced procedures”).¹ The Vermont Ophthalmologist Society (“VOS”) and the Vermont Medical Society (“VMS”) adamantly opposed this proposed change in the scope of practice of optometrists.² The Committee determined that a study was needed to “evaluate the safety and public health needs of enlarging the scope of practice of optometrists to include advanced procedures.” Act 30, Section 13 (2019).

In Act 30, the General Assembly directed the Office of Professional Regulation (the “Office” or “OPR”) to conduct this study. The General Assembly further instructed OPR to “evaluate, among other considerations, approaches to advanced procedures in jurisdictions outside Vermont, patient need for access to additional practitioners, effects on patient access to care, effects on patient safety, costs to the health care system, and the existing education and training for optometrists, including the degree to which it addresses training in advanced procedures” and to “inquire into the specific clinical training for both optometrists and ophthalmologists for specific procedures.” Id.

After consulting with stakeholders and conducting extensive and thorough research, OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures. Further, OPR finds that there is little need for, and minimal cost savings associated with, expanding the optometric scope of practice to include advanced procedures. For these reasons, OPR recommends against expanding the optometric scope of practice to include the proposed advanced procedures.

¹ Vermont. House of Representatives. Committee on Government Operations. *Testimony on House Bill 104: An Act Relating to Professions and Occupations Regulated by the Office of Professional Regulation. February 21, 2019.* 2019-2020 Legislative Session. (testimony of Dean Barcelow, O.D., President of the Vermont Optometric Association).

² See e.g., Vermont. House of Representatives. Committee on Government Operations. *Testimony on House Bill 104: An Act Relating to Professions and Occupations Regulated by the Office of Professional Regulation. February 21, 2019.* 2019-2020 Legislative Session. (written statement of Vermont Ophthalmological Society). and Vermont. House of Representatives. Committee on Government Operations. *Testimony on House Bill 104: An Act Relating to Professions and Occupations Regulated by the Office of Professional Regulation. February 21, 2019.* 2019-2020 Legislative Session. (written testimony of Dr. Amy Gregory, M.D., President of the Vermont Ophthalmological Society).

1

Legal Standards and Analytical Structure

To guide its analysis in this report, OPR has relied on the following language in Section 13 of Act 30:

Sec. 13. OFFICE OF PROFESSIONAL REGULATION; STUDY OF OPTOMETRIC ADVANCED PROCEDURES

(a) The Office of Professional Regulation shall conduct a study to evaluate the safety and public health needs of enlarging the scope of practice of optometrists to include advanced procedures. In conducting this study, the Office shall consult with relevant stakeholders, including the Vermont Board of Optometry, the Vermont Optometric Association, the Vermont Board of Medical Practice, the Vermont Department of Health, and the Vermont Ophthalmological Society.

(b) The study shall evaluate, among other considerations, approaches to advanced procedures in jurisdictions outside Vermont, patient need for access to additional practitioners, effects on patient access to care, effects on patient safety, costs to the health care system, and the existing education and training for optometrists, including the degree to which it addresses training in advanced procedures. The Office shall inquire into the specific clinical training for both optometrists and ophthalmologists for specific procedures.

(c) On or before January 15, 2020, the Office shall report its findings, including any recommendations for legislative action, to the House Committees on Government Operations and on Health Care and to the Senate Committees on Government Operations and on Health and Welfare. *Id.*

Though not specified in Act 30, OPR also considered the policy and criteria set forth 26 V.S.A. Chapter 57 (“Chapter 57”) in its analysis of whether to recommend expanding the optometric scope of practice. Typically applied by OPR in analyses of whether to initiate or continue the regulation of a profession, the Chapter 57 policy and criteria require regulation in circumstances when the following can be demonstrated:

(1) it can be demonstrated that the unregulated practice of the profession or occupation can clearly harm or endanger the health, safety, or welfare of the public, and the potential for the harm is recognizable and not remote or speculative;

(2) the public can reasonably be expected to benefit from an assurance of initial and continuing professional ability; and

(3) the public cannot be effectively protected by other means.

-26 V.S.A. § 3105(a).

2

The law does not currently require OPR to consider the Chapter 57 policy and criteria when determining whether the scope of practice of a profession should be expanded. However, OPR finds that this policy and these criteria are equally applicable and valid in the circumstances of scope of practice expansion as in the determination of whether to recommend new regulated profession or an evaluation of continued regulation of a profession. Thus, in its analysis of whether the optometric scope of practice should be expanded to include the proposed advanced procedures, OPR considered whether regulation of the proposed procedures is necessary to protect the public, as well as whether the public’s interest will be served by such regulation and whether there are alternative means of protecting the public. These considerations underly the analysis, below.

In this report, the impact on public safety of scope expansion will be addressed first, followed by an analysis of the need for scope expansion to facilitate access to care, and then, an examination of the costs of scope expansion. Each section – safety, need and access, and costs – includes the arguments in support of expansion, those against, and OPR’s research findings. The first section of the report includes policy recommendations from OPR.

Outreach and Methodology

Outreach

Rather than hold a public hearing on the matter of expanding the scope, the Office met with each stakeholder named by the General Assembly in Act 30 – the Vermont Board of Optometry (the “Board”), the VOA, the Vermont Board of Medical Practice (the “BMP”), and the VOS³ – individually to allow the stakeholder the opportunity to share its complete views on the proposed expansion of the optometrist scope of practice. Additionally, OPR invited stakeholders to share any additional information or questions that may develop or be thought of after the in-person meeting.

At the stakeholder meetings, OPR asked the stakeholder questions regarding education and training, patient safety, access to care, and costs. Additionally, VOA was asked to provide the list of advanced procedures that optometrists wanted to be permitted to perform under an expanded scope of practice.⁴

³ The General Assembly also instructed OPR to consult with the Vermont Department of Health. Upon receipt of an inquiry from OPR, the Vermont Department of Health referred the Office to the Board of Medical Practice for input.

⁴ VOA stated that it would prefer the list of advanced procedures remain open so that, as optometric education and training advanced, optometrists could adapt their practices. VOA’s suggested provisions included permitting optometrists to perform those procedures “as taught” in optometry school or deferring to the Board of Optometry to evaluate and declare, by Rule, what procedures were within the optometric scope of practice. OPR requested a specific list of procedures for several reasons: (1) the “as taught” language was too open-ended given that it was not then clear – and is still not clear – which procedures are consistently taught in optometric school; (2) the specific list was needed to evaluate whether optometric schools provided consistent and/or sufficient education and training on the requested procedures; and (3) in Vermont, the scope of practice of a profession is established by law through the legislature rather than using the rulemaking process to determine scope.

3

OPR asked VOA to reach out to optometrists and their patients and to have these individuals call or email OPR directly to share stories about challenges accessing the proposed advanced procedures under the current optometric scope of practice. Five individuals emailed OPR to share their stories regarding accessing the proposed advanced procedures. Two additional patients shared their stories with OPR through their optometrist, Dr. Steven St. Marie. OPR believes this direct outreach to optometrists and patients was more effective than holding a general public meeting, as it permitted affected individuals to share their complete stories without interruption and it did not require consumers to travel or to share in a large group.

OPR also asked the directors of the 21 schools of optometry in the United States to provide detailed curricula, course descriptions, syllabi and other information about optometric training and education on the proposed advanced procedures. None of the directors or schools responded to OPR. As a result of OPR’s request to the school directors, the President of the Association of Schools and Colleges of Optometry (“ASCO”),⁵ Dr. Elizabeth Hoppe, OD, MPH, DrPH, contacted the Office to discuss optometric education and training. Dr. Hoppe could not provide information about the course offerings, curricula or syllabi from the schools of optometry. She did share the guidance documents that ASCO provides to its

member schools regarding competencies optometry students should meet upon graduation from optometry school and recommendations for assessment of these competencies.

Research

OPR conducted extensive research regarding the expansion of the optometric scope of practice and the impacts thereof. OPR considered the following sources and information in its review:

- Data regarding the number and location of optometrists and ophthalmologists in Vermont •
Optometric scope of practice laws in other states
- Policy reports on optometric scope expansion from other states
- National Practitioners Data Bank data
- Disciplinary data and information for Vermont-licensed optometrists
- Disciplinary actions and complaints against optometrists in other states
- Course catalogues and course descriptions from U.S. schools of optometry, where available •
Applicable editorial, policy and scientific literature
- Advocacy materials from professional associations

OPR believes these methods of outreach, research and information gathering were comprehensive and effective and that it has thoroughly explored varying perspectives and the available information on the issue of optometric scope expansion.

⁵ ASCO is a “non-profit education association representing the interests of optometric education.” *Background, Mission and Vision*, ASCO, <https://optometriceducation.org/about-asco/background-and-mission> (last reviewed January 15, 2020).

History and Background

The Ongoing Debate

The VOA’s scope expansion proposal is part of a 100-year, national effort by the American Optometric Association (“AOA”) to expand the optometric scope of practice in each state. In the February 2012 edition of the AOA’s Journal *Optometry*, Sherry L. Cooper, the then Associate Director of State Government Relations for the AOA, described the goal of the AOA as having every state’s scope of

optometric practice permitting a license holder “to examine, diagnose, treat, and manage diseases or conditions of the vision system, eye, and related structures with any appropriate means” including “every facet of the practice of modern optometry, from the use of lenses and prisms...to the use or prescription of appropriate drugs, including controlled narcotic substances; to the performance of non-surgical and surgical procedures.”⁶

In response to these efforts by the AOA, ophthalmologists and physicians have organized on the state and national levels to oppose proposed scope expansions. The American Academy of Ophthalmology (“AAO”) established the Surgical Scope Fund for the purpose of collaborating with state ophthalmological and medical societies to oppose these efforts to expand the optometric practice. These ophthalmologist groups argue that optometric scope expansion poses a threat to patient safety because optometrists lack the education and training necessary to perform the procedures proposed.⁷

Throughout these debates, similar arguments and points of contention have arisen: (i) whether optometrists can safely provide the optometric procedures proposed; (ii) whether there is a need for an expanded optometric scope of practice to address a lack of patient access to ophthalmological services; and (iii) whether costs savings would be realized from an expanded optometric scope of practice. It is, thus, appropriate that Act 30 charges OPR with evaluating safety, access and need, and cost associated with the expansion of the optometric scope of practice.

Other States’ Experiences

Other states have expanded the optometric scope of practice in various ways. Currently, five states – Oklahoma, Kentucky, Alaska, Louisiana and Arkansas⁸ – permit optometrists to prescribe pharmaceuticals and to perform all of the proposed advanced procedures (i.e., laser treatments, injections, and removal of lesions and growths). Five states permit optometrists to remove lesions and growths, without lasers,

⁶ Sherry L. Cooper, *1971-2011: Forty Year History of Scope Expansion Into Medical Eye Care* (Saint Louis, MO: American Optometric Association, 2011).

⁷ *Advocacy*, AAO, <https://www.aao.org/advocacy/surgical-scope-fund/overview> (last reviewed January 15, 2020).⁸ Arkansas’ legislature passed a law in 2019 expanding the optometric scope of practice to permit the advanced procedures proposed by the VOA. The law has yet to take effect.

and to prescribe pharmaceuticals.⁹ The remaining forty states (including Vermont) do not currently

permit optometrists to perform the proposed advanced procedures.¹⁰

Washington, New Mexico and Nebraska issued policy reports when considering whether to expand the optometric scope of practice to include the proposed advanced procedure. After these reviews, Washington and Nebraska declined to expand the scope of practice while New Mexico expanded the scope to permit injections and the non-laser removal of lesions. Laser procedures remain prohibited in New Mexico.

Vermont's History

There have been prior expansions of the Vermont optometric scope of practice, including in 1983, 2004, and, most recently, in 2019. A similar debate between optometrists and ophthalmologists about scope expansion occurred in the 2003 legislative session, this time about optometrists using therapeutic pharmaceutical agents. On December 31, 2003, OPR issued a "Report on S. 54: Expanded Scope of Practice for Optometrists", which concluded that, with the appropriate safe guards, the public would not be harmed by expanding the optometric scope of practice to permit optometrists to use therapeutic pharmaceutical agents.¹¹ Subsequently, the General Assembly passed Act 108, which permitted optometrists holding an additional "endorsement" on their optometry license (a) to use pharmaceutical agents for the "appropriate diagnosis, management, and treatment of the eye and adnexa," and (b) to "perform epilation of the eyelashes including electrolysis, punctal dilation, and lacrimal irrigation, and

⁹ *Optometrist Scope of Practice*, NCSL, <http://www.ncsl.org/research/health/optometrist-scope-of-practice.aspx> (last reviewed January 15, 2020). Nine states defer to the state's Board of Optometry to define the optometric scope of practice. None of these states permits optometrists to perform all of the proposed advanced procedures, though there are a few minor exceptions. California permits optometrists to perform "Intravenous injection for the purpose of performing ocular angiography at the direction of an ophthalmologist as part of an active treatment plan in a setting where a physician and surgeon is immediately available." CA Bus. & Prof. § 3041(d)(15). Additionally, with a special license endorsement, California-licensed optometrists may provide immunizations. CA Bus. & Prof. § 3041(f). Iowa permits optometrists to perform minor surgical procedures that do not require any injectable or general anesthesia, lasers, moderate sedation, or penetration of the globe. Optometrists in West Virginia may perform minor surgical procedures and administer medications by injection (though no retrobulbar or peribulbar injections are permitted). West Virginia prohibits optometrists from performing surgery using lasers, and from performing cataract or retinal surgery. North Carolina permits optometrists to perform injections. ¹⁰ *Id.*

¹¹ Vermont: Secretary of State, Office of Professional Regulation, *Report of S.54: Expanded Scope of Practice for Optometrists* (December 31, 2003) available at <https://www.sec.state.vt.us/media/411945/optometryreport.pdf>. OPR acknowledges that the 2003 report arrived at a different policy recommendation despite analysis of similar factors. However, the activities that the optometrists were seeking authorization to perform in 2003 were of a different nature and there was additional information about education and training standards. For instance, the ACOE Professional Optometric Degree Program Standards 2000 referenced by the Optometrists and relied on by the Office in 2003 are no longer available. Notably, in 2003, even the VOA proponents of scope expansion stated that "ophthalmologists receive extensive training for years in surgery and tertiary medical eye care that optometrists do not receive." The VOA went on to state that optometrists "receive the necessary specialized ocular education and clinical training required to provide primary eye care."

insert punctal plugs.” Act 108, Section 5 (2004). The Board of Optometry and OPR then promulgated rules establishing qualifications and requirements for obtaining this endorsement.¹²

Notably, the 2004 law expressly prohibited optometrists from performing surgery (defined as “any procedure in which human tissue is cut, penetrated, thermally or electrically cauterized except when performing electrolysis, or otherwise infiltrated by mechanical or laser means”), as well as the use of injections (except for when needed for emergency stabilization of a patient) and the removal of skin lesions. Act 108, Sec. 5 (2004) *amending* 26 V.S.A. § 1728.¹³

Recommendations

The Office of Professional Regulation recommends against expanding the optometrist scope of practice to include the proposed advanced procedures. At this time, the Office cannot conclude that optometrists have the education and training to safely provide these procedures. Nor can it find that there is a need for expanded access to the proposed advanced procedures or a reduction in costs associated with scope expansion.

Safety

The proposed advanced procedures, if performed by untrained individuals, pose risks to the health and well-being of the public. This is evidenced by the complexity of each procedure and the potential complications thereof. There has been little uncontroverted evidence provided supporting the conclusion that optometrists are capable of safely performing these advanced procedures or managing these risks. The VOA offers only that the procedures are “simple” and straightforward. However, the VOS has provided ample evidence that these procedures require a degree of skill to perform the procedure, to determine who is a good candidate for the procedure, and to manage unforeseen complications. The states that have expanded the scope of practice report that there have been no complaints, complications or malpractice cases against any optometrists. However, the data from the National Practitioner Data Bank (“NPDB”) contradicts these reports. VOA references low malpractice insurance rates as an indicator of safety, but the insurance industry itself disputes this characterization.

Most significant for OPR is the lack of evidence showing that optometric education prepares optometrists to perform these proposed advanced procedures. Despite multiple efforts through various sources, OPR was unable to gather specific or detailed information about the curricula and courses offered by the U.S.

¹² In 2019, the optometric scope of practice was revised again to permit all optometrists holding a Vermont license to use pharmaceutical agents in the treatment of glaucoma without an additional endorsement on the license. Act 30, Section 12 (2019).

¹³ The express prohibition was removed from 26 V.S.A. §1728 in 2019 via Act 30 as part of the process of permitting all optometrists holding a Vermont license to use pharmaceutical agents in the treatment of glaucoma without an additional endorsement on the license. OPR's interpretation of the law remains the same, however -- it is unprofessional conduct for Vermont-licensed optometrists to "practice", "offer to practice", "perform" or "provide" laser surgeries, removal of lesions or growths, or injections. *See e.g.*, 26 V.S.A. §1719.

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schools of optometry in these advanced procedures. Other states attempting to gather such information have met with similar refusal to disclose detailed curricula.¹⁴

Even the more stringent and comprehensive optometric educational programs do not provide the level of training and experience obtained by ophthalmologists. What information is available about U.S. optometry schools shows that (a) curriculums vary widely (there is no standardized course of study regarding these advanced procedures); and (b) courses on lasers, injections and minor surgical procedures are very limited – they are short courses, with little to no lab time, and minimal practical experiences. Continuing education courses on advanced procedures present similar limitations. They are very short and have negligible practical experience requirements.

Providers who perform the proposed advanced procedures need to be trained in assessing the systemic condition of patients, to be educated on how to adjudge whether a patient is a candidate for a procedure, and to be qualified to address medical complications. OPR cannot conclude that optometrists have this necessary education and training. OPR is thus concerned that permitting optometrists to perform these advanced procedures poses a risk to the public's safety

Need and Access

The Office finds that there is insufficient evidence showing a need for expanded access to care that can be addressed by expanding the optometric scope of practice. OPR acknowledges that there are patients who have experienced longer wait times than preferable and that have had to drive further than desired. However, the evidence shows that, in most cases, there is little delay in treatment, there is no reported detriment from the delays that do exist, and there is additional capacity:

- In the reports to OPR, initial examinations with ophthalmologists have typically occurred within weeks after a referral from optometrist. Ophthalmologists reported in survey results that they are available to provide necessary advanced procedures immediately, should an urgent case arise.
- Commenters also stated that advanced procedures were delayed following the initial ophthalmology

exam. The timing of the advanced procedures following the initial exam is part of an ophthalmologist's professional assessment. OPR is reticent to interfere with or opine on whether an ophthalmologist's assessment about the course and timing of treatment in these cases is appropriate.

- No evidence was presented showing that patients are experiencing detrimental disease consequences due to waiting for procedures.
- According to Medicare data and reports from providers, there are relatively few of these advanced procedures performed every year and ophthalmologists around the state have said they have the capacity to care for these patients.

¹⁴ Joseph Acierno, M.D., J.D., *Director's Report on the Proposal to Expand the Scope of Practice of Optometrists*, Nebraska: Department of Health and Human Services, Division of Public Health (March 10, 2014).

Additionally, there does not appear to be a need for making these advanced procedures available in locations closer to Vermont residents. Vermont data shows that there is an ophthalmologist located within 30 miles of most Vermont residents.¹⁵ Even if there is a need for locating these services closer to patients, expanding the optometric scope of practice is unlikely to address this issue. Most Vermont ophthalmologists and optometrists are located in the same places.¹⁶ In turn, permitting optometrists to perform the advanced procedures would simply make patients drive equally as far to see their optometrist rather than an ophthalmologist. Supporting this supposition is the experience in states where optometric scope expansion has occurred. In these states, few optometrists have chosen to perform these advanced procedures and those who do are located near ophthalmologists (typically near a population center).

Regarding patient choice, the confusion of the public regarding the differences between optometry and ophthalmology shows that the public does not have the information necessary to make an informed choice between providers when it comes to seeking these advanced procedures. In this case, a move to expand the scope of optometric practice could actually create additional confusion for patients. Based on the information available, OPR cannot find that there is a need for greater access to care or that an expanded scope of practice would address this need.

Costs

OPR concludes that there will be little, if any, cost savings associated with the expansion of the scope of practice. Patients may be saved the additional costs of seeing a new doctor, repeating an exam, and traveling twenty minutes to see another provider. However, it is not clear to OPR that these costs savings

are beneficial to the patient. Evidence provided by the VOS and experiences in other states show that optometrists sometimes refer patients for or perform unnecessary advanced procedures. At least in one study showed that significantly more repeated procedures were required when the initial procedure was performed by an optometrist. Thus, the initial costs savings to the patient may be outweighed by the costs of an unnecessary or repeated procedure.

Further, the VOA acknowledges that the number of advanced procedures would increase in the short term as optometrists begin using lasers. The cost of the equipment is also significant and may drive up utilization. Because of these increased costs that are not offset by other apparent savings, OPR cannot conclude that expanding the scope of optometric practice would result in any cost savings.

For the above reasons, OPR recommends against expanding the optometric scope of practice to include the proposed advanced procedures.

¹⁵ See Figures 2 and 3 in Appendix A.

¹⁶ See Figure 1 in Appendix A.

Proposed Advanced Procedures

The VOA has asked OPR to include the following proposed advanced procedures in the optometric scope of practice:

- Anterior Segment Laser Procedures:
 - Laser Capsulorhexis
 - YAG Capsulotomy
 - Laser Trabeculoplasty
 - Laser Iridotomy

- Injections of the Eyelids and Adnexa
 - Injections into the eyelid
 - Injections of the subconjunctival space
 - Intramuscular and subcutaneous injections
 - Intravenous injections

- Removal of benign eyelid and eye growths (e.g., pedunculated lesions, papilloma, keratosis, cutaneous cysts, etc.)¹⁷

Following is a brief description of the proposed advanced procedures. Also described are the purpose of the procedures and associated risks and complications.

Anterior Segment Laser Procedures

A. Cataracts: Laser Capsulorhexis and YAG Capsulotomy

- *Laser Capsulorhexis* – A laser capsulorhexis is the process of using a laser to make an incision around the capsule of the eye to permit the removal of the lens during cataract surgery.
 - Whether performed by an optometrist or an ophthalmologist, this procedure must be done in an operating room because surgery to remove the cataract and replace the lens follows. The VOA proposes to offer this procedure as the beginning part of a cataract surgery and then turning the patient over to an ophthalmologist to complete the removal and replacement of the lens.
 - This procedure can be done manually, as well as with a laser. There is currently one FEMTO laser, the laser that performs this surgery, in Vermont. The VOS reports that ophthalmologists prefer the manual method of performing a capsulorhexis (i.e., using a blade to create the incision), as there can be problems with the lasers cutting all the way

¹⁷ Dean Barcelow, O.D. Letter to the House Committee on Government Operations and Representative Copeland Hanzas, *Re: Guidance on What Procedures Optometry is Expecting to Look at Once Rulemaking Statute is in Place* (February 12, 2019).

through the tissue and the resultant need to repeat the incision. Additionally, there are reported challenges controlling the size and contour of the incision with the laser.¹⁸

- Complications
 - Imprecise and/or incomplete incision
 - Repeated surgery
 - Poor visual acuity following surgery
 - Repeat tear of the rhexis (the incision)
 - Blindness

- Loss of eye¹⁹

- *YAG Capsulotomy* – After cataract surgery, the capsule that holds the lens can become cloudy. A YAG capsulotomy relieves this cloudiness by using a YAG laser to create a clear hole at the back of the capsule, thereby allowing light through.

- The development of capsule cloudiness is common in patients who have had cataract surgery and multiple capsulotomies may be needed over time.

- Complications

- If the hole tears further or creates weaknesses in the capsule, the lens can slip or dislocate completely. This requires surgery to retrieve and, likely, replace the lens.

- Secondary effects from the laser energy include interfering with the function of the trabecular meshwork (see Glaucoma section), which can lead to an intraocular pressure spike.

- Retinal detachment can also occur from this surgery if a preexisting retinal weakness is exacerbated or disturbed by the laser energy.

- The shock waves of the laser can create white dots (“pits”) on the new lens which effect the clarity of vision.

- Additional complications include intraocular bleeding, pupil distortion, intraocular pressure rises, corneal abrasions, conjunctivitis, reactivation of ocular herpes, corneal decompensation, cataracts, blindness.²⁰

B. Glaucoma: Laser Trabeculoplasty and Laser Iridotomy

Fluid in the front of the eyes typically drains through the trabecular meshwork located at the junction of the iris and the cornea. When more fluid is produced than can drain through the meshwork (from diseases such as glaucoma), the pressure inside the eye increases. A person can go blind if the pressure becomes extreme and is not relieved. To reduce pressure, ophthalmologists sometimes use a laser to create a

¹⁸ *Capsulorhexis Strength with FLACS Surgery*, Investigative Ophthalmology & Visual Science, <https://iovs.arvojournals.org/article.aspx?articleid=2526362> (May 2016).

¹⁹ Vermont Ophthalmological Society, *Additional Descriptions of “Advanced Procedures” Under Consideration* (October 2019).

²⁰ *Id.*

“hole” through which the fluid can flow. Two of these procedures include the laser trabeculoplasty and the laser iridotomy.²¹

- *Trabeculoplasty* – When the junction between the iris and the cornea is not completely closed (i.e., it is not completely “occluded”), a laser can be used to create a hole in the trabecular meshwork, a “hair thin” line of tissue, and allow fluid to again flow through this passage.

- Complications

- The laser must be precisely targeted on the narrow trabecular meshwork. Laser energy hitting the surrounding structures could damage those structures and result in no decrease in pressure.

- Similarly, over treatment can result in damage to the surrounding structures and limit their function, resulting in an increase in pressure.

- Other complications include corneal abrasions/infections/ulcers, conjunctivitis, reactivation of ocular herpes, corneal decompensation, cataracts.²²

- *Laser Iridotomy* – When the junction between the iris and the cornea is nearing complete occlusion (i.e., the trabecular meshwork is no longer visible and the iris sits close to the cornea), a laser can be used to make a hole at the edge of the iris to restore the flow of fluid and relieve pressure.

- Complications

- If an iridotomy is placed in the wrong location, the patient will effectively have two pupils, resulting in vision distortion and double vision.

- As the iris contains blood vessels and nerves, so placement of the laser is important to avoid bleeding and pain. Bleeding in the eye can result in an increase in pressure that can require surgery to relieve.

- Cataract can result if the hole is not made far enough out on the iris.

- Other complications include corneal abrasions/infections/ulcers, conjunctivitis, reactivation of ocular herpes, corneal decompensation, cataracts.²³

Injections of the Eye and Adnexa

The VOA did not provide the types or purposes of injections it is requesting in the expanded scope of practice. Nor did it specify the medications to be injected. Rather, the VOA proposed a list of anatomical structures optometrists would be allowed to inject. The VOA notes that it is not seeking to do intraocular injections.²⁴

- *Injections into the eyelid* – VOA proposes to inject topical (local) anesthesia into the eyelid before removal of growths or lesions on the eyelid and to inject steroids for chalazion (i.e., sty) removal.

²¹ *Id.*

²² *Id.*

²³ *Id.*

²⁴ Dean Barcelow, O.D. Letter to the House Committee on Government Operations and Representative Copeland Hanzas, *Re: Guidance on What Procedures Optometry is Expecting to Look at Once Rulemaking Statute is in Place* (February 12, 2019).

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- *Injections into the subconjunctival space* – VOA proposes to inject glaucoma medications into the subconjunctival space (i.e., the space between the conjunctiva – the thin clear membrane covering the eye and the inner eyelid – and the lens). VOS notes that injections into the subconjunctival space are very rarely done and, when performed, are done by surgeons.

- The VOA also notes that some states permit optometrists to inject vaccines in public health emergencies. VOS notes that intramuscular injections are also used for performing Botox procedures.

- *Intravenous injections* – The VOA proposes to use intravenous injections to perform fluorescein angiography through the eye. This is the process of injecting a dye into the bloodstream that then highlights the blood vessels in the back of the eye, allowing them to be photographed.²⁵

Improper injections can result in infection, excessive bleeding and bruising, damage to the nerves surrounding the eyelid resulting in the inability to open or close the lid, damage to the surrounding systems, and the needle slipping into the eyeball.²⁶

Removal of Benign Eyelid and Eye Growths

The VOA has proposed being permitted to remove benign eyelid and eye growths, including “pedunculated lesions, papilloma, keratosis, cutaneous cysts, etc.”²⁷ VOA states that they would remove a growth and send the tissue to a pathologist to determine whether the growth is benign or malignant, similar to the process ophthalmologists currently follow.

VOS notes that the eyelid is very thin, and lesions may involve muscles and nerves beneath the lid. Additionally, optometrists would be cutting near complex and delicate systems, such as the lacrimal (tear) drainage system. An additional risk is that it is not always clear whether a growth is benign or malignant, the determination of which may impact the extent and complexity of the procedure.

- **Complications**

- Damage to the muscles or nerves beneath the eyelid can result in the permanent drooping of the lid or the inability to close the lid (which can require a skin graft to remedy).
- Damage to the lacrimal system can result in permanent tearing or dry eyes.

- Improper removal of a malignant growth (e.g., not making sure all the margins of the removal are “clean”) can result in the spread or regrowth of the cancer.

²⁵ *Fluorescein Angiography*, Healthline <https://www.healthline.com/health/fluorescein-angiography> (last visited January 15, 2020).

²⁶ Vermont Ophthalmological Society, *Additional Descriptions of “Advanced Procedures” Under Consideration* (October 2019).

²⁷ Dean Barcelow, O.D. Letter to the House Committee on Government Operations and Representative Copeland Hanzas, *Re: Guidance on What Procedures Optometry is Expecting to Look at Once Rulemaking Statute is in Place* (February 12, 2019).

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- Suturing may be required when the growth is larger underneath the skin than anticipated or if the skin tissue spreads farther than expected.²⁸

Summary of Arguments For and Against Optometric Scope Expansion and Analysis of Findings

Patient Safety

After a thorough review of the research and consultation with the stakeholders, OPR finds that there is little evidence demonstrating that optometrists have the education and training necessary to provide the proposed advanced procedures safely. The following section details the arguments that optometric scope expansion is safe, and those arguments that scope expansion will endanger the public. The report then states OPR’s findings.

I. Argument that Expanded Scope will Protect Patient Safety

A. Advanced Procedures and Safety

Dean Barcelow, O.D., President of the VOA, and Steven St. Marie, O.D., an optometrist and member of the VOA, met with OPR on August 5, 2019.²⁹ The VOA contends that the proposed advanced procedures are straight-forward, minor procedures that are a part of providing “primary eye care” to patients.³⁰ The “difficult part” of these procedures, according to the VOA, is pre- and post-surgical management, which optometrists are charged with handling under the current scope of practice. The VOA referred OPR to YouTube videos showing the proposed advanced procedures as evidence of the simplicity of the

techniques involved in the surgical portion of the procedure.³¹

Regarding injections, Dr. Barcelow stated that intraocular injections (i.e., into the globe of the eye) should not be permitted, but that the other forms of injections (eyelid and adnexa, subconjunctival, intramuscular and subcutaneous, and intravenous) should be allowed. He also noted that optometrists should be permitted to remove growths and lesions and send them to a pathologist to analyze whether the growth is malignant or benign, just as an ophthalmologist would do.

²⁸ Vermont Ophthalmological Society, *Additional Descriptions of "Advanced Procedures" Under Consideration* (October 2019).

²⁹ Meeting Notes, *Vermont Optometric Association* (Vermont: Secretary of State, Office of Professional Regulation, August 5, 2019).

³⁰ *American Optometric Association. Doctors of Optometry are America's Primary Eye Care Providers* [Fact Sheet]. Received July 24, 2019.

³¹ See e.g., American Academy of Ophthalmology, *YAG Capsulotomy After Cataract Surgery* (YouTube) (February 16, 2017).

B. Potential Complications

When asked about the risks for complications, Dr. St. Marie contended that accidents happen to even the best surgeons but that the rate of complications would be no greater with optometrists than with ophthalmologists. He cited the low premiums for malpractice insurance in Oklahoma, where optometrists are permitted to perform the proposed advanced procedures, as evidence of this low risk of complications. Dr. St. Marie further stated that the riskiest complication from performance of these eye procedure was post-procedure inflammation, which optometrists treat and address already. The other proposed advanced procedures, per Dr. St. Marie, pose minimal risks of complications.

C. Safer to Treat Faster

Dr. St. Marie and Dr. Barcelow both argue that, by permitting optometrists to perform these advanced procedures, patients will receive treatment faster, which benefits safety. When a referral to an ophthalmologist is required, the patient must wait to attend the initial ophthalmological appointment, have another exam, and, then, perhaps schedule and wait for a surgical appointment. These delays and redundancies, it is argued, result in a delay in care during which diseases can worsen and medications,

which are symptomatic treatments only, must be taken. Additionally, delayed care may lead to patient non-compliance with treatment recommendations.

D. Education and Training

Dr. Barcelow stated that he believed the proposed advanced procedures are being taught in all U.S. optometry schools. VOA provided a table listing courses at each optometry school, as copied from the schools' websites, that referenced the proposed advanced procedures. Dr. Barcelow also reported that education and training on these advanced procedures can be obtained through continuing education courses. He reported taking a weekend-long course that covered these procedures in lectures and that included clinical practice on other students.

The VOA and other advocates for scope expansion further argue that optometrists, like other doctoral level health professionals, should be trusted to only perform those procedures in which they are trained and capable. Thus, even if the optometric scope of practice is expanded, optometrists would not provide the advanced procedures if they are not qualified to do so.

The VOA also provided a factsheet developed by the AOA giving a general overview of optometric education in the U.S. and comparing it to medical education. The factsheet shows 47 total courses completed in most U.S. optometry schools, including one labeled "Injections and Minor Surgical Procedures" and one labeled "Ophthalmic Lasers".³² No further description of course content is provided.

³² *Id.*

II. Argument that Expanded Scope will Harm Patient Safety

Board of Medical Practice

OPR consulted with the Executive Director of the Board of Medical Practice, David Herlihy, regarding the opinions of the BMP on expanding the optometric scope of practice. At its November 6, 2019 meeting, the BMP passed a motion stating its position that, regarding expanding the scope of practice, "There is no evidence of [sic] justification for accepting greater risk on behalf of Vermont patients. The evidence shows no problem with access to care for the procedures at issue."³³ The BMP noted the vast differences between ophthalmological and optometric education and training, and the risks posed by surgical procedures on eyes.³⁴ The BMP also noted that there is less information available about the "adverse history of optometrists" than there is about physicians, who are often required to report

adverse events.³⁵

Vermont Ophthalmological Society and Vermont Medical Society

OPR consulted with Dr. Amy Gregory, M.D., Chair of the Vermont Ophthalmological Society (“VOS”); Dr. Jessica McNally, M.D., an ophthalmologist at the University of Vermont Medical Center in Berlin; Jessa Barnard, Director of the Vermont Medical Society; and Stephanie Winters, the Executive Director of the Vermont Ophthalmological Society. The following are the arguments presented by VOS and VMS.

A. Risks of Advanced Procedures

Dr. Gregory and Dr. McNally contended that the proposed advanced procedures are complex procedures that require years of training to determine when patients require such a procedure, to ensure efficacy, and to avoid or to quickly address complications. The doctors explained that the YouTube videos cited by VOA as evidence of the ease of these advanced procedures, are actually made by ophthalmologists for patient education and reassurance. The videos are intentionally non-technical, simplifications of the procedures created to ease patients’ minds and to provide general information. To demonstrate the complexities of these procedures, the ophthalmologists showed videos of the entire procedure being performed. The videos showed the very thin (“human hair width”) and difficult-to-detect line of the trabecular meshwork during a laser trabeculoplasty, the challenges with creating a complete cut using a FEMTO laser during a capsulorhexis, and the potential for damage due to a slight misplacement of the laser during an iridotomy or capsulotomy.³⁶

In addition to the complications outlined in the “Advanced Procedures” section, herein, and the complexity of each of the proposed advanced procedures, the doctors also noted the following specific challenges with several of the advanced procedures:

▪ Capsulorhexis –

- The ophthalmologists state that capsulorhexis is an integral part of the cataract surgery and there is no need to create a separate, second surgery in which the optometrist performs the capsulorhexis prior to an ophthalmologist performing the cataract removal and lens replacement. The doctors stated that this would result in

³³ Vermont: Department of Health, Board of Medical Practice, *Minutes of the November 6, 2019 Board Meeting*, 4- 5 and Appendix B (November 6, 2019).

³⁴ *Id.*

³⁵ *Id.*

³⁶ See e.g., Chris Teng, M.D., *Selective Laser Trabeculoplasty (SLT) Compilation* (YouTube) (January 29, 2013).

unnecessary multiple procedures, which adds complexity, time, and cost, and increases the chances for complications.

- The doctors also reported that this procedure is typically, and preferably, done with a blade rather than a laser.

- They further noted that there is currently only one FEMTO laser in Vermont (the laser that performs this procedure). This, in turn, poses a threat to safety, as providers will not have the opportunity to gain the necessary experience to become competent at performing the laser capsulorhexis procedure.

- Injections –

- Regarding injections, the doctors noted how rarely subconjunctival injections are performed. The doctors stated that it is not medically recommended or safe to perform subconjunctival injections in an office setting. They reported that a surgeon may give a subconjunctival injection prior to an intravitreal (or intraocular) injection (which the VOA stated they did not wish to include in an expanded scope), or before surgical removal of an eye ball tumor.

- The ophthalmologists also noted that it was unusual to request to do intramuscular and intravenous procedures in an office setting and that the purpose of doing these injections (e.g., for which diseases or conditions) was unclear.

- Removal of Growths and Lesions –

- Regarding removal of growths and lesions, the ophthalmologists emphasized that knowing whether a growth or lesion is malignant or benign is often not clear when beginning a procedure. However, the doctors noted that, through frequent exposure to and experience with removing these growths and lesions, one can become better at predicting whether the condition is malignant or not. This experience and exposure, the doctors argue, comes from many years of medical education and training. Similarly, this education and training prepares providers in knowing how to suture and how to anticipate the way the skin will stretch and spread when cut. Providers without this experience may not anticipate that, for example, a small skin tag could result in a large wound needing significant suturing.

- The ophthalmologists also note that the most recommended treatment for chalazions is to use warm compresses, not to surgically remove the chalazion or inject it with steroids.

B. Evidence of Risk or Harm

The ophthalmologists provided anecdotal data about the safety risks of expanding the optometric scope of practice to include the proposed advanced procedures. Specifically, the doctors shared letters from ophthalmologists in Kentucky and Oklahoma (two states with expanded scopes of optometric practice)

who reported treating patients with complications resulting from botched and/or unnecessary optometrist-performed procedures.³⁷

Despite these anecdotes, the ophthalmologists could not point to any outcomes data showing an increased risks of patient harm due to expanded optometric scopes of practice.³⁸ The doctors argued, however, that the default assumption, in the absence of outcomes data showing harm, should not be that the expanded scope is safe. Rather, when it comes to permitting individuals to perform surgery, the doctors argued that the patient is better protected if there is affirmative evidence showing safety.

C. Malpractice Insurance Rates

The ophthalmologists contended that the malpractice premium rates are not good indications of the low risk of an expanded optometric scope of practice, as these rates are based on optometric practice in all states, not solely on those states where the proposed advanced procedures are permitted. The ophthalmologists provided a letter from the Ophthalmic Mutual Insurance Company (“OMIC”), which insures over 800 optometrists nationwide, stating that optometry malpractice insurance premiums remain low because most optometrists are not permitted to perform laser procedures, surgery or injections.³⁹ In turn, there are fewer “opportunities” for malpractice.⁴⁰ OMIC also notes in its letter that the optometric scope expansions are very recent in most states. Oklahoma was the first to expand the optometric scope of practice in 2004. The next state to expand the scope of practice was Kentucky in 2011, followed by Louisiana in 2014, Alaska in 2017 and Arkansas in 2019. Since malpractice cases take many years to adjudicate, OMIC states that the impact of any cases arising in these states with newly expanded scopes of practice would not yet be reflected in insurance premium rates.⁴¹

D. Over-Utilization

The doctors argue that the repeated examination that they perform on all patients referred to them is essential for protecting patient safety. Dr. McNally estimated that, after a repeat examination, about one third of patients referred to her by optometrists for advanced procedures do not need the advanced procedure for which they were referred. This is particularly true with capsulotomies, where patients may have some opacifications but there is no impact on vision and, thus, no procedure needed. She argued that the risk to these patients is not having a second exam but rather having an unnecessary surgical procedure which carries the inherent and heightened risks of all surgeries.

³⁷ Cynthia A. Bradford, M.D., Letter to the Texas House of Representatives, *Re: Opposition to HB 1798 which would allow optometrists to perform eye surgery* (Oklahoma, February 25, 2019) and Woodford S. Van Meter, M.D., Letter to the Texas House of Representatives, *Re: Opposition to SB 2123 and HB 1798 which would allow optometrists to perform eye surgery* (Kentucky, March 4, 2019).

³⁸ The VOS provided a study from the Journal of the American Medical Association (“JAMA”) finding a significant increase in repeated YAG capsulotomy procedures when the initial procedure was performed by an optometrist.

Joshua D. Stein, M.D. *et al*, “Comparison of Outcomes of Laser Trabeculoplasty Performed by Optometrists vs Ophthalmologists in Oklahoma”, *Journal of American Medical Association Ophthalmology* (July 28, 2016) available at jamanetwork.com/journals/jamaophthalmology/fullarticle/2535226.

³⁹ Timothy J. Padovese, *Statement on Optometric Malpractice Rates* (San Francisco, California: Ophthalmic Mutual Insurance Company, January 30, 2019).

⁴⁰ *Id.*

⁴¹ *Id.*

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E. Education and Training

Dr. Gregory and Dr. McNally emphatically argued that a brief, one-to-two-day course in lasers or injections is wholly insufficient to prepare individuals to perform surgery. The doctors asserted that these brief courses on laser surgeries, injections and removal of growths cannot train optometrists in the complexities of systemic medicine, and teach optometrists how to safely perform procedures, address complications, and suture human tissue.

The doctors were unaware of any standardized, comprehensive curricula from U.S. schools of optometry that teach these essential components of laser surgeries, injections and removal of growths. However, as a contrast to optometric education, the doctors provided details of ophthalmology education and training, which follow.

- Ophthalmologists must complete eight years of education and training, including four years of medical school with a nationally standardized core curriculum, one year of internship and three years of residency. The first two years of medical school are spent learning the “basic science” of human biology and disease through class and laboratory work, including dissection and exploration of human cadavers. In the third and fourth years, medical students rotate through clinical assignments in which they gain hands-on experience with patients and a variety of diseases and conditions. While a medical student in their first 2 years in medical school may only have one-to-two lectures specific to the eye, the student will be gaining knowledge of the human body as a system which will inform their practice as an ophthalmologist. Further, during this time and during the third and fourth years, students get extensive training about human tissue (e.g., the texture and tendencies of different types of tissues when sutured), adhesions, needles, face structure and “line” following when suturing.

- Beginning in years three and four, those students who are interested in pursuing ophthalmology need to begin to develop ophthalmologic skills in order to get “matched” with a postgraduate internship and residency in ophthalmology. Good candidates for an ophthalmology internship and residency will have completed an ophthalmological clinical rotation at their home medical school and 2-3 clinical rotations at other medical schools and will have conducted relevant research. By the time a medical student is placed in an ophthalmological residency, they have a thorough and in-depth understanding of the human body in its entirety, as well as extensive knowledge about the eye, specifically.

- Ophthalmology students then enter their post-graduate internship and residency years. During the internship year, medical interns rotate through “fundamental clinical skills” education in “primary specialties” including “emergency medicine, family medicine, general surgery, internal medicine, obstetrics and gynecology, or pediatrics, or in primary critical care experiences (medical, surgical, or pediatric).”⁴² This education continues the ophthalmology student’s education in suturing, surgery, systemic medicine, and conditions and disease. Medical interns also begin to observe and participate in ophthalmological clinics, procedures, and surgeries. Students will observe hundreds of procedures and patient interactions performed by physicians,

⁴² Accreditation Council for Graduate Medical Education, *ACGME Program Requirements for Graduate Medical Education in the Transitional Year*, 24 (eff. July 1, 2019).

as well as participating in some procedures and interactions. Throughout this internship, ophthalmology students are closely overseen by faculty and given only “conditional independence.”⁴³ There is a standardized process for evaluating a student’s progress toward becoming an “autonomous” practitioner based on the ACGME Program Requirements and associated “Milestones” evaluations.⁴⁴

- After this “transitional year” of the internship, the ophthalmology student moves on to their residency. Typically, there are 3-4 residents in each program with 12-15 doctors participating in the mentorship and training of the residents. This allows for significant one-to-one mentoring, training and oversight. Every procedure, patient interaction and surgery the resident performs is overseen by a senior physician. If the resident seems unsure, makes a mistake or their hands shake, the senior physician takes over or remedies the error. Dr. McNally stated that these senior physicians will even tell a resident to choose a “non-surgical path” if improvement is not shown. These experiences take place entirely in a hospital, emergency department and associated clinics, where the acuity and pathology of disease and the needs of patients are often higher. Residents are on-call and must be available to “suture an eyeball or close a globe at 2AM” and to treat patients in varying states, including vomiting, shaking, and being uncooperative. By the end of their residency, all residents are required to have performed a “minimum number of procedures” for compliance with ACGME standards (e.g., a minimum of 5 YAG capsulotomy cases, 5 Laser Trabeculoplasty cases, 4 iridotomy cases, and 3 chalazion excisions).⁴⁵ However, the ophthalmologists note that residents perform hundreds of each of these procedures prior to finishing their residencies, and that the number of procedures completed are no longer logged after the ACGME requirements are met.

All of this experience results in a provider who has an extensive knowledge and understanding of the human body as a whole, who is aware of an expanse of diseases and conditions and how they present, who can think quickly and perform smoothly under stressful and varied conditions, and who has skill and comfort as a surgeon both when things go smoothly and when there are complications. Importantly, according to Dr. Gregory and Dr. McNally, this training also teaches ophthalmologists the

judgment necessary to determine when a procedure is needed and to identify which patients are candidates for a procedure (i.e., when the benefits of a procedure outweigh the risks of the complications, based on a full understanding of the patient’s health).

F. Maintaining Competency

Finally, Dr. Gregory and Dr. McNally assert that there are not enough of the proposed advanced procedures performed in Vermont each year to ensure that optometrists seeing only these patients maintain competency. Dr. McNally provided procedure numbers from her own two-surgeon practice in Berlin, Vermont which takes referrals from 13 optometrists.⁴⁶ From January 2019 through October 2019,

⁴³ *Id.* at Preamble.

⁴⁴ Accreditation Council for Graduate Medical Education, *ACGME Program Requirements for Graduate Medical Education in Ophthalmology*, 17 (approved February 4, 2019; eff. July 1, 2020).

⁴⁵ Accreditation Council for Graduate Medical Education: Review Committee for Ophthalmology, *Required Minimum Number of Procedures for Graduating Residents in Ophthalmology* (2013).

⁴⁶ Practice Data, *Summary of Laser Usage in a 2 Surgeon Office in Berlin, VT with 13 Referring Community Optometrists* (January 2019 – October 2019).

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each surgeon performed an average per month of 4 YAG capsulotomy procedures, 6-8 laser peripheral iridotomies, and 12 laser trabeculoplasties.⁴⁷ If these cases were then disbursed over 13 different optometrists, many of these providers would go months without performing a procedure. The doctors assert that this is not enough experience to maintain competence.

The doctors also note that there is no oversight of an optometrist’s competence or measure of whether competence is maintained. In contrast, ophthalmologists must render a certain number of procedures to maintain privileges at hospitals and must maintain national board certifications through continuing education and re-taking the examination.⁴⁸

III. OPR’s Findings Regarding Patient Safety and an Expanded Scope of Optometric Practice

A. Advanced Procedures

Primary Eye Care

Contrary to the VOA’s contention, it is not clear to OPR that the proposed advanced procedures are “simple” and part of “primary eye care.” Past assertions by the VOA indicate that the VOA did not always consider these procedures to be “primary eye care”, either. During the 2003 Vermont optometric scope expansion report process, the VOA asserted that “surgical and tertiary medical eye care” went beyond “primary eye care.” In his response to the President of the Vermont Ophthalmological Society’s questions regarding the proposed 2003 scope expansion, Timothy Johnson, O.D., the then-legislative chairman of the Vermont Optometric Association, stated that “[o]phthalmologists receive extensive training for years in surgery and tertiary medical eye care *that optometrists do not receive*...However, *in areas where our [ophthalmologists’ and optometrists’] scopes of practice do overlap (i.e. primary eye*

care), our basic health science background is comparable to medicine...⁴⁹

The lack of a consistent, standardized curriculum for teaching these advanced procedures,⁵⁰ and the costly unique equipment required to perform them further indicates that these procedures are not part of primary eye care. Additional support for this conclusion is that laser, injection and minor surgical procedures are not included as “primary eye care” on the AOA’s fact sheet detailing optometry education

⁴⁷ *Id.*

⁴⁸ The National Board of Examiners in Optometry – the organization that offers the exam that optometrists must currently pass to become licensed in Vermont – has recently (2019) begun to offer a Laser and Surgical Procedures Exam (“LSPE”). *Laser and Surgical Procedures Exam*, National Board of Examiners in Optometry, <https://www.optometry.org/lspe.cfm> (last visited January 15, 2020). This exam purports to evaluate competency in laser trabeculectomy, iridotomy and capsulotomy in one section, and suturing, eyelid surgery, injections and anesthesia in a separate section. However, the exam is currently only offered at one location (Charlotte, North Carolina) and Dr. Barcelow was uncertain whether the exam is very “stringent”. He suggested that the coursework out of Oklahoma and Kentucky optometry schools is more comprehensive for evaluation purposes. ⁴⁹ Vermont: Secretary of State, Office of Professional Regulation, *Report of S.54: Expanded Scope of Practice for Optometrists*, 17 (December 31, 2003) available at <https://www.sec.state.vt.us/media/411945/optometryscopereport.pdf> (emphasis added).

⁵⁰ While OPR was unable to obtain details of each U.S. optometry school’s curriculum, it is clear to OPR that there are these advanced procedures are not taught consistently by all optometry schools in the country. For example, there is broad agreement, including from Dr. Barcelow, that certain schools, particularly Northeastern State University in Oklahoma, have a more rigorous and in-depth laser, surgical and injections program than other schools.

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in the U.S., entitled “Doctors of Optometry Are America’s Primary Eye Care Providers”.⁵¹ These considerations lead OPR to believe that the proposed advanced procedures are not “primary eye care.”

Nor can OPR conclude that these proposed advanced procedures are “simple.” The VOA encouraged the Office to review YouTube videos of the laser procedures as evidence of the simplistic nature of the procedures. The videos do show simplistic surgeries that are quick and seem noninvasive. However, these videos are clearly intended to be general overviews of the procedures directed at informing the layman patient. The videos show the effect of the laser on the eye (e.g., black spots appearing on an eye during a YAG capsulotomy) but do not explain or show the anatomical structures targeted by the laser or how the provider is placing or adjusting the laser. The VOS provided more in-depth videos of the procedures, which described the anatomical structures the laser was aimed at (e.g., “hair thin” lines), and the placement of the laser in “consecutive but not overlapping spots” to create the needed hole in the trabecular meshwork. These videos seem to show a much more complex procedure. OPR is not equipped with the expertise to know which presentation of the procedures is more accurate regarding complexity. Given the conflicting evidence, however, the Office is unable to conclude that these procedures are “simple”.

Complications

As with the topic of simplicity, the VOA and the VOS urge opposite positions when it comes to the complications of these procedures. The VOS emphasizes the gravity of the complications while the VOA emphasizes the rarity thereof. The Office is not able to evaluate the severity of a complication or its frequency. That said, OPR finds that there is no evidence that, should a complication occur, optometrists are prepared to treat and/or correct the complication, thus minimizing severity and lasting impacts. An ophthalmologist, through his or her extensive training, is exposed to complications and learns various techniques and procedures to correct or address complications. There is no evidence that optometrists have similar experience or training. As noted below, if optometry schools teach these proposed advanced procedures at all, the courses are a small part of the curriculum and there is little to no experience with human patients.

Further, given that optometrists propose to perform these procedures in an office-based setting, there are no other providers who could offer support or guidance should a complication occur. If a complication should occur, an optometrist may need to transfer the patient to either another provider or a hospital setting, requiring more time for the procedure and added risk for the patient. Thus, though OPR cannot determine whether the complications associated with the proposed advanced procedures are severe or frequent, the Office finds that there is no evidence that an optometrist is trained or capable of addressing complications from these procedures.

B. Other States' Experiences

States with Expanded Scopes of Practice

OPR considered the experiences with patient safety of other states that have expanded scopes of optometric practice – Oklahoma, Kentucky, Alaska, and Louisiana. OPR was particularly interested in

⁵¹ On this fact sheet, only “pre-operative and postoperative care before and after eye surgery” are listed as areas that optometrists are “highly specialized” in. *American Optometric Association. Doctors of Optometry are America’s Primary Eye Care Providers* [Fact Sheet]. Received July 24, 2019.

reports of complications, complaints from the public, and disciplinary records. The Office emailed the Board of Optometry in each state. Unfortunately, only the Oklahoma and Alaska Boards of Examiners in Optometry replied to OPR’s inquiry.

The Executive Director of the Oklahoma Board reported that there have been no adverse outcomes reported to the Board of Examiners by any optometry patient between 1992 and 2019.⁵² He did report that there were two malpractice cases settled out of court and a malpractice case, self-reported by the optometrist involved, alleging that the optometrist failed to refer a patient to an ophthalmologist in a timely manner. The Alaska Board of Examiners in Optometry reports that there have been no actions taken against an optometrist in the state since 2011.⁵³

These reports are seemingly contradicted, however, by reports to the National Practitioner Data Bank (“NPDB”), a federal database of medical malpractice payments and certain adverse actions taken against health care providers, including optometrists.⁵⁴ According to the NPDB, between the years of 1992 and 2019, there were 59 malpractice payments and adverse events reported to the NPDB for Oklahoma optometrists.⁵⁵ This is much higher than the three cases reported by the Executive Director of the Oklahoma Board. Less striking, but nonetheless significant, while the Alaska Board only reports one discipline case against an optometrist since 2011, the NPDB reports five malpractice payments or adverse events from the State.⁵⁶ While the NPDB data does not offer conclusive evidence regarding whether the expanded scope of optometric practice has led to an increase in malpractice cases or adverse events, it does indicate that the professional boards in these states do not have a full understanding of the complications, adverse actions and malpractice cases occurring in the state.

An additional challenge is that the professional board members in Oklahoma, Kentucky and Louisiana are, themselves, optometrists, who have an interest in seeing the optometric scope of practice expanded nationally. This coupled with the seemingly inaccurate reports of adverse events, discipline and malpractice cases leads OPR to be reticent to rely on the reports of few to no adverse actions taken against optometrists as indicative of the safety of scope expansion.

There are also anecdotal reports from ophthalmologists in Oklahoma and Kentucky of adverse events resulting from the expanded scope of optometric practice. In March 2019, an ophthalmologist from the University of Kentucky submitted a letter to the Texas House of Representatives.⁵⁷ The Kentucky

⁵² Laverty, Russel O.D., *RE: Vermont Secretary of State's Office of Professional Regulation seeking Optometrist Discipline Data*. Message to Dylan Bruce. Received November 6, 2019. (Email). In 1998, Oklahoma law permitted optometrists to perform procedures with anterior segment lasers. In 2004, the scope was again expanded to permit optometrists to perform non-laser surgery.

⁵³ Zimmerman, Marilyn A., *Records Request: Alaska Optometrist Discipline Data*. Message to Dylan Bruce. Received November 21, 2019. (Email).

⁵⁴ National Practitioner Data Bank, U.S. Department of Health and Human Services (2020). *Query on State-by-State Data Regarding Discipline and Malpractice Suits Against Optometrists* [Data file]. Retrieved from <https://www.npdb.hrsa.gov/guidebook/EOverview.jsp>. There are limits to the NPDB data. While OPR can determine how many malpractice payments have been made or adverse actions taken against optometrists in a specific state in a certain year, there is no information provided about the underlying malpractice case or adverse action. In turn, OPR is not able to determine whether the events reported in the NPDB are related to the proposed advanced procedures.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ Texas was considering a similar optometric scope expansion measure at the time.

ophthalmologist reported “a rise in surgical complications from the enactment of the Kentucky optometric scope legislation” (legislation which expanded the scope of practice to include the proposed advanced procedures), which went unreported to the state due to a lack of oversight and supervision.⁵⁸ In February 2019, an ophthalmologist at the University of Oklahoma College of Medicine also wrote a

letter to the Texas House of Representative describing the “patient confusion and complications” she had seen due to the scope expansion in Oklahoma.⁵⁹ She reported cases in which optometrists failed to take medical histories and, as a result, performed an unnecessary and ineffective procedure in one case, and caused hemorrhaging in another case (due to failure to note that a patient was taking anticoagulants).⁶⁰ The Oklahoma ophthalmologist also reported numerous patients were referred to her for unnecessary procedures.⁶¹

States That Chose Not to Expand the Optometric Scope of Practice

Several states considered expanding the scope of practice for optometrists but decided against it. In 2009, the Washington State Department of Health (the “Department”) conducted a sunrise review on the proposal to expand the optometric scope of practice to include office-based medical procedures and to permit the administration of injectable medications, along with other practices.⁶² Citing its mission to protect the public, the Department recommended against expanding the optometric scope of practice.⁶³ The Department’s reasons for recommending against permitting optometrists to perform office-based medical procedures were the lack of evidence of training in these procedures in optometry schools, a policy position of not wanting out-of-state optometry schools dictating Washington State policy through their curricula, the potential of laser procedures putting the public at risk, and optometric training not being the functional equivalent of ophthalmological training.⁶⁴

Nebraska reviewed expanding the optometry scope of practice to include injections of medications and allowing minor surgical procedures in 2009 and 2014.⁶⁵ In 2009, a Technical Committee, created under Nebraska state law, recommended against expansion of the scope of practice concluding (1) the current scope of practice (i.e., optometrists were not permitted to perform minor surgical procedures or to inject medications) did not create a harm or a threat to the health, safety or welfare of the public; (2) the

⁵⁸ Woodford S. Van Meter, M.D., Letter to the Texas House of Representatives, *Re: Opposition to SB 2123 and HB 1798 which would allow optometrists to perform eye surgery* (Kentucky, March 4, 2019).

⁵⁹ Cynthia A. Bradford, M.D., Letter to the Texas House of Representatives, *Re: Opposition to HB 1798 which would allow optometrists to perform eye surgery* (Oklahoma, February 25, 2019).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² Washington: State Department of Health, *Optometry Scope of Practice Sunrise Review* (December 2009) available at <https://www.doh.wa.gov/portals/1/Documents/Pubs/631002OD.pdf>.

⁶³ *Id.* at 3.

⁶⁴ *Id.* at 11.

⁶⁵ Based on a Nebraska governmental process similar to the sunrise review process in Vermont, a Technical Committee was convened in 2009 to review an application from optometrists to expand their scope of practice. The Technical Committee voted to recommend against approval of the proposed scope expansion. Nebraska: Optometry Technical Review Committee, *Report of Recommendations and Findings* (October 16, 2009). In 2014, the Director of the Division of Public Health in the Nebraska Department of Health and Human Services then generated his own report, based on the Technical Committee’s report, also recommending against approval expanding the optometric scope of practice. Nebraska: Department of Health and Human Services, *Director’s Report on the Proposal to Expand the Scope of Practice of Optometrists* (March 10, 2014).

proposed scope expansion could potentially create a new danger to the public health, safety or welfare of the public; (3) the proposed scope expansion would not benefit the public health, safety or welfare; and (4) the public could be effectively protected by other means.⁶⁶ In his 2014 report, the Director of the Division of Public Health in the Nebraska Department of Health and Human Services concurred with the Technical Committee's decision.⁶⁷ The Director emphasized the lack of information about optometric training and education in his decision to recommend against expanding the optometric scope of practice.⁶⁸

In 2005, New Mexico considered expanding the scope of optometric practice. The State does now permit optometrists to perform the non-laser removal, destruction or drainage of superficial eyelid lesions and conjunctival cysts. 16.16.18.8(A) NMAC (March 22, 2008). However, the State does not permit optometrists to perform laser procedures or to inject medications, except as necessary to perform removal of eyelid lesions and cysts. *Id.*

Not only the states have considered whether to expand the scope of optometric practice. In 2015, the U.S. Department of Veterans Affairs issued a Veterans Health Administration Directive specifying that "only ophthalmologists will be privileged to perform therapeutic laser procedures of the eye and the eyelids at the Department of Veterans Affairs (VA) medical facilities."⁶⁹

C. Increased Risk for Repeat Surgeries

Based on experiences in other states and studies thereof, OPR remains concerned that expanding the optometric scope of practice could result in unnecessary and repeated advanced procedures. A study, reported in the October 2016 JAMA Ophthalmology, found that the need for repeat laser trabeculoplasty procedures nearly doubled when the initial procedure was performed by an optometrist rather than an ophthalmologist.⁷⁰ When considering expanding the optometric scope of practice, the New Mexico Human Services Department expressed similar concern that repeated procedures would be needed as optometrists developed "advanced surgical skills."⁷¹

D. No Evidence of Patient Safety Risk if Scope is Not Expanded

OPR found no evidence that the current system requiring referrals to an ophthalmologist impacted patient safety. OPR received seven emails from Vermont optometry patients sharing the challenges with having

⁶⁶ Nebraska: Optometry Technical Review Committee, *Report of Recommendations and Findings* (October 16, 2009).

⁶⁷ Nebraska: Department of Health and Human Services, *Director's Report on the Proposal to Expand the Scope of Practice of Optometrists* (March 10, 2014).

⁶⁸ *Id.*

⁶⁹ VHA Directive 1132, *Performance of Therapeutic Laser Eye Procedures in Veteran Health Administration Facilities*

(May 5, 2015).

⁷⁰ Stein, Joshua M.D. *et al*, "Comparison of Outcomes of Laser Trabeculoplasty Performed by Optometrists vs Ophthalmologists in Oklahoma", *Journal of American Medical Association Ophthalmology* (July 28, 2016) available at jamanetwork.com/journals/jamaophthalmology/fullarticle/2535226. The AOA objected to the study's findings, arguing that the need for repeat laser trabeculoplasty procedures are not due to the quality of the procedure but rather a choice to use an "acceptable method" of performing the procedure in split sessions.

[\[https://www.aoa.org/news/clinical-eye-care/trabeculoplasty-commentary\]](https://www.aoa.org/news/clinical-eye-care/trabeculoplasty-commentary)

⁷¹ New Mexico: Legislative Finance Committee, *Fiscal Impact Report: Amend Optometry Act, 2* (March 7, 2005).

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to go to an ophthalmologist rather than receiving care from their optometrist. These patients all expressed difficulties with wait times and travel, but none reported experiencing adverse outcomes due to the referral and wait.

E. Malpractice Insurance Rates

OPR does not find that low malpractice rates indicate that expanding the optometric scope of practice is safe for the public. As noted by VOS and OMIC, malpractice insurance premium rates are based on the practice of optometrists in all states, not just those with expanded scopes of practice. Thus, given that there are only a few states that permit expanded scopes of practice and most optometrists do not perform laser procedures, injections or other minor surgical procedures, malpractice insurance rates have remained low for optometrists.⁷² Additionally, premium rates remain low because scope expansion in those states that have allowed it is relatively new and malpractice cases can take years to settle or move through the courts.⁷³ In turn, any malpractice cases from these states would not yet be factored into the premium calculation.⁷⁴

F. Volume Needed for Competence

It is not clear that Vermont optometrists would be able to maintain competence in these proposed advanced procedures given the low volume of the procedures performed in Vermont. The VOS' data survey data shows that these procedures are not frequently required. Other rural states considering expanding the optometric scope of practice also noted the low volume of these procedures.⁷⁵ Even in those states with expanded scopes of practice, optometrists performed only a few of each of the procedures (e.g., 180 chalazion removals, 87 eyelid abscess removals and 55 lid lesion removals between 2008 and 2014 in Oklahoma, Kentucky and New Mexico).⁷⁶

G. Education and Training

Optometry Schools

OPR is unable to conclude that optometry schools provide consistent and adequate education and training in the proposed advanced procedures. In response to OPR's request for additional information about the curricula of U.S. schools of optometry, ASCO, the national trade association for optometry schools, shared its Framework for Developing Optometric Curriculum Guidelines and Educational

Standards for Advanced In-Office Primary Care Ophthalmic Procedures (“Framework”).⁷⁷ The Framework contemplates that

⁷² Timothy J. Padovese, *Statement on Optometric Malpractice Rates* (San Francisco, California: Ophthalmic Mutual Insurance Company, January 30, 2019).

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ Nebraska: Optometry Technical Review Committee, *Report of Recommendations and Findings*, 5 (October 16, 2009).

⁷⁶ Sanders, David S. M.D., Alan Sugar, M.D., Chris Andrews, PhD, Joshua Stein, M.D., M.S., University of Michigan (2017), *A Comparison of Performance of Therapeutic Procedures by Ophthalmologists and Optometrists in States with Expanded Scope of Practice* [Fact sheet] available at <https://pdfs.semanticscholar.org/c106/a504a522ab2677570d315221a0c33b63c071.pdf>.

⁷⁷ Association of Schools and Colleges of Optometry: ASCO Board of Directors, *Framework for Developing Optometric Curriculum Guidelines and Educational Standards for Advanced In-Office Primary Care Ophthalmic Procedures* (approved November 6, 2018).

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optometric students will be able to demonstrate “appropriate use, indication, and action of ophthalmic ultraviolet, visible, and infrared radiation LASER procedures”, including for the performance of “trabeculoplasty, post-cataract capsulotomy, peripheral iridotomy, and corneal modification for refractive changes.”⁷⁸ The Framework also states that optometric students shall, upon graduation, “demonstrate the psychomotor and cognitive skills necessary” to remove lesions and growths, and to perform injections.⁷⁹ No information is provided about how these skills are taught in optometry schools (e.g., practical experience, amount of time devoted to each procedure), however, nor is there information about how these competencies are assessed upon graduation.⁸⁰

The schools themselves were not willing to share syllabi or curriculum descriptions beyond course catalogs and brief course overviews. From these scant descriptions, the Office found that, if the proposed advanced procedures were taught at all, they were taught as one of several topics in a short course. Northeastern State University Oklahoma College of Optometry, widely regarded as the most rigorous of the optometry schools in matters of advanced procedures, offers several courses on advanced procedures and experience with human tissues and four courses regarding surgical procedures.⁸¹ However, no other schools offered this number of courses or depth of coursework. For example, in 2009, Pacific University’s curriculum offered 4,811 contact hours, 1260 of which were in a clinical setting.⁸² Ten of those hours related to providing injections. At Midwestern University Arizona College of Optometry, there is a course offered called “Advanced Ophthalmic Procedures” which addresses, among other things, “an introduction to physical assessment therapeutic ophthalmic lasers; intraocular, subcutaneous, intramuscular, and intravenous injections; and other advanced procedures.”⁸³ This course, offered in the winter of the third year, is four credits out of 252 credits required for graduation and there is no lab component.⁸⁴ The Illinois College of Optometry offers more

courses – three – that provide education on advanced procedures.⁸⁵ The injections and minor surgical procedures course requires a total of six hours of lab and 18 hours of lecture.⁸⁶ The ophthalmic lasers course requires about six hours of lab and six hours of lecture. There is also a clinical rotation offered in advanced eyecare where students observe ophthalmic care.⁸⁷ This rotation offers about 24 hours of total observation.⁸⁸

⁷⁸ *Id.* at 8 citing Standard C.7.

⁷⁹ *Id.* at 9-10 citing Standards C.8.-C.14.

⁸⁰ There is a document on ASCO's website instructing schools on how to create an outcome assessment. The information is general, however, and not specific to each skill or procedure.

⁸¹ *NCUOCO Course Catalog*, Northeastern State University Oklahoma College of Optometry, <https://optometry.nsuok.edu/Portals/5/PDF%20Files/nsuoco-course-catalog.pdf> (last visited January 15, 2020).⁸² Washington: State Department of Health, *Optometry Scope of Practice Sunrise Review*, 75-76 (December 2009) available at <https://www.doh.wa.gov/portals/1/Documents/Pubs/631002OD.pdf>.

⁸³ *Course Descriptions Arizona College of Optometry, OPTOG 1729: Advanced Ophthalmic Procedures*, Midwestern University Arizona College of Optometry, <https://www.midwestern.edu/glendale-az-campus-catalog/arizona-college-of-optometry/course-descriptions.xml> (last visited January 15, 2020).

⁸⁴ *Id.*

⁸⁵ *Course Catalog: OCD 368 Injections and Minor Procedures, OCD 369 Ophthalmic Lasers, and PCE 371 Specialty Rotation (Advanced Eyecare)*, Illinois College of Optometry (last visited January 15, 2020). The estimates of total time spent in lab, lecture and clinical rotation, provided herein, are based on the hours per week requirements in the course description and the total length of the semester.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

OPR further found that the courses on advanced procedures were mainly didactic in nature. Practical experience with human patients and advanced procedures was minimal if at all. While optometry students do complete basic science courses at the beginning of their education, like medical students, most optometric students do not also have a lab experience performing dissections on human cadavers. (Northeastern State University in Oklahoma does use cadaver dissection in its first-year labs.)⁸⁹ If any practical experience is offered, animals and computer models are more likely the subjects.⁹⁰

Even the most in-depth and comprehensive optometry school program at Northeastern State University, however, is not the functional equivalent of ophthalmology training.⁹¹ Medical education is highly standardized and consistent across schools and much more extensive than optometric training in the proposed advanced procedures. This education and training contribute significantly to patient safety. During their training, ophthalmologists see all manners of disease in various forms of manifestation. They are trained with direct oversight from experienced physicians on how to perform procedures, and they perform these procedures hundreds of times before they do so on their own. Ophthalmologists not only learn about the eye and related diseases and conditions, but they learn about other diseases,

the impacts of disease on the entire anatomical system, how to suture human tissue, clinical judgment and how to address complications as they arise. While OPR cannot conclude that 16,000 hours of training is necessary to safely perform the advanced procedures proposed by the VOA, it is clear to OPR that more than one or two, short, lecture-based courses are needed to prepare a provider to safely render these procedures.

Continuing Education

OPR also finds that a two-day continuing education course on the proposed advanced procedures is likely insufficient to prepare an optometrist to perform these on his or her own in a private office. A sample course curriculum on injections provided in the 2009 Washington policy report states that it is a two-day course, with one to four hours spent learning about and practicing each procedure.⁹² Each procedure is practiced on a lab partner. The AOA offers a 16-hour course at its annual meeting teaching “the skills necessary to perform surgery in a primary eye care setting, including suture techniques, injections, anesthesia, wound management and other procedures.”⁹³ Both courses offer 8 hours of lab time and 8 hours of lecture.⁹⁴ There is a separate 16-hour Laser Procedures Certification course, providing “training for performing anterior segment laser procedures, including YAG capsulotomy, laser peripheral iridotomy,

⁸⁹ *NCUOCO Course Catalog: Course 4167 Human Anatomy and Physiology*, Northeastern State University Oklahoma College of Optometry, <https://optometry.nsuok.edu/Portals/5/PDF%20Files/nsuoco-course-catalog.pdf> (last visited January 15, 2020).

⁹⁰ Schroeder, Michael, “Optometrists, Ophthalmologists Fight Over Eye Care Rights”, *Angie’s List* (June 16, 2011) available at www.angieslist.com/articles/optometrists-ophthalmologists-fight-over-eye-care-rights.htm and *Student Catalog: OPT 516 Gross Anatomy, Histology & Radiographic Techniques*, 54, University of Kentucky College of Optometry, <https://www.upike.edu/wp-content/uploads/2019/09/KYCO-Catalog-2019-2020.pdf> (last visited January 15, 2020).

⁹¹ Washington: State Department of Health, *Optometry Scope of Practice Sunrise Review*, 11 (December 2009) available at <https://www.doh.wa.gov/portals/1/Documents/Pubs/631002OD.pdf>.

⁹² *Id.* at 49-52.

⁹³ *Need CE? Look no further than Optometry’s Meeting*[®], American Optometric Association, <https://www.aoa.org/news/inside-optometry/continuing-education-optometrys-meeting-2019> (last visited January 15, 2020).

⁹⁴ *Id.*

gonioscopy, laser trabeculoplasty and other procedures.”⁹⁵ It is difficult to see how such a short course could prepare providers to perform these procedures and to address all complications that arise, let alone provide additional training in counter-indications for surgery and the clinical judgment of when surgery is needed.

For the above reasons, OPR is unable to conclude that expanding the optometric scope of practice to

include the proposed advanced procedures would be in the interest of protecting public safety.

Need and Access

Proponents of expanding the optometric scope of practice argue that Vermont's eye patients face barriers to accessing these services, including such barriers as distance and wait time. Supporters of an expanded scope also argue that Vermont patients need to have a choice of providers when determining whether to undergo one of the proposed advanced procedures. Those opposed to the scope expansion argue that the current system of care – one in which optometrists refer patients to ophthalmologists to undergo the proposed advanced procedures – is functioning well and there are few if any access issues. Opponents further argue that, due to confusion in the marketplace, patients would not have a real, informed choice of providers should optometrists be permitted to perform the proposed advanced procedures.

Based on the evidence and research collected, OPR could not conclude that there is an issue with accessing these proposed advanced procedures in Vermont. OPR is also concerned that permitting optometrists to perform these procedures would create additional confusion in the marketplace about optometric training and education, and about the distinction between optometrists and ophthalmologists. This would negatively impact a patient's ability to make an informed choice about care.

I. Support for Scope Expansion: Access Challenges and Need for Choice

A. Access

The VOA states that a combination of long wait times, long drives and redundant care create an access problem for Vermont patients. These barriers result in delayed care and increased risks for noncompliance with care. OPR asked the VOA to contact patients and have them speak with the Office about challenges the patients faced accessing care related to the proposed advanced procedures. Seven patients responded, two of whom sent their responses through Dr. St. Marie and two more of whom responded to a list of questions Dr. St. Marie presented to them. The following are summations of these patients' concerns regarding traveling to ophthalmologists for the advanced procedures:

- One patient was initially seeing an ophthalmologist 2.5 hours from her home but is currently seeing an ophthalmologist 25 minutes from her home and is pleased with her current situation.
- Another patient shared the challenge of getting to Burlington or Dartmouth from Stowe for her appointments, especially given her inability to drive in bad weather.
- One patient reported that for each of his appointments with the ophthalmologist, first for an exam and then for the laser procedure, he had to have his wife drive him and wait for him during the procedure.
- Another patient had to travel 15-20 minutes each way to receive care from the ophthalmologist.

⁹⁵ *Id.*

Another concern voiced by the VOA and the seven patients who contacted OPR was the long wait times for care from an ophthalmologist.

- Several of the patients who contacted OPR expressed preference for receiving the laser procedure on the same day they were there for their exam appointments.
- One patient was referred to Dartmouth Hitchcock Medical Center for an advanced procedure and had to wait so long for an appointment at that facility that he had to pay an additional insurance deductible. The patient did not report this delay to his optometrist and did not seek a referral to another ophthalmologist in Vermont.
- One patient from St. Albans reported seeing the ophthalmologist within two weeks for a repeat exam but having to wait 72 days (from his initial referral) for the first laser treatment and 97 days for the second laser treatment.
- Another patient from Richford was seen by an ophthalmologist within a month of the day he was referred for treatment and received laser treatments in 12 days (for one eye) and 21 days for the other.
- A third patient from St. Albans, whose story was related through Dr. St. Marie, stated that she had to wait 50 days after her referral from Dr. St. Marie to see an ophthalmologist for her initial exam. Her laser surgeries were performed 82 days and 118 days after the initial referral.
- Dr. St. Marie also related the story of a patient who was referred to an ophthalmologist in April and missed his first exam in June. Then, because of scheduling conflicts on both sides, his first exam was not until August. His laser surgeries eventually occurred in November and December.

In sum, three of the seven patients who contacted OPR regarding delays in care after being referred to a Vermont ophthalmologist were by seen that ophthalmologist for an initial exam within 4 weeks. Two patients experienced longer delays: one patient experienced a delay of 50 days before her first appointment, and one patient experienced a delay at Dartmouth-Hitchcock Medical Center. One patient missed his initial appointment, and one patient did not report how long it took for her initial appointment to be scheduled.

The VOA also noted that allowing optometrists to perform advanced procedures would help address access issues in emergencies when a lack of access to care may mean that a patient will go blind in days.

Finally, the VOA stated that, even if there are ophthalmologists nearby, they may be specialists who do not treat patients needing routine care. Thus, geographic proximity of ophthalmologists does not necessarily indicate that patients have access to advanced procedures.

B. Patient Choice

The VOA argued that patients should have a choice in providers. In support of this contention, the VOA shared a study performed by Avalon Health Economics (“Avalon”), a consultancy firm engaged by the

AOA. In this study, Avalon avers that “80% of American voters when it comes to their eye health, report[ed] they’d rather have easy access to a doctor of optometry than have to travel further or wait longer to schedule with a specialist.”⁹⁶ Similarly, many of the patients who sent OPR emails about their

⁹⁶ Schneider, John E. PhD and Cara M. Scheibling, “Optometry’s Essential and Expanding Role in Health Care: Assured Quality and Greater Access for Healthier Communities”, *Avalon Health Economics* (June 20, 2019)

experiences expressed a preference for receiving care from their optometrist with whom they had a longstanding relationship.

II. Opposition to Scope Expansion: No Access Issues and Creating Confusion

A. Access

In support of its position that there is not a problem with access to ophthalmic care in Vermont, VOS provided a map showing that 79.3% of Vermonters live within a 30-minute drive of an ophthalmologist’s office. (Some of those offices are located in New Hampshire, New York or Massachusetts.) VOS also presented a map based on 2016 Medicare data showing that YAG capsulotomy procedures were performed in nine locations across all regions of the state, including locations in the Northeast Kingdom, around Rutland, in Windham and Bennington Counties, and in central and Northwestern Vermont.

VOS also pointed out that, in other states with expanded scope of optometric practice, most optometrists offering advanced procedures are located in urban locations in order to have enough patients to justify the costs of the equipment and to maintain competency. The patients in rural areas remain unserved.⁹⁷

Additionally, VOS presented its findings from a survey it conducted of 28 ophthalmologists across the State of Vermont regarding wait times for procedures. The findings are as follows:

- For YAG capsulotomies and laser iridotomies, 85% of respondents said they could see a patient in less than 2 weeks and 100% of respondents said they could see the patient in 4-8 weeks.
- For laser trabeculoplasty (ALT/SLT), 82% of respondents said that they could see a patient for an initial exam in less than 2 weeks and 100% of respondents could see a patient in 4-8 weeks.
- 19/26 (73%) of responding ophthalmologists perform eyelid surgeries. 78% said they could do so in less than 2 weeks from the initial referral and 100% said they could do so in less than 4 weeks.
- The respondents noted that, if the eyelid surgery had to be performed at the hospital, there would be longer wait times due to scheduling OR time.

- 96% of providers said they could accommodate procedures in one week with a request from a referring provider and immediately if urgent.
- The VOS also noted that acceptance of insurance is a key to patient access to care. 100% of providers who responded to the VMS/VOS survey accept Medicaid payment.⁹⁸

B. Patient Choice

Ophthalmologists emphasized that they, too, are local providers with relationships with patients. The VOS also argued that the public does not have enough information to make an informed choice about care when it comes to choosing between an optometrist and an ophthalmologist because of confusion

available at https://avalonecon.com/optometrys-essential-and-expanding-role-in-health-care/?fbclid=IwAR3YUAWbhBjCix_fEdDvkFon-O8W2Lh3yNnVLh_Y3i3OcjFpQQk5K4wyXA.

⁹⁷ Stein, Joshua D. M.D. *et al*, "Access to Ophthalmologists in States Where Optometrists Have Expanded Scope of Practice", *Journal of American Medical Association Ophthalmology* (November 22, 2017) available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5833600/?report=printable>.

⁹⁸ Vermont Ophthalmological Society, *Vermont Ophthalmology Survey on Access to Laser and Eyelid Surgery* (conducted in October 2019).

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over the differences between the professions. VOS provided an AMA study showing that 47% of those surveyed believed optometrists were physicians, and 10% were not sure.⁹⁹ The survey also showed that 89% of respondents wanted only an M.D. or O.D. to be allowed to perform surgical procedures.¹⁰⁰

III. OPR Findings

A. Access

Access in Vermont

There are 130 licensed optometrists and 80 licensed ophthalmologists in Vermont.¹⁰¹ Figure 1, in Appendix A, shows the locations of each of these providers. As shown on the map, there are only a few optometrists located in areas where there are no ophthalmologists. Similarly, there are only a few ophthalmologists located in areas without optometrists.

As shown on Figures 2 and 3 included in Appendix A, all Vermonters, except those living in a small area of the Northeast Kingdom, live within 30 miles of an ophthalmologist. Notably, there are no optometrists within 30 miles of the area in the Northeast Kingdom that is more than 30 miles from an ophthalmologist.

OPR is not able to find that there is a dearth of ophthalmologists in Vermont or that they are located far away from patients needing their services. All of the patients who contacted OPR report traveling 30

miles or less to see the ophthalmologist. The geographic data similarly shows that the vast majority of Vermonters lives within 30 miles of an optometrist. Further, when the geographic data is considered, it appears that most optometrists and ophthalmologists are located in the same towns or within a few miles of each other. Thus, permitting optometrists to perform these proposed advanced procedures would not reduce driving time for most patients.

Nor is OPR able to conclude that patients are experiencing inappropriately long wait times for eye care in Vermont. Only two patients provided evidence that they experienced a delay of longer than 4 weeks before their initial appointments with an ophthalmologist. Regarding the delays between the initial appointment and the laser treatments, there are considerations outside of capacity, and specific to patient care, that may be the source of these delays. Rather than opine that the time between initial examination and the advanced procedure was too long, OPR defers to the ophthalmologists, who examined the patients and concluded that the procedures did not need to be performed immediately, to determine the course of patient treatment.

OPR further notes that none of the patients who contacted OPR experienced any disease consequences due to the wait between the initial exam and the procedures. Nor did the optometrists in these cases think the need for the procedures was so urgent that they called and sought faster treatment for their patients. Considering the short wait times for an initial exam, deference to the ophthalmologists' professional judgment, and the lack of disease impact, OPR cannot conclude that Vermont patients are experiencing inappropriate long wait times for these proposed advanced procedures.

⁹⁹ American Medical Association, *Truth in Advertising Survey Results* (2018).

¹⁰⁰ *Id.*

¹⁰¹ *Provider Lookup*. Vermont Medicaid Portal. <http://vtmedicaid.com/#/providerLookup>. Accessed in July 2019.

For these reasons, OPR does not find that there is an issue with access to these advanced procedures in Vermont that expanding the optometric scope of practice would fix.

Access in States with Expanded Scopes of Practice

A review of the research demonstrates that expanding the optometric scope of practice will not necessarily address access issues for rural patients. A 2018 JAMA Ophthalmology article found that, in Oklahoma, a state with an expanded scope of practice, only 12.2% of the advanced procedures performed by optometrists were performed in areas more than an hour away from the nearest ophthalmologist.¹⁰² In Kentucky, only 0.8% of advanced procedures performed by an optometrist occurred in locations more than an hour away from an ophthalmologist.¹⁰³ In New Mexico, which does not permit optometrists to perform laser procedures but allows non-surgical removal of lesions and cysts, 34.8% of advanced procedures performed by an optometrist were conducted in a location more

than an hour away from an ophthalmologist.¹⁰⁴ In these states, optometrists who perform these advanced procedures were located in more urban areas and patients in rural areas did not see improved access.

B. Patient Choice

OPR notes that the patients who contacted OPR, either directly or through their optometrists, had good relationships with their optometrists and wished to receive advanced procedures care from them. The Office is also aware, however, that there is evidence that the public does not have the information to make an informed choice between receiving care from an optometrist or an ophthalmologist. In a survey conducted by Angie's List, 93% of respondents claimed to know the difference between ophthalmologists and optometrists.¹⁰⁵ However, 25% of these respondents then went on to incorrectly identify optometrists as medical doctors.¹⁰⁶ The AMA study provided by VOS shows similar confusion.¹⁰⁷

OPR is concerned that permitting optometrists to perform procedures traditionally performed by medical doctors would further obscure the distinctions between optometrists and ophthalmologists, and their respective education and training, thus creating more confusion among the public. In turn, OPR finds that maintaining the current optometric scope of practice would better serve the goal of helping the public make an informed choice about their care providers.

Cost

I. Support for Scope Expansion: A Reduction in Redundancy and Other Costs

The VOA admits that there may be a short-term increase in the number of laser procedures performed if the optometric scope of practice is expanded. The VOA argues, however, that long-term costs will decrease if the optometric scope of practice is expanded because a repeat exam performed by an

¹⁰² Stein, Joshua D. M.D. *et al*, "Access to Ophthalmologists in States Where Optometrists Have Expanded Scope of Practice", *Journal of American Medical Association Ophthalmology* (November 22, 2017) available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5833600/?report=printable>.

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ Schroeder, Michael, "Optometrists, Ophthalmologists Fight Over Eye Care Rights", *Angie's List* (June 16, 2011) available at www.angieslist.com/articles/optometrists-ophthalmologists-fight-over-eye-care-rights.htm.¹⁰⁶ *Id.*

¹⁰⁷ American Medical Association, *Truth in Advertising Survey Results* (2018).

ophthalmologist will not be needed, and patients won't need to take additional time off from work or make long drives multiple times. VOA also argues that shorter wait times will reduce costs by improving patient compliance with care, thus avoiding increased morbidity associated with not caring for the disease, and by allowing patients to stop taking medications, which are used to treat the symptoms of

the disease, faster. The Avalon study further estimated that “scope of practice expansion adds \$600 million per year in transaction costs savings and another \$4 billion per year in savings attributable to access related improvements in health outcomes.”¹⁰⁸

The VOA also argues that the facility fee charged by hospitals will be saved when the procedure is performed in an office setting and that the increased number of providers in the market place will increase competition and drive down costs for laser procedures.

OPR also takes note of a patient commented that the prescription medications he takes to treat the symptoms of his eye disease cost \$400 every month. As a result, the 4 months it took for him to receive laser surgery cost him over \$1000 for medications, in addition to missing work and having to travel. He stated that, had he been able to receive the laser treatment from his optometrist on the same day he was diagnosed, he would have been saved those costs for medications.

Regarding the cost of equipment, the VOA says that the cost of equipment is minimal and can be handled by most optometry practices.

II. Opposition to Scope Expansion: No Cost Savings

The VOS contends that repeat examinations by ophthalmologists are necessary to prevent ophthalmologists from performing unnecessary or inappropriate procedures, which can save costs. Dr. McNally reports that about one-third of the patients referred to her by optometrists for a procedure do not need that procedure but can be managed through medication or other treatments. VOS argues this shows that, should the scope of practice be expanded, costs could actually increase due to over-utilization of these advanced procedures by optometrists who have not developed the clinical judgment to know when such a procedure is needed.

The VOS also states that the equipment to perform these advanced procedures, specifically the lasers, is expensive. Consequently, VOS contends, optometrists will need to see more patients to pay for the equipment or increase costs for other patients.

III. OPR Findings

OPR finds that permitting optometrists to perform the proposed advanced procedures will eliminate the need for a repeated exam by an ophthalmologist and may result in patients taking less time off work and traveling less. However, it is less clear that a scope expansion will lead to the realization of money or health care system savings. The VOS contends, and the VOA admits, that utilization would increase if the scope of optometric practice were expanded. As Medicare and Medicaid provide the same

¹⁰⁸ Schneider, John E. PhD and Cara M. Scheibling, “Optometry’s Essential and Expanding Role in Health Care: Assured Quality and Greater Access for Healthier Communities”, *Avalon Health Economics* (June 20, 2019) available at https://avalonecon.com/optometrys-essential-and-expanding-role-in-health-care/?fbclid=IwAR3YUawbhBiCix_fEdDvkFon-O8W2Lh3yNnVLh_Y3i3OcitFpQQk5K4wyXA.

reimbursement regardless of whether a procedure is performed by an optometrist or ophthalmologist, OPR can thus conclude that costs would increase based on utilization, at least in the short-term.

Additionally, OPR cannot conclude that there will be long-term, net cost savings if the optometric scope of practice is expanded. For instance, there is some evidence that permitting optometrists to perform these advanced procedures may result in an increased number of repeated procedures. A 2016 JAMA Ophthalmology study found a significant increase in the rate of repeated trabeculectomy procedures required when optometrists performed the initial procedure.¹⁰⁹ When New Mexico considered scope expansion, the New Mexico Human Services Department estimated that the number of procedures would increase “because the learning curve for developing advanced surgical skills would necessitate that numerous ‘re-dos’ be performed by ophthalmologists to fix problems caused by less experienced practitioners.”¹¹⁰ The New Mexico Health Services Department estimated that the cost for the “re-dos” would be over \$200,000 in the State Medicaid budget.¹¹¹

Nor is OPR inclined to rely on the unsupported cost savings cited by the Avalon study provided by the VOA. This study provides no explanation about the “cost-benefit analysis” that calculated the \$4.6 billion in savings, nor does it provide any additional information about what “transaction costs” or “access related improvements in health outcomes” resulted in such significant cost savings.¹¹²

Further, the hospital facility fees that VOA considers as a long-term savings are already being “saved” by ophthalmologists, who provide these advanced procedures in their offices rather than in a hospital. In the survey of 28 ophthalmologists, conducted by VOS, only 2 stated that they regularly used hospital facilities to perform advanced procedures.¹¹³ In turn, no savings of the “facility fee” would be realized from also permitting optometrists to perform these procedures in their offices.

Regarding equipment, OPR estimates the cost to purchase the equipment for SLT and YAG lasers would cost \$30,000 to \$50,000. A recent search yielded a refurbished SLT laser selling on eBay for \$17,900, and a combination refurbished YAG/SLT laser selling for \$49,995. OPR received a price quote of \$13,950 for a refurbished YAG laser from Insight Eye Equipment, an ophthalmic equipment vendor headquartered in St. Louis, Missouri. There are likely other costs associated with providing such a procedure that OPR is

¹⁰⁹ Joshua D. Stein, M.D. *et al*, “Comparison of Outcomes of Laser Trabeculectomy Performed by Optometrists vs Ophthalmologists in Oklahoma”, *Journal of American Medical Association Ophthalmology* (July 28, 2016) available at jamanetwork.com/journals/jamaophthalmology/fullarticle/2535226. The AOA alleges this study is inaccurate because repeated trabeculectomy sessions is “an acceptable model” of care. *Criticized Laser Study Resurfaces in Scope Battles*, American Optometric Association, <https://www.aoa.org/news/clinical-eye-care/trabeculectomy-commentary> (last visited January 15, 2020).

¹¹⁰ New Mexico: Legislative Finance Committee, *Fiscal Impact Report: Amend Optometry Act, 2* (March 7, 2005).¹¹¹ *Id.*

¹¹² Schneider, John E. PhD and Cara M. Scheibling, “Optometry’s Essential and Expanding Role in Health Care: Assured Quality and Greater Access for Healthier Communities”, *Avalon Health Economics* (June 20, 2019) available at https://avalonecon.com/optometrys-essential-and-expanding-role-in-health-care/?fbclid=IwAR3YUAWbhBjCix_fEdVvkFon-O8W2Lh3yNnVLh_Y3i3OcitFpQQk5K4wyXA.

¹¹³ Vermont Ophthalmological Society, *Vermont Ophthalmology Survey on Access to Laser and Eyelid Surgery* (conducted in October 2019).

unaware of and, thus, unable to estimate. A 2009 article stated that purchasing all the equipment needed to perform advanced procedures could cost up to \$500,000.¹¹⁴

Based on equipment costs, the JAMA and New Mexico research, and the predicted increased utilization accompanied by equivalent per-procedure reimbursement, OPR cannot find that expanding the optometric scope of practice to include these proposed advanced procedures would result in any costs savings.

Conclusion

At this time, OPR recommends against the expansion of the optometric scope of practice to include the proposed advanced procedures. This conclusion is affected significantly by our inability to confirm that clearly-established and appropriately-tailored didactic and in vivo education and training in specified procedures is universal to accredited educational programs. Consistent with Title 26, Ch. 57, we analyze licensing restrictions, including those derived from scope limitations, with the presumption that the public and licensees alike are best served when professionals are lawfully empowered to offer services commensurate with the full scope of their training. Future evolution in optometric graduate education could warrant reevaluation of these conclusions.

Respectfully submitted to the House and Senate Committees on Government Operations, the House Committee on Health Care, and the Senate Committee on Health and Welfare.

STATE OF VERMONT
SECRETARY OF STATE
OFFICE OF PROFESSIONAL REGULATION

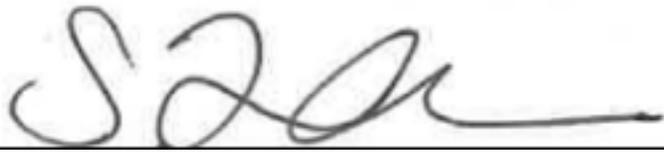
BY:



January 15, 2020 Lauren K.

Layman Date
Staff Attorney

APPROVED:



January 15, 2020

S. Lauren Hibbert Date

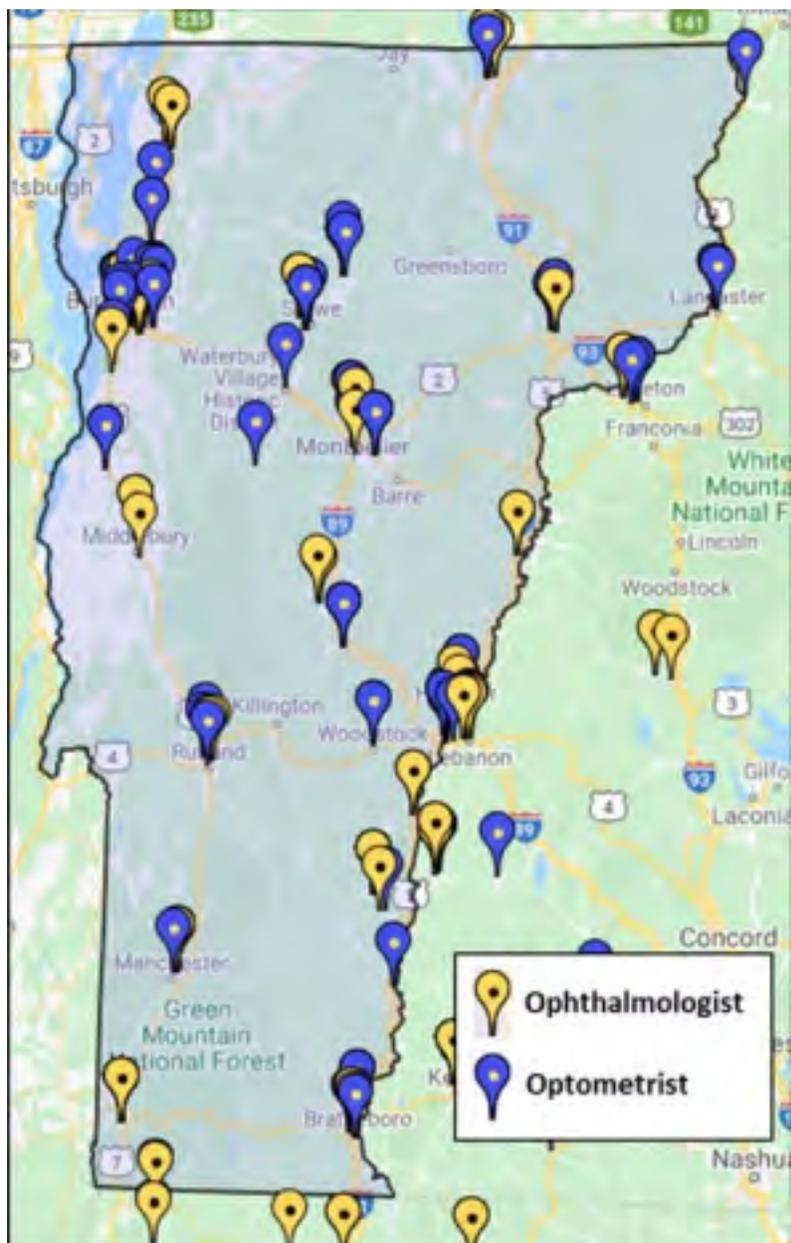
Director OPR

¹¹⁴ Schroeder, Michael, "Optometrists, Ophthalmologists Fight Over Eye Care Rights", *Angie's List* (June 16, 2011) available at www.angieslist.com/articles/optometrists-ophthalmologists-fight-over-eye-care-rights.htm

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APPENDIX A

Figure 1: Map of All Optometrist and Ophthalmologist Providers in Vermont¹¹⁵



¹¹⁵ Figures 1, 2 and 3 are based on Vermont-enrolled Medicaid providers as of July 2019. *Provider Lookup*. Vermont Medicaid Portal. <http://vtmedicaid.com/#/providerLookup>. Accessed in July 2019.

Figure 2: Map of 30-Mile Radii from Vermont Ophthalmologists North of Montpelier

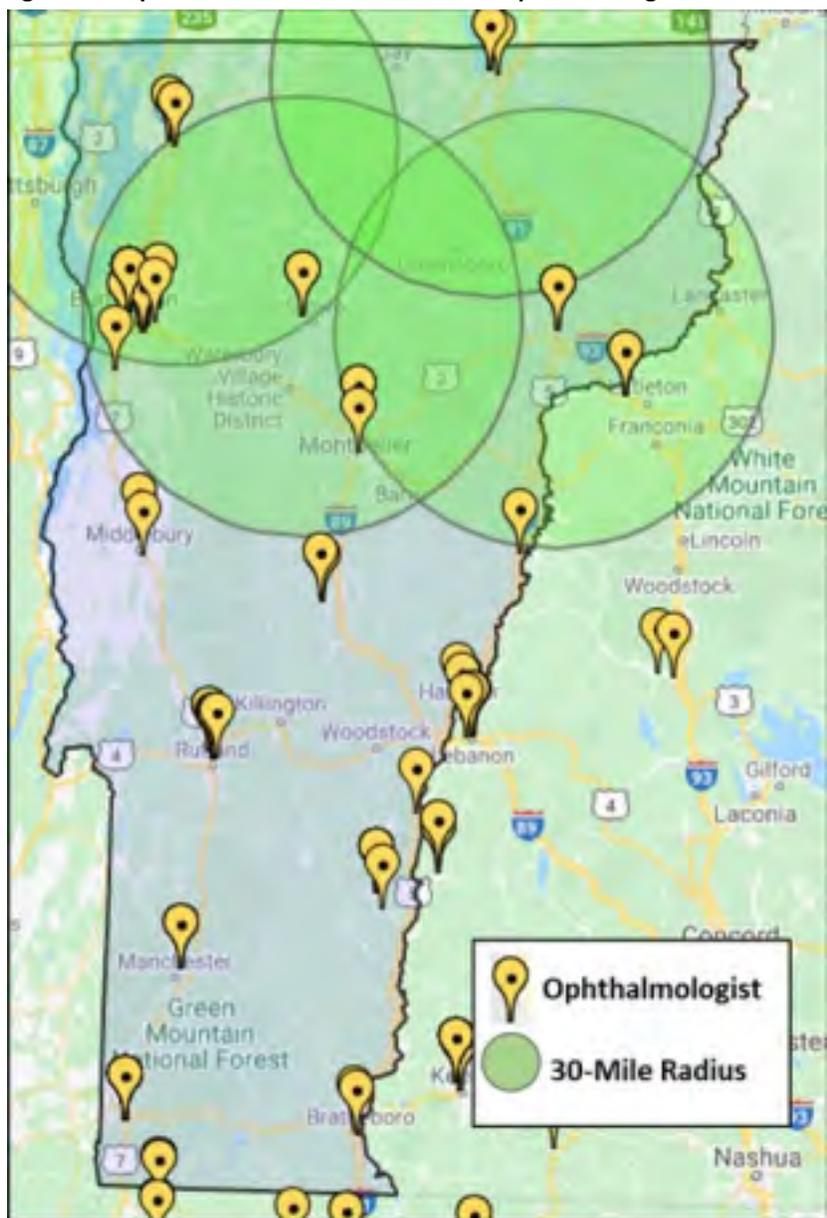
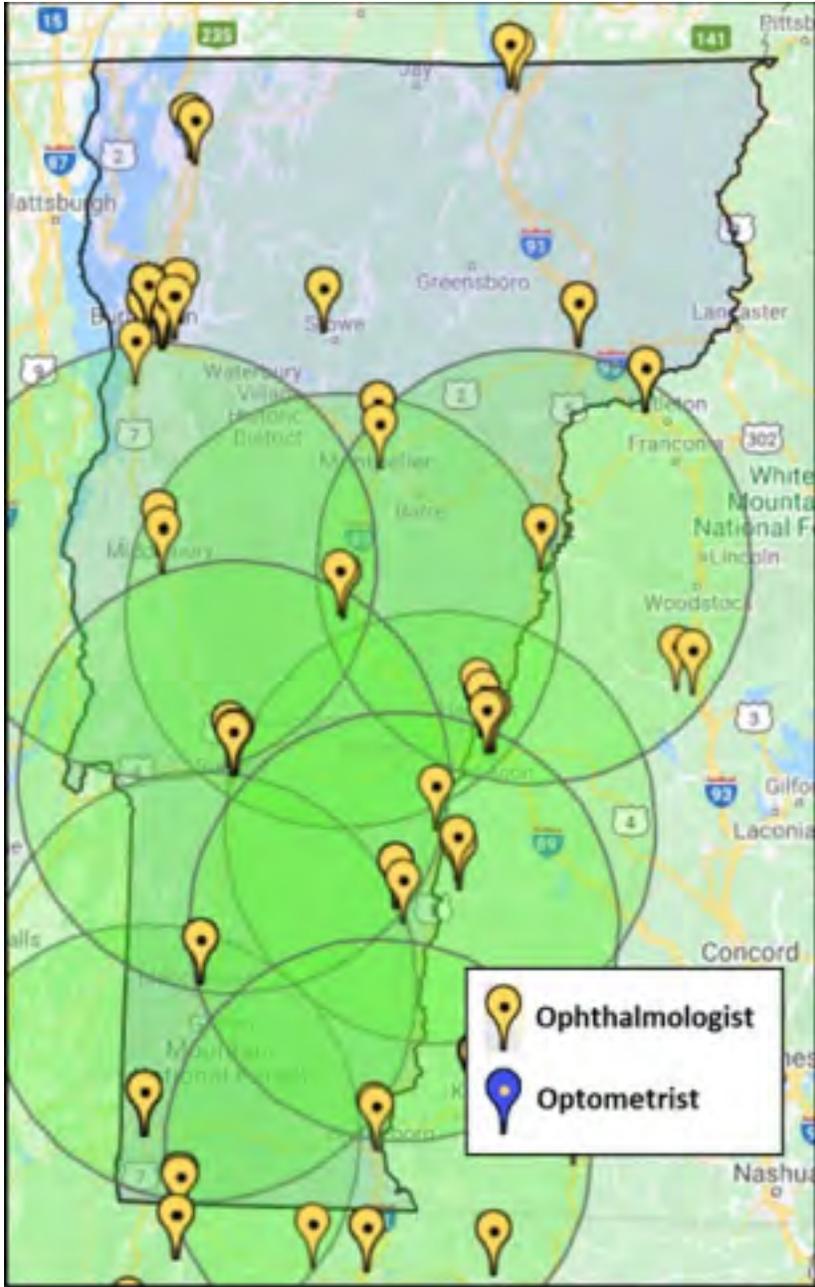


Figure 3: Map of 30-Mile Radii from Vermont Ophthalmologists South of Montpelier



7/11/2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890
RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah –

I support the proposed revisions to the scope of practice for optometric physicians in the state of Washington.

I have been a practicing optometrist for 6 years and am in a private practice with offices serving the Seattle and Bellevue communities for medical and primary eye care.

During my four years of post-graduate training in Oregon for my doctorate of optometry, I was trained to do many procedures beyond the scope of Washington's current practice regulations. Washington's current scope prevents me from caring for my patients as I have been trained, and are inconsistent with other states and national standards.

The current scope restrictions on optometry in Washington state make it challenging for me and my colleagues to provide expedited care, increasing the cost of care to patients and delaying sight-saving care. For example, several of my optometric colleagues are unable to perform procedures to treat post-surgery complications (such as secondary cataracts formed after a primary cataract extraction) even when they are the first person to diagnose the complication; they work in interdisciplinary settings where they have access to the instruments to treat the patient immediately and have also been trained under their degree to do so, but Washington's scope inhibits them. The patient may be left with a visually disabling issue that decreases their quality of life, including their ability to work until they are seen by another provider which can take weeks if not months depending on their access to care. Washington needs to keep up with changing technology and standards to provide the best eye care for patients. If you authorize the Board of Optometry to regulate the scope of optometry as other health care professional boards in the state do, it expedites the best patient outcomes.

Please recommend that the Legislature support the proposed changes in the optometry scope of practice for Washington.

Thank you for your consideration.

Charlene Walton, OD
Optometric Physician, Puget Sound Eye Care
Member of Optometric Physicians of Washington
Member of American Optometric Association
Member of the American Academy of Optometry



Illinois College of Optometry
3241 South Michigan Avenue
Chicago, Illinois 60616-3878

www.ico.edu

July 16, 2021

To whom it may concern:

I am writing in support of the proposed scope of practice legislation for optometrists as part of the sunrise review process within the Washington State Department of Health. This legislation will enable the State Board of Optometry to determine the scope of practice for all optometric physicians within the state. Members of the Board are well-positioned to make decisions regarding appropriate scope of practice based upon their knowledge of the training that optometrists receive during their four years of specialized doctoral-level biomedical education, content of the National Board of Examiners in Optometry examination series that is necessary for licensure, and the continued education that is required of optometrists each year following graduation.

As Vice President for Academic Affairs/Dean at the Illinois College of Optometry (ICO), I can assure you that the current scope of practice for optometrists in Washington is not consistent with the extensive training that students enrolled in my institution as well as at the other schools and colleges of optometry receive. Our core curriculum includes not only classroom, but also hands-on laboratory and clinical training for management of a wide array of ocular diseases, including use of oral medications, injections, lasers, and minor surgical procedures. Graduates of ICO's optometry degree program and our affiliated residency programs practice successfully in states that have already expanded their scopes of practice into these areas.

It is important to note that the proposed legislation is consistent with the current training of optometric physicians. It expands the scope of practice judiciously and specifies areas that should, as well as should not be included in the expansion, thereby eliminating any ambiguity. While it enables optometrists to prescribe a wider array of medications, including oral steroids, and includes a broader range of therapeutic procedures including injections, eyelid lesion removal, and certain laser procedures, it also specifically excludes other procedures such as LASIK, cataract surgery, injections into the posterior segment of the eye, and posterior laser procedures.

While it is clear that Washington's optometrists would benefit from this legislation, it should also be noted that residents of the state would benefit from improved access to eye care services. Optometric physicians currently practice in all but three Washington counties, while 15 counties have no ophthalmologists. When an optometrist is forced to refer patients to other providers for procedures that they are trained to safely provide it may unnecessarily delay care, require the patient to travel a long distance, and increase the cost of health care through duplication of services. At times it also results in lack of crucial care, as patients may fail to follow through on the referral to a new provider due to the associated inconveniences.



As our country continues to age, the US healthcare system will need to adapt to provide for the attendant increases in needed care. Allowing health care providers, including optometrists, to practice to the full scope of their training will play an important role in meeting our nation's health care needs. I encourage the Department of Health and the state legislature to support the proposed scope of practice expansion for the state's optometric physicians.

Sincerely,

A handwritten signature in black ink that reads "Stephanie S. Messner".

Stephanie S. Messner, O.D.

Vice President for Academic Affairs/Dean

312-949-7015

smessner@ico.edu



To: Washington State Department of Health (DOH)

From: Dr. Ida Chung, Associate Dean of Academic Affairs, Western University College of Optometry

Subject: Support for proposed scope of practice legislation to grant State Board of Optometry the authority to determine scope of practice for optometric physicians in Washington

Date: July 10, 2021

About Doctor of Optometry Training and Education

The Doctor of Optometry program at Western University of Health Sciences is a four year accredited program that graduates optometrists to practice full scope optometry in any state in the US. As with the exponential growth of medical knowledge in today's evolving health care arena, the profession of Optometry continues to incorporate the latest clinical technologies and advances in patient care. Optometric education in 21st century eye health and vision care continues to combine cutting-edge, expanded didactic and clinical curricula. For the U.S. to achieve optimum population health outcomes, this knowledge and expertise must be made adaptable to augmented community wide access. Doctors of optometry require modernization of state practice acts that incorporate today's educational and clinical advances into contemporary scope of practice. To address questions regarding what today's Doctor of Optometry graduates are learning and how they are trained in preparation to deliver comprehensive eye care, I am providing an overview of today's professional Doctor of Optometry program.

Professional post-baccalaureate education of students pursuing a Doctor of Optometry (O.D.) degree consists of classroom, laboratory, and clinical education, including a progressive clinical experience over four years, In addition to concentrations on the eye, visual system, and systemic health, optometry students, progress through basic medical sciences in didactic and hands-on learning that includes:

- Histology, genetics, and biochemistry
- Human anatomy and physiology including whole body, head/neck, and eye
- Cell and molecular, biology, biochemistry, immunology, and pathology
- Microbiology, pharmacology, therapeutics, and pathology
- Neuroscience, with a concentration on the visual system
- Cardiovascular, respiratory, musculoskeletal, renal, gastrointestinal, and endocrine system anatomy, physiology and cell biology
- Clinical medicine of systemic diseases and disorders
- Principles of evidence based medicine.



A Review Of Training In Ophthalmic Surgery

Below is a composite listing of topics from various courses throughout the curriculum relevant to expanded scope of practice particularly as it relates to advanced procedures including laser and lid procedures.

Here is the composite list of topics that span our curriculum:

- laser physics, hazards, and safety
- biophysics of lasers
- laser application on clinical optometry
- laser tissue interactions;
- laser indications, contraindications, and potential complications
- gonioscopy
- laser therapy for open angle glaucoma
- laser therapy for angle closure glaucoma
- posterior capsulotomy
- common complications: lids, lashes, lacrimal system
- medicolegal aspects of anterior segment procedures
- peripheral iridotomy
- laser trabeculoplasty
- minor surgical procedures
- overview of surgical instruments, asepsis
- surgical anatomy of the eyelids
- emergency surgical procedures
- chalazion management
- local anesthesia: techniques and complications.

OPTM 8120 Principles and Practices of Optometry VI: Laser Eye Procedures and Minor Surgical Eye Care (2.0 credit hours)

This course covers the uses of lasers to perform certain surgical eye procedures, including laser therapies for open angle glaucoma, for angle closure glaucoma, and for posterior capsulotomy. The course will include a review of laser biophysics, laser-tissue interactions, as well as contraindications and complications associated with laser procedures on ocular tissues. This course will also cover surgical preparation and management of lid and adnexal lesions with an emphasis on benign neoplasms and chalazion. Additional topics include medicolegal aspects of surgical eye care and postoperative wound care. The lab portion of the course will provide hands on experience in suturing techniques and ophthalmic laser operations.



OPTM 8021 Principles and Practice of Optometry V: Special Procedures (2.0 credit hours)

This course will cover the theory and methods of clinical techniques that build upon basic examination skills acquired during the courses Principles and Practice of Optometry I through IV. Clinical techniques including scleral depression, A- and B-scan ultrasonography, punctal occlusion, punctal dilation and irrigation, removal of foreign bodies from the cornea and conjunctiva, and the injection techniques of IM, SubQ and IV will be presented in a hands-on format. The course will include non-glaucoma visual fields and applications of significant optometric thought processing.

OPTM 6175 Ocular Disease: Diagnosis and Treatment of the Posterior Segment (4.0 credit hours)

This course builds upon the framework presented in the Principles and Practice of Optometry curricular track to present advanced concepts in ocular disease management. The anatomical, physiological, histological, and pathological processes of ocular disease will be emphasized. Topics include in-depth discussion of diseases and abnormalities of the vitreous and retina as well as vitreo-retinal pathology associated with systemic diseases.

OPTM 6073 Ocular Disease: Diagnosis and Treatment of Glaucoma (2.5 credit hours)

This course covers the pathophysiology, diagnosis, treatment, and management of patients with all forms of glaucoma, with an emphasis on evidence-based therapeutic interventions. The course includes technique and interpretation of visual fields for glaucoma diagnosis and management. Topical and systemic medical therapies will be emphasized. The course will also discuss current surgical management of various forms of glaucoma.

OPTM 6053 Optical Science: Physical Optics (3.0 credit hours)

This course presents the physics of light, including the wave and particle behavior of light. In particular, the course will include the characteristics of electromagnetic radiation, wave motion, total and partial coherence of light, interference, diffraction (single slit, double slit, gratings, circular apertures), zone plates, polarization, birefringence, anti-reflective lens coatings, lasers, emission and absorption spectra. Examples of applications in vision science and ocular diagnostic instruments will be provided.

OPTM 5133 Systemic Pharmacology (2.0 credit hours)

This course will cover medications commonly prescribed for systemic conditions, their indications and mode of action, as well as their ocular and visual side effects and toxicities. Topics include pharmacodynamics, pharmacokinetic aspects of drug formulations, routes of administration, and dosing & elimination, with an emphasis on drug indications, mechanisms of action, adverse effects, drug interactions, and contraindications. Additionally, a review of the pathophysiology of systemic diseases as it relates to current drug treatment paradigms will reinforce the connection between the medications and their corresponding indications.



OPTM 5130 Ocular Physiology (3.0 credit hours)

This course presents in depth coverage of the physiology of the eye, adnexa and visual systems. Topics include the physiology of the eyelids, lacrimal gland and its apparatus, tear production, cornea and lens, ocular fluid dynamics, vitreous body, retina, choroid and optic nerve. Topics of visual function and nutrition related to development and normal ocular function will be covered. When possible, relevant comparisons to disease states will be discussed to show the clinical relevance of the physiological concepts. The topics related to visual function includes, visual acuity, color vision, contrast sensitivity function, in health and disease states, accommodation function and decline in accommodation function with aging and presbyopic changes.

OPTM 5041 Anatomy for the Optometrist (4.0 credit hours)

This course covers all aspects of anatomy relevant to the practice of Optometry. Course content covers broad aspects of gross anatomy. Ocular anatomy is covered in detail including adnexa, orbit, orbital content, structure, and functional relationship of various ocular structures and their clinical importance. Through lectures and laboratory exercises students are introduced to the anatomy of the head and neck and neuroanatomy. Particular attention is paid to the cranial nerves, both their normal function and the numerous clinical syndromes that affect them as they pertain to optometric practice.

Sample topical outlines for selected content areas relevant to expanded scope of practice [selected courses only] In the following section, some samples of topical outlines are provided. These outlines go beyond the course descriptions to provide another layer of detail to more fully elaborate on the curricular content. The samples do not represent the entirety of the course content, and merely provide a portion of the content that is particularly relevant to demonstrating the education and training in support of expanded scope of practice.

OPTM 8120 Sample Topics

- Cataract surgery in Review
- IOL calculations and IOL types (premium IOLs)
- Femtosecond Laser-Assisted Cataract Surgery (FLACS)
- Post-op cataract complications
- LASIK in Review
- Post-op LASIK complications
- Innovations in corneal refractive procedures SMILE procedure
- Safety overview for minor surgical procedures: indications, surgical procedures. Instrumentation, anesthesia, asepsis & OSHA, medicolegal aspects, management of anaphylaxis & other complications
- Laser glaucoma procedures
- Gonioscopy review & ALT/SLT procedures
- YAG posterior capsulotomy



- Peripheral Iridectomy (PI)
- YAG cap, PI, ALT laser procedures (3-hr lab with proficiency)
- Minor corneal procedures: FB removal, amniotic membranes
- Corneal FB removal, lid speculum, pressure patch, amniotic membrane (2-hr lab with proficiency)
- Basic lid procedures e.g. chalazion, benign lesions
- Oculoplastic Procedures
- Glaucoma surgeries e.g. MIGS, trabs, tubes Retinal laser procedures e.g. PRP, macular grid Surgical Retinal Procedures
- Suturing and subdermal injections (2-hr lab with proficiency)

OPTM 8021 Sample Topics

- Injections
- Reclined BIO
- Scleral Depression BIO 3-Mirror Fundus Ocular Foreign Bodies Punctal Plugs
- Dilation & Irrigation
- Cataract Surgical Procedures
- Anterior Segment OCT Refractive Surgeries
- Fundus Auto Fluorescence Sample Assessments
- Demonstrate ability to perform the complete process of injections for IM
- Demonstrate ability to perform the complete process of injections for IV
- Perform complete process of specialty testing suite including Interpretation and Report
- Integrate specialty fundus exam techniques (scleral depression BIO and 3-Mirror fundus lens) suitably into ocular health evaluation
- Examine angles with four mirror lens
- Discuss the processes and procedures of ocular cataract surgeries
- Discuss the processes and procedures of corneal refractive surgeries
- Demonstrate ability to perform Anterior Segment OCT
- Examine the retina using FAF
- Perform the sequence of managing corneal foreign bodies
- Complete process of ultrasonography
- Safely implement punctal health procedures of dilation/irrigation and plugs

OPTM 6053 Sample Topics

- Laser Theory and Clinical Laser Applications
- Spontaneous emission
- Stimulated emission
- Three-level ruby laser
- Brewster windows



- Laser types
- Helium Neon laser
- Pulsed laser
- Mode locking
- Q-switching
- Lasers in eye care
- Laser tissue interaction
- Photocoagulation
- Photoablation
- Photodisruption

OPTM 6073 Sample Topics

- Surgical management
- Laser options
- Types of surgeries
- MIGS
- Consideration in selection of procedures
- Transitioning from medical to surgical options
- Future developments
- Anaphylaxis and other office emergencies
- Post-operative wound care

Doctor of Optometry Training in the U.S. Department of Veterans Affairs

In the final year of the Doctor of Optometry degree program, optometric students are trained at the U.S. Department of Veterans Affairs (VA). The VA is home to the largest optometric clinical education externship program in the U.S. In April 2020, the Veterans Health Administration (VA) issued Directive 1899 affirming that doctors of optometry and others should practice to the full scope of their licensure and training. In August 2020, VA rescinded Directive 1132, removing a previous ban that had prevented doctors of optometry from providing therapeutic laser eye procedures to veterans. As a result, optometric clinical education is expanding over time to ensure full scope training opportunities and better support the VA Optometry Service as it works to: provide care for about 80% of veterans receiving eye care services annually, perform about 70 percent of the more than 3.4 million select ophthalmic procedures, and provide nearly 99 percent of vision rehabilitation services in low vision clinics and blind rehabilitation centers each year.



Concluding Statement Of Support For Scope Of Practice Legislation

Doctors of optometry take a leading role in patient care with respect to eye health and vision care. Doctors of optometry examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify, diagnose and coordinate care of related systemic conditions affecting the eye. As primary health care providers, Doctors of optometry have extensive, ongoing training to examine, diagnose, treat and manage ocular disorders, diseases and injuries, and ocular complications and manifestations of systemic diseases. Doctors of optometry are the nation's front- line primary eye care providers; doctors of optometry provide more than two-thirds of primary eye health and vision care in the U.S. Today's doctors of optometry are graduating ready to serve the eye care needs of patients, including surgical care utilizing lasers.

Submitted by,

Ida Chung

Ida Chung, OD

Associate Dean of Academic Affairs, Associate Professor of Optometry

August 13, 2021

Cori Tarzwell, Optometrist Sunrise Review Lead

Health Systems Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504

Re: Optometrist scope of practice sunrise review

Dear Ms. Tarzwell:

Thank you for the opportunity to comment on the sunrise review of S-3085.2 regarding scope of practice extension for optometrists in Washington State. I am writing in my capacity as Chair of the Department of Ophthalmology at University of Washington School of Medicine.

If passed into law, S-3085.2/21 would grant optometrists the ability to 1.) prescribe essentially all systemic medications, and 2.) perform a number of laser and incisional surgeries on the eye and its surrounding tissues. These expansions in scope of practice for optometrists would unnecessarily threaten the welfare of the citizens of Washington. The comments outlined below articulate how, if passed, this proposal will lead to harm for the citizens of this state.

By background, I have extensive training in medical and surgical ophthalmology, ocular inflammatory diseases (uveitis), and neuroscience. I have served as a medical faculty member for over twenty years, first at the Washington University Medical School in St. Louis and since 2008 as Chair of the Department of Ophthalmology at University of Washington School of Medicine. I have also published extensively on eye function and eye disease and have served in leadership positions for national and Washington state professional associations including national ophthalmic education organizations and the American Board of Ophthalmology. My CV is attached for your reference.

Optometric education includes no training to perform surgery on the eye; ophthalmologists undergo over 10,000 hours of supervised medical and surgical training before becoming independent surgeons.

Optometrists attend an accredited optometry school for four years, during which time they take didactic courses directed at understanding the anatomy and physiology eye, diagnosing ocular disease, and providing glasses and contact lens. Following this, optometrists are eligible for licensure. Less than a quarter of optometrists pursue post-graduate training. There are no mandatory boards for assessing competency in optometry, nor is optometry recognized by the American Board of Medical Specialties.

In contrast, ophthalmologists attend four years of allopathic or osteopathic medical school, including two years of didactic training followed by two years of clinical rotations. All medical students must demonstrate proficiency in basic surgery – including understanding of aseptic technique and operating procedure – in order to graduate medical school. All medical students must take and pass the three step US Medical Licensing Exams (USMLE) before being eligible for medical licensure. Following medical school, ophthalmologists serve one year as medical or surgical interns followed by three years of ophthalmology residency. All ophthalmology residency programs in the US are accredited by the Accreditation Council of Graduate Medical

Education, which reviews all programs in the country annually and has strict guidelines for the educational content of each residency.

At University of Washington, our ophthalmology residency program provides trainees with 9500 hours of training over three years in all aspects of medical and surgical care of patients with eye disease. About 1000 hours of this training is in the classroom, and the remaining 8500 hours is hands-on, supervised training in our clinics and operating rooms. Our residents perform several hundred ophthalmic surgical procedures each during this time, under full supervision of faculty ophthalmologists. Our residents report their surgical complications at a monthly quality assurance meeting, and we discuss these fully to ensure our residents understand the challenges and risks of surgical treatments. Following residency training, our graduates take the American Board of Ophthalmology (ABO) exam, which consists of a full-day written exam followed, one year later, by a full-day oral examination. The ABO is recognized by the American Board of Medical Specialties, which is the sole recognized board certification organization for medical doctors in the US. While this would seem to be a great deal of training and testing, about 80% of our graduates opt to pursue an additional one to two-year subspecialty fellowship in order to gain more training and experience in specialized surgical and medical eye care. All told, the average ophthalmologist in our state has over 10,000 hours of supervised medical and surgical training *after medical school* before they become independent surgeons.

In the few states that have expanded optometric scope in recent years, optometric surgical training for practitioners has typically been a 3-4 day 'long weekend' course, taught by other optometrists, covering all aspects of surgery, with no opportunity for the optometrists to perform procedures on actual patients under supervision, and no recognized certification process. This training is not at all sufficient as a substitute for the thousands of hours of supervised surgical and medical training ophthalmologists receive.

The surgical procedures permitted under the proposed legislation are not safe to perform without extensive surgical training, which optometrists do not receive. It is dangerous to allow minimally trained individuals to perform *any* surgical procedures on the eye.

S-3085.2/21 specifically precludes a number of surgical procedures from optometric scope, with the implication that the remaining procedures are low-risk and safe for optometrists to perform. *There is no such thing as a simple or low-risk surgical procedure.* I will illustrate by describing a procedure that would be allowed to be performed by optometrists under S-3085.2/21.

The term periocular injection refers to procedures in which a medication (corticosteroid, antibiotic, or anesthetic) is injected into tissues immediately next to the eye. It is typically performed in awake patients under local anesthetic, under aseptic conditions. Indications for this treatment are typically intraocular inflammation (uveitis) not responding to steroid eye drops, or administration of anesthesia.

The procedure is inherently *invasive* and *surgical*. Correct performance of this technique requires an excellent knowledge of: 1.) aseptic technique; 2.) pharmacology of these medications; and 3.) precise knowledge of ocular anatomy. On the following page is a photograph of a patient receiving a periocular injection:



Incorrect technique – being off in the location of the injection by 1 mm -- can lead to the needle puncturing the eye itself, and severe and potentially blinding complications including retinal detachment, infection of the eye or retinal hemorrhage. Recognition of these complications requires substantial training, and immediate management often requires surgical treatment. An optometrist who had such a complication would be unable to treat it.

Periocular corticosteroids will cause elevated intraocular pressure in about 30% of patients, and will cause severely elevated pressure (and potentially blinding glaucoma) in about 5%; the latter usually requires urgent surgical treatment including trabeculectomy and surgical excision of deposited steroid. Periocular corticosteroids are also highly associated with development of cataracts that can decrease the patient's vision. Cataracts require surgical treatment.

When considering periocular corticosteroid injections for a patient, there are several other treatments that could be used to treat the patient, including oral corticosteroids, intraocular injection of medications, placement of long-acting intraocular steroids by surgery, vitrectomy surgery, or treatment with immunomodulating drugs. I do not know how an optometrist who cannot offer these alternate treatments can appropriately provide risk/benefit counseling on selection of a periocular injection.

During my residency and fellowship training, I learned to perform periocular medication injections by performing over 100 injections under the direct supervision and instruction of my attending physicians. Since entering practice on my own, I have performed over 2,000 periocular injections. I have also taught this technique to over 50 residents and fellows. I typically do not allow our residents to perform this 'simple' procedure under supervision until their second year in residency.

This is the level of training that must be required before anyone approaches the eye with a needle to perform an injection. There is simply no substitute for full surgical training to prepare one to perform this technique. Further, the treating physician must be prepared for any and all complications arising from the technique, including infections, inadvertent puncture of the eye, severe glaucoma, or cataracts.

As another example, eyelid biopsy is not precluded by this bill. Such a procedure may be used for the excision of potentially malignant tumors. An incomplete excision of such a lesion can lead to metastatic cancer and death. Even after four years of surgical training, most ophthalmologists do not feel fully comfortable biopsying and excising such lesions, and refer them to specialist ophthalmologists. A procedure of this complexity should not be performed by anyone who has not had full surgical training.

And it is also important to remember that laser surgery is still surgery – whether one cuts tissue with a knife or a laser, extensive surgical training is required. Severe complications such as bleeding within the eye, markedly elevated eye pressure, and retinal detachment can result from incorrect performance of 'simple' laser procedures.

Regulatory oversight of surgical procedures should rest solely with the Washington Medical Commission.

I am particularly troubled by the provision in S-3085.2/21 granting the state board of optometry full oversight over surgery performed by optometrists. These are surgical procedures, and oversight of all surgery should rest solely with the Washington Medical Commission. Allowing a state optometric board oversight of the same procedures will create two standards of care for the citizens of Washington: a medical board which requires that all surgeons be licensed medical doctors with full accredited residency training, and an optometric board which oversees individuals performing surgical procedures with minimal training and minimal competency standards.

Members of the public may not understand the huge difference in training between optometrists and ophthalmologists. If optometrists are granted the scope to perform these procedures in Washington, unsuspecting patients may suffer potentially blinding complications that could have been prevented had a qualified surgeon performed the procedure.

Access to care will not be substantially increased by the proposed expanded scope of practice.

I will not reiterate the arguments that my colleagues at the Washington Academy of Eye Physicians and Surgeons have made regarding access to care in the State of Washington. Suffice to say that exhaustive analysis of the locations of treating ophthalmologists and optometrists in our state demonstrates that nearly all of our state's citizens have ready access to a local ophthalmologist who can safely perform surgical procedures.

Thank you again for the opportunity to comment on this draft legislation. I sincerely hope the sunrise review committee does not put the safety of our citizens' eyes in jeopardy by approving this proposal. If you have any questions, please do not hesitate to contact me at: russvg@uw.edu.

Sincerely,



Russell N. Van Gelder, MD, PhD
Boyd K. Bucey Memorial Chair
Professor and Chair, Department of Ophthalmology
Adjunct Professor, Departments of Biological Structure and Laboratory Medicine and Pathology

Director
Roger and Angie Karalis Johnson Retina Center
UW Vision Science Center

CURRICULUM VITAE

Russell N. Van Gelder, MD, PhD

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russvg@u.washington.edu

Professional Appointments

- 2008- Boyd K. Bucey Memorial Chair
Professor and Department Chair
Department of Ophthalmology
Adjunct Professor, Department of Biological Structure (2008-)
Adjunct Professor, Department of Pathology (2013-)
University of Washington Medical School
Seattle, Washington
- 2006-2007 Bernard Becker Professor
Department of Ophthalmology and Visual Sciences
Washington University Medical School
St. Louis, Missouri
- 2004-2007 Associate Professor with tenure
Department of Ophthalmology and Visual Sciences
Department of Molecular Biology and Pharmacology
Washington University Medical School
St. Louis, Missouri
- 2000-2004 Assistant Professor
Department of Molecular Biology and Pharmacology
Washington University Medical School
St. Louis, Missouri
- 1999-2004 Assistant Professor
Department of Ophthalmology and Visual Sciences
Washington University Medical School
St. Louis, Missouri

Education and Training

- 1998-1999 Fellow, Uveitis and Medical Retina
Instructor
Dept. Ophthalmology and Visual Sciences
Barnes Retina Institute/Washington University Medical School,
St. Louis, Missouri
- 1995-1998 Resident
Dept. Ophthalmology and Visual Sciences
Barnes-Jewish Hospital/Washington University Medical School,
St. Louis, Missouri
- 1994-1995 Intern, Internal Medicine
Stanford University Hospital and Veterans Administration
Hospital, Palo Alto, California
- 1994 Ph.D., Neurosciences
Stanford University School of Medicine, Stanford, California
- 1994 M.D.
Stanford University School of Medicine, Stanford, California
- 1985 B.S., Biological Sciences
Stanford University, Stanford, California

Research training

- 1995-1998 Postdoctoral research (during residency)
Circadian photoreception in the retinal degenerate mouse
David C. Beebe, PhD, advisor
Department of Ophthalmology and Visual Sciences
Washington University School of Medicine
- 1990-1994 Doctoral research in Neurosciences
Circadian control of gene expression in *Drosophila melanogaster*
Mark A. Krasnow, MD, PhD; William C. Dement, MD, PhD,
advisors
Department of Biochemistry, Stanford University School of Medicine
- 1988-1990 Doctoral research in Neurosciences
Circadian control of gene expression in the mammalian eye and
suprachiasmatic nucleus
Jack D. Barchas, MD; William C. Dement, MD, PhD, advisors
Nancy F. Pritzker Laboratory of Behavioral Neurochemistry
Department of Psychiatry, Stanford University School of Medicine
- 1985-1988 Graduate research in Neurosciences
Real-time automated sleep scoring in rodents
William C. Dement, MD, PhD, advisor
Department of Psychiatry, Stanford University School of Medicine

- 1984-1985 Undergraduate research in Biological Sciences
Determinants of daytime alertness in adolescent and geriatric subjects
Mary A. Carskadon, PhD, advisor
Department of Psychiatry, Stanford University School of Medicine
- 1983-1984 Summer research fellowship in Pharmacology
Cardiovascular pharmacology of halogenated hydrocarbons and benzo[a]pyrenes
Duncan E. Hutcheon, MD, DPhil, advisor
Department of Pharmacology, University of Medicine and Dentistry of New Jersey

Professional work experience

- 2013- Director
UW Vision Science Center
University of Washington Medical School
- 2009- Director
UW Medicine Eye Institute
University of Washington Medical School
- 2000- 2007 Director, Uveitis Service
Department of Ophthalmology and Visual Sciences
Barnes Retina Institute
Washington University Medical School
- 1999-2007 Attending physician, Barnes Retina Institute
St. Louis, MO
- 1985- Independent biomedical/software consultant
- 1985-1986 Life sciences technician, Stanford University Basic Sleep Research Laboratory and Sleep Disorders Clinic
- 1981 Editorial assistant, Journal of Clinical Pharmacology, Tenafly, New Jersey

Staff Privileges

University of Washington Medical Center, Seattle, WA 2008-
Harborview Medical Center, Seattle, WA, 2008-
Puget Sound VA Medical Center, Seattle, WA 2008-
Barnes-Jewish Hospital, St. Louis, MO, 1998-2007
Barnes-Jewish West Hospital, Creve Coeur, MO, 1998-2007
St. Luke's Hospital, Chesterfield, MO, 1998-2007
St. Mary's Hospital, Clayton, MO, 1998-2007
St. Anthony's Hospital, St. Louis, MO, 1998-2007

Teaching experience

2004-2007	Director of Education Department of Ophthalmology and Visual Sciences Washington University Medical School
1999-2004	Director of Residency Education/Program Director Department of Ophthalmology and Visual Sciences Washington University Medical School/Barnes-Jewish Hospital
1986	Teaching assistant, biology of circadian rhythms Dow O. Woodward, PhD, Professor Department of Biological Sciences, Stanford University
1985	Teaching assistant, developmental biology and vertebrate biology Norman K. Wessels, PhD, Professor Department of Biological Sciences, Stanford University
1984	Teaching assistant, core undergraduate biology laboratory Dow O. Woodward, PhD, Professor Department of Biological Sciences, Stanford University

Awards, fellowships, and appointments

2021-2025	Editorial Board Annual Reviews of Vision Science Annual Reviews, Inc.
2020-	Ethics Committee American Academy of Ophthalmology
2020	Retina Research Foundation Research Award Retina Research Foundation Dallas, TX
2020-	Board Member Virginia Merrill Bloedel Hearing Research Center University of Washington
2019-2020	Chair Clinical advisory board (unpaid) Vedere, LLC
2020-2025	Member Council of Councils National Institutes of Health
2019-	Examiner American Board of Ophthalmology

2019	Gold Fellow Association for Research in Vision and Ophthalmology (ARVO)
2018-	Advisory committee Audacious Goals Initiative National Eye Institute National Institutes of Health
2017-2019	President Elect, President, and Past President Association of University Professors of Ophthalmology
2017-2019	President Elect, President, and Past President Washington Academy of Eye Physicians and Surgeons
2017	Bressler Prize in Vision Science Lighthouse Guild New York, NY
2017-2021	Member National Eye Advisory Council National Eye Institute National Institutes of Health
2016	Heed-Gutman Award Society of Heed Fellows Heed Ophthalmic Foundation
2016	Helen Keller Vision Award Lions Clubs Multiple District 19
2016	Member, Z03 Special Emphasis Study Section Member, Z04 Special Emphasis Study Section National Institutes of Health Bethesda, MD
2016	Chair, Nominating Committee American Academy of Ophthalmology
2016	Immediate Past President American Academy of Ophthalmology
2015	Member, Z03 Special Emphasis Study Section National Institutes of Health Bethesda, MD
2015, 2016, 2018	PRAISE Award (Patient Reported Assessment in Satisfaction and Excellence) UW Medicine
2015	Silver Fellow Association for Research in Vision and Ophthalmology (ARVO)

2015	President American Academy of Ophthalmology
2014	President-Elect American Academy of Ophthalmology
2013	NIH National Eye Institute 'Audacious Goals' Awardee
2013	Election to the Alcon Research Institute
2013-17	Trustee Association of University Professors of Ophthalmology
2013-2014	Awards Committee ARVO Foundation
2013-	Editorial Board Ophthalmology
2013-2016	Scientific Advisory Board Foundation Fighting Blindness
2013-	Chair, Finance and Audit Committee University of Washington Physicians
2013-	Director American Uveitis Society
2012	Senior Honor Award American Academy of Ophthalmology
2012-2013	Chair, Council American Academy of Ophthalmology
2012-2018	Associate Editor Investigative Ophthalmology and Visual Science
2011, 2013	Harry Hirsch Leiter Award Ocular Microbiology and Immunology Group (OMIG) Orlando, FL
2011-2016	Scientific Advisory Board Catalyst for the Cure 2 Glaucoma Research Foundation San Francisco, CA
2011	Secretariat Award American Academy of Ophthalmology
2011-2013	Immediate Past President American Uveitis Society

2010-2013	Appointments and Promotions Committee School of Medicine University of Washington
2010-2016	Board of Trustees American Academy of Ophthalmology
2011-2012 2014-2016	Executive Committee Board of Trustees American Academy of Ophthalmology
2011-2021	Trustee Society of Heed Fellows
2010-11	Vice Chair of Council American Academy of Ophthalmology
2010	Section Chair Standardization of Uveitis Nomenclature Meeting II Miami, FL
2010-2012, 2018-20	Inclusion in 'Top Doctors', Ophthalmology Seattle Magazine
2010-2020	Inclusion in 'Top Doctors', Ophthalmology Seattle Metropolitan Magazine
2009, 2011, 2014, 2017 2020	Ad hoc scientific study section Research to Prevent Blindness New York, NY
2009	Teacher of the year, academic faculty Department of Ophthalmology University of Washington School of Medicine
2008-2010	President, American Uveitis Society
2008-	Board of Trustees University of Washington Physicians University of Washington Medical School
2008-2016	Executive Committee University of Washington Physicians University of Washington Medical School
2008-11	Chair, Commercial Relations Committee Association for Research in Vision and Ophthalmology
2008-9	Presidential Nominating Committee American Academy of Ophthalmology
2008-2012	Basic and Clinical Sciences Curriculum Committee

Uveitis subsection
American Academy of Ophthalmology

2007-8 President-elect
American Uveitis Society

2007-2011 Editorial Board Member
Investigative Ophthalmology and Visual Science (IOVS)

2007-2013 Burroughs-Wellcome Translational Scientist Award

2007-2009 Council representative, American Uveitis Society
American Academy of Ophthalmology

2006 Election to Macula Society

2006-2007 Medical Treatment Quality Assurance Committee
Multi-center Uveitis Steroid Trial (MUST)

2006-2012 Editorial Board
American Journal of Ophthalmology

2006 Chairman, nominating committee
Society for Research in Biological Rhythms

2006 Ad Hoc Member
Biological rhythms and sleep study section
NIH

2006 Teacher of the Year, Research Faculty
Department of Ophthalmology and Visual Sciences
Washington University Medical School

2005-2008 Scientific Advisory Board
Drug Discovery Division
Alcon Research Laboratories

2005-2008 Maintenance of Certification Committee
American Academy of Ophthalmology

2005- Best Doctors in America

2004-2013 Editorial Advisory Board
Journal of Biological Rhythms

2004-2007 Member-at-large
American Uveitis Society Executive Committee

2004 Achievement Award
American Academy of Ophthalmology

2003 Second prize, Uveitis Clinical Paper of the Year Award

Deutsche Uveitis-Arbeitsgemeinschaft
(Awarded to Dworkin et al., Arch. Ophthalmol. 120:1534-9, 2002)

2003 Associate Examiner, American Board of Ophthalmology (Declined)

2003- Associate Editor
Ocular Immunology and Inflammation

2003-2004 American Academy of Ophthalmology Leadership Development Program

2003-2006 Charles E. Culpeper Medical Science Scholar
Rockefeller Brothers Foundation

2002-2007 Co-Director
Mouse Transgenic and Embryonic Stem Cell Module
Department of Ophthalmology and Visual Sciences
Washington University Medical School

2002-2004 NARSAD Young Investigator Award

2001-2004 Becker/Association of University Professors of Ophthalmology/RPB Clinician-
Scientist Career Development Award (inaugural)

2001-2007 Meeting Organizer, Annual Winter Meeting
(Responsible for scientific program and organization for national meeting)
American Uveitis Society

2000 Ophthalmology Teacher of the Year, Academic Faculty
Washington University Department of Ophthalmology and Visual Sciences

2000-2004 Research to Prevent Blindness
Young Investigator Career Development Award

2000-2001 Becker Clinician-Scientist Award (inaugural)
Horncrest Foundation

1999-2004 K08 Physician-Scientist Training Award
"Function of cryptochromes in the mouse eye"
National Eye Institute, NIH

1999-2000 Member, national expert panel on immunosuppressive medication for uveitis

1999 Resident and fellow research award finalist
Association of University Professors of Ophthalmology

1998-1999 Thomas D. and Ruth Byers Heed Foundation Fellow

1998-1999 Society of Heed Fellows Fellow

1998 Alpha Omega Alpha medical honor society

1989-1994 Admissions committee, Medical Scientist Training Program and

	Stanford University School of Medicine
1991	Consultant Congressional Commission on Sleep Disorders, Washington DC
1989	Raconteur, Sleep Research Basic Sciences Colloquium, Institute of Medicine, National Academy of Sciences, Newport, CA
1987-1994	Medical Scientist Training Program Stanford University School of Medicine
1985	Phi Beta Kappa, California Beta Chapter
1986	Award for outstanding contribution to undergraduate teaching Department of Biological Sciences, Stanford University
1982-1983	Undergraduate Summer Research Fellowships University of Medicine and Dentistry of New Jersey

Grant Funding

Current

"Functions of OPN5 and OPN3 in the eye". PI: Van Gelder. 1R01EY026921. 2017-2022, total direct funding \$1,650,000

"Molecular epidemiology of adenoviral pathogenesis in keratoconjunctivitis." PI: Van Gelder. Pending. total direct funding \$375,000.

Past

"Photoswitchable channel blockers for treatment of blindness", Lead PI: Van Gelder. 1R24EY023937. 2014-2019, total direct funding \$7,272,435.

"Molecular epidemiology of adenoviral pathogenesis in keratoconjunctivitis." PI: Van Gelder. 1R21EY027453. 2017-2019, total direct funding \$375,000.

"Diversity and Dynamic Stability of the Ocular Surface Microbiome". Lead PI: Van Gelder. 1R01EY022038-01. 2012-2017, total direct funding \$2,500,000.

"Nanomaterials in the treatment of blindness". Supplement to NIH Nanotechnology Discovery Center for the Optical Control of Biological Function. PN2 EY018241 2008-2016; total direct funding \$557,381.

"Mouse models of uveitis", Alcon Research Laboratories, Inc., \$250,000

"Ocular surface microbiome in dry eye disease", Alcon Research Laboratories Inc, 2012-2013, \$250,000

"Mechanisms of ocular inflammatory disease", Burroughs-Wellcome Translational Scientist Award. 2007-2013; total direct funding \$750,000

“Light dependent protein degradation”, EUREKA R01 Award, National Institutes of Health, National Institute of General Medical Studies R01-GM085404. 2008-2011; total direct funding \$450,000

“Pathogen detection in glaucoma”, Alcon Research Laboratories Inc. unrestricted gift, \$137,000

“Non-visual function of cryptochromes” National Institutes of Health, National Eye Institute R01-EY14988. 2003-2008; total direct funding \$1.0 million

“A transgenic mouse model of ocular inflammation”, National Institutes of Health, National Eye Institute R03-EY16216. 2004-2007; total direct funding \$300,000

“Multicenter Uveitis Steroid Trial”, National Institutes of Health, National Eye Institute U10EY14660 2005-2009; Wash U site PI; total direct funding \$336,000

Charles Culpepper Medical Scientist Award, Rockefeller Brothers Foundation. 2003-2006; total direct funding \$300,000

“Characterization of non-visual ocular photoresponses”, McDonnell Center for Higher Brain Function. 2004-2006; total funding \$80,000

“Foreign DNA in sarcoidosis tissue specimens identified by digital karyotyping” Danforth Center for Genome Sciences. 2004-5; total funding \$50,000

Becker/AUPO/RPB Physician Scientist Award. 2001-2004; total direct funding \$300,000

Research to Prevent Blindness Career Development Award. 2000-2004; total direct funding \$200,000

NARSAD Career Development Award. 2002-2004; total direct funding \$60,000

Physician-Scientist Award, Horncrest Foundation. 1999-2001 (relinquished in second year after being awarded the Becker/AUPO/RPB award). Total direct funding \$240,000.

“Non-visual photoreception” National Institutes of Health, National Eye Institute K08-00403-5. 1999-2004; total direct funding \$620,000

Publications (187 total)

Google Scholar statistics:

h-index: 51

Total citations: 10,566

I10 index: 110

NIH iCite Weighted Relative Citation Index: 229

I. Peer review: Basic research

Upton BA, Diaz NM, Gordon SA, Van Gelder RN, Buhr ED, Lang RA. Evolutionary constraint on visual and nonvisual mammalian opsins. **J Biol Rhythms**. 36:109-126, 2021.

Zhang KX, D'Souza S, Upton BA, Kernodle S, Vemaraju S, Nayak G, Gaitonde KD, Holt AL, Linne CD, Smith AN, Petts NT, Batie M, Mukherjee R, Tiwari D, Buhr ED, Van Gelder RN, Gross C,

Sweeney A, Sanchez-Gurmaches J, Seeley RJ, Lang RA. Violet-light suppression of thermogenesis by opsin 5 hypothalamic neurons. **Nature**. 585(7825):420-425, 2020.

John S, Rolnick K, Wilson L, Wong S, Van Gelder RN, Pepple KL. Bioluminescence for in vivo detection of cell-type-specific inflammation in a mouse model of uveitis. **Sci Rep**. 10(1):11377, 2020.

Díaz NM, Lang RA, Van Gelder RN, Buhr ED. Wounding induces facultative Opn5-dependent circadian photoreception in the murine cornea. **Invest Ophthalmol Vis Sci**. 61(6):37, 2020.

Nayak G, Zhang K, Vemaraju S, Odaka Y, Buhr ED, Holt-Jones A, Kernodle S, Smith AN, Upton BA, D'Souza S, Zhan JJ, Diaz N, Nguyen M-T, Mukherjee R, Gordon SA, Wu G, Schmidt R, Mei X, Petts NT, Batie M, Rao S, Hogenesch J, Nakamura T, Sweeney A, Seeley R, Van Gelder RN, Sanchez-Gurmaches J, Lang R. Adaptive thermogenesis in mice is enhanced by opsin 3-dependent adipocyte light sensing. **Cell Rep**. 30:P672-686.E8, 2020.

Pepple KL, Wilson L, Van Gelder RN, Kovaleva M, Ubah OC, Steven J, Barelle CJ, Porter A. Uveitis therapy with shark variable novel antigen receptor domains targeting tumor necrosis factor alpha or inducible T-cell costimulatory ligand. **Transl Vis Sci Technol**. 8:11, 2019.

Buhr ED, Vemaraju S, Diaz N, Lang RA, Van Gelder RN. Neuropsin (OPN5) mediates local light-dependent induction of circadian clock genes and circadian photoentrainment in exposed murine skin. **Curr Biol**. 29:3478-3487, 2019.

Hüll K, Benster T, Manookin MB, Trauner D, Van Gelder RN, Laprell L. Photo-pharmacologic vision restoration reduces pathological rhythmic field potentials in blind mouse retina. **Sci Rep**. 9:13561, 2019.

Nguyen MT, Vemaraju S, Nayak G, Odaka Y, Buhr ED, Alonzo N, Tran U, Batie M, Upton BA, Darvas M, Kozmik Z, Rao S, Hegde RS, Iuvone PM, Van Gelder RN, Lang RA. An opsin 5-dopamine pathway mediates light-dependent vascular development in the eye. **Nat Cell Biol**. 21:420-429, 2019.

Tsuchiya S, Sugiyama K, Van Gelder RN. Adrenal and glucocorticoid effects on the circadian rhythm of murine intraocular pressure. **Invest Ophthalmol Vis Sci**. 59:5641-5647, 2018.

Delwig A, Chaney SY, Bertke AS, Verweij J, Quirce S, Larsen DD, Yang C, Buhr E, Van Gelder R, Gallar J, Margolis T, Copenhagen DR. Melanopsin expression in the cornea. **Vis Neurosci**. 35:E004, 2018.

Pepple KL, Wilson L, Van Gelder RN. Comparison of aqueous and vitreous lymphocyte populations from two rat models of experimental uveitis. **Invest Ophthalmol Vis Sci**. 59:2504-2511, 2018.

Tsuchiya S, Buhr ED, Higashide T, Sugiyama K, Van Gelder RN. Light entrainment of the murine intraocular pressure circadian rhythm utilizes non-local mechanisms. **PLoS One**. 12:e0184790, 2017

Laprell L, Tochitsky I, Kaur K, Manookin MB, Stein M, Barber DM, Schon C, Michalakis S, Biel M, Kramer RH, Sumser MP, Trauner D, Van Gelder RN. Photopharmacological control of bipolar cells restores visual function in blind mice. **J Clin Invest**. 127:2598-2611, 2017

Gutowski MB, Wilson L, Van Gelder RN, Pepple KL. In vivo bioluminescence for longitudinal monitoring of inflammation in animal models of uveitis. **Invest Ophthalmol Vis Sci**. 38:1421-1428, 2017.

Bedont JL, LeGates TA, Buhr E, Bathini A, Ling JP, Bell B, Wu MN, Wong PC, Van Gelder RN, Mongrain V, Hattar S, Blackshaw S. An LHX1-regulated transcriptional network controls sleep/wake coupling and thermal resistance of the central circadian clockworks. **Curr Biol.** 27:128-136, 2017.

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IV. Letters

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V. Books

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VI. Book chapters

Pepple KL, Van Gelder RN. Sarcoidosis. In: Papiodis G (ed). Uveitis: a practical guide to the diagnosis and treatment of intraocular inflammation. Cham, Switzerland: Springer, 2017.

Kim E, Pepple K, Van Gelder RN. Polymerase chain reaction diagnostics. In: Tasman W, Jaeger EA (eds): Duane's Ophthalmology. Baltimore: Lippincott, Williams, and Wilkins, 2012.

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Van Gelder RN. Posterior segment uveitis. In: Yorio T, Clark AF, Wax MB, eds. Ocular Therapeutics: an Eye to New Discoveries. San Diego: Academic Press, 2008, pp. 301-314.

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Van Gelder RN, Kaplan HJ. Thinking about endophthalmitis. In Saer JB (ed): Vitreoretinal and uveitis update. Proceedings of the 47th annual symposium of the New Orleans Academy of Ophthalmology. The Hague: Kugler Publications, 1998, pp. 187-191.

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for Anxiolytics and Hypnotics: From Molecular Pharmacology to Therapeutics. Basel: Int. Acad. Biomed. Drug Res. Karger, 1992, vol 3, pp. 129-150.

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VII. Columns

Author of 'Journal Watch' column, *Ocul Immunol Inflamm*:

11(4), 2003
12(1), 12(2), 12(3), 12(4), 2004
13(1), 13(2-3), 13(3), 13(4), 13(5), 13(6), 2005
14(1), 14(2), 14(3), 14(4), 14(5), 14(6), 2006
15(1), 15(2), 15(4), 15(5), 15(6), 2007
16(1), 16(2), 16(3), 16(4), 16(5), 16(6) 2008
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VII. Thesis

Van Gelder RN. Circadian control of gene expression in *Drosophila melanogaster* and *Mus musculus*. Program in Neurosciences, Stanford University School of Medicine, 1994.

VIII. Patents

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Van Gelder RN, von Zastrow ME, Barchas JD, Eberwine JH. 2001. Multi-genes expression profile. United States Patent and Trademark Office. Patent #6,291,170.

Van Gelder RN, von Zastrow ME, Barchas JD, Eberwine JH. 1999. Processes for genetic manipulations using promoters. United States Patent and Trademark Office, Patent #5,891,636

Van Gelder RN, von Zastrow ME, Barchas JD, Eberwine JH. 1998. Processes for genetic manipulations using promoters. United States Patent and Trademark Office, Patent #5,716,785

Van Gelder RN, von Zastrow ME, Barchas JD, Eberwine JH. 1996. Process for amplification of nucleic acids using a single primer-promoter complex. United States Patent and Trademark Office, Patent # 5,545,522.

Selected invited presentations

Named lectures

2020 The miracle of retinal reanimation: restoring vision in outer retinal degeneration
72nd Arthur J. Bedell, MD Memorial Lecture
Wills Eye Hospital Annual Meeting
Philadelphia, PA

Prospects for vision restoration in outer retinal degeneration

- Schepens Lecture/Retina Research Foundation Prize Lecture
Retina Society
New York, NY (virtual due to COVID-19)
- 2019 Restoring visual function in retinal degeneration with small molecule photoswitches
Susruta Lecture
University of Pittsburgh Department of Ophthalmology
Pittsburgh, PA
- 2018 Progress toward pharmacologic vision restoration in outer retinal blindness
Dame Ida Mann Lecture
Royal Australian and New Zealand College of Ophthalmology
Adelaide, South Australia, Australia
- 2017 Idiopathic Ocular Inflammatory Disease: Lessons From Deep DNA Sequencing
C. Stephen and Frances Foster Lecture
American Academy of Ophthalmology
New Orleans, LA
- Novel opsins in ocular and extraocular photoreception
Alfred Bressler Award Lecture
Lighthouse Guild
New York, NY
- Deep DNA sequencing for ocular pathogen detection and discovery
Alan E. Irwin, MD Lecture
Department of Ophthalmology
University of Vermont Medical School
Burlington, VT
- 2016 The ocular surface microbiome
Oliver H. Dabezies, Jr., MD Lecture
Contact Lens Association of Ophthalmologists
Seattle, WA
- Molecular diagnostics for infectious eye disease
Novel Photoreceptors in the eye
James E. McDonald, MD Lectures
Department of Ophthalmology, Loyola Medical School
Chicago, IL
- 2015 Pathogen detection and discovery in inflammatory eye disease
Roger Hiatt, MD Lecture
Southeast Eye Regional Meeting
Sandestin, FL
- 2014 More than meets the eye: new retinal photoreceptors for circadian entrainment
Dr. Joseph E. Koplowitz Memorial Lecture
Wilmer Eye Institute
Johns Hopkins University
Baltimore, MD

Deep DNA sequencing in ocular infectious and inflammatory disease
Walter J. Stark Memorial Lecture
Dean McGee Eye Institute
University of Oklahoma
Oklahoma City, OK

Torque Teno virus associated with culture negative endophthalmitis
Harry Hirsch Leiter Lecture
Ocular Microbiology and Immunology Group
Chicago, IL

Changing times in the diagnosis and management of ocular infectious diseases
Inaugural Jones-Smolim Lecture
American Academy of Ophthalmology
Chicago, IL

Adventures in natural and synthetic non-visual photoreception
Inaugural David C. Beebe Lecture
Department of Ophthalmology
Washington University
St. Louis, MO

2013 New retinal and corneal photoreceptors
Transamerica Professor
University of California, San Francisco
San Francisco, CA

2012 Deep DNA Sequencing for of the ocular surface microbiome
Harry Hirsch Leiter Lecture
Ocular Microbiology and Immunology Group
Chicago, IL

2010 Pathogen detection and discovery in the 21st century
Joseph A. Bryan Lecture
Department of Ophthalmology
Duke Eye Center
Duke University
Durham, NC

2008 Power and pitfalls of the polymerase chain reaction in diagnostics
Adventures in non-visual ocular photoreception
Bausch & Lomb Visiting Professorship
Department of Ophthalmology
University of Rochester Medical School
Rochester, NY

2006 Non-visual ocular photoreception: a guided tour from bench to bedside
Bernard Becker Professorship Lecture
Department of Ophthalmology and Visual Sciences
Washington University Medical School
St. Louis, MO

2005 Learning from the pupils: non-visual ocular photoreception
8th Harvard Professorship
Massachusetts Eye and Ear Infirmary
Harvard Medical School
Boston, MA

2004 Making (a) sense of non-visual ocular photoreception
Harrison and Lya Cordova Latta Lecture
Department of Pathology
University of California, Los Angeles

Polymerase chain reaction diagnostics in ophthalmology
Walter Griggs, MD Lecture
New Hampshire Ophthalmologic Society
Hanover, NH

2003 Making (a) sense of non-visual ocular photoreception
Richard O'Connor, MD Lecture
Proctor Foundation
University of California, San Francisco
Asilomar, CA

Polymerase chain reaction diagnostics: From bench to bedside
Inaugural Jeffrey Berger, MD, PhD Lecture
Scheie Eye Institute
University of Pennsylvania School of Medicine

2002 Non-visual ocular photoreception
David and Lois Rich Lecture
Department of Ophthalmology
University of Alabama, Birmingham Medical School
Birmingham, AL

Other invited presentations

2020 Non-visual opsins in retinal and extraretinal photoreception
American Society for Photobiology
Via Zoom

Time Management Hacks
School Level Responsibilities and Opportunities
Association of University Professors of Ophthalmology Annual Meeting
Palm Desert, CA

What Does the Mouse See?
Evaluating Small Molecule Photoswitches for Vision Restoration In Vitro
University of California, Irvine
(Given remotely due to COVID travel restrictions)

2019 Approaches to vision restoration in outer retinal blindness

Montana State University Department of Chemistry and Biochemistry
Bozeman, MT

Uveitis literature year in review
American Uveitis Society
San Francisco, CA

Current status of diagnostic modalities in endophthalmitis
American Academy of Ophthalmology
San Francisco, CA

Lessons in adenoviral keratoconjunctivitis from deep DNA sequencing
Small molecule photoswitches for vision restoration
More than meets the eye: the expanding spectrum of mammalian opsin photoreceptors
23RD Annual Ophthalmic Innovation Summit
University of Colorado School of Medicine
Denver, CO

Sensing without seeing: The world of ocular and extraocular non-visual photoreceptors
Residency graduation speaker
University of Chicago Department of Ophthalmology
Chicago, IL

New models and tools for studying uveitis
Department of Ophthalmology
University of Bristol School of Biomedical Sciences
Bristol, UK

Deep DNA sequencing for pathogen detection, description, and discovery
Vanderbilt Eye Institute Grand Rounds
Nashville, TN

Reversing outer retinal blindness using small molecule photoswitches
Distinguished Lecture in Vision and Ophthalmology
Vanderbilt University Department of Ophthalmology
Nashville, TN

Molecular diagnostics for ocular infectious and inflammatory diseases
Laboratory Medicine Grand Rounds
University of Washington

1. Fishing for a diagnosis: understanding the uveitis workup
2. Lessons from deep DNA sequencing in inflammatory eye disease
3. Sensing without seeing: novel inner retinal photoreceptors
4. Progress in retinal reanimation

38th Annual Squaw Valley Retina Symposium
Truckee, CA

Nuts and bolts of endowments
AUPO New Chair Bootcamp
4. Ft. Lauderdale, FL

President's symposium: professionalism
Association of University Professors of Ophthalmology
Ft. Lauderdale, FL

2018 Local or global? Pros and cons of treating uveitis with corticosteroid implants versus systemic immunomodulation
Royal Australia and New Zealand College of Ophthalmology
Adelaide, Australia

Culture negative endophthalmitis
Royal Australia and New Zealand College of Ophthalmology
Adelaide, Australia

The ocular microbiome in health, infection and inflammation
Royal Australia and New Zealand College of Ophthalmology
Adelaide, Australia

Lessons from deep sequencing in ocular inflammatory disease
Royal Australia and New Zealand College of Ophthalmology
Adelaide, Australia

The Future of Ophthalmology Practice for YOs: Has the academic practice changed?
American Academy of Ophthalmology
Chicago, IL

Polymerase chain reaction
Retinal subspecialty day
American Academy of Ophthalmology
Chicago, IL

Uveitis Literature Year in Review
American Uveitis Society
Chicago, IL

Restoring vision with small molecule photoswitch compounds
Department of Ophthalmology
Stanford University School of Medicine
Stanford, CA

Insights into infectious eye disease from deep DNA sequencing
Massachusetts Eye and Ear Infirmary
Harvard Medical School
Boston, MA

Small molecular approaches to vision restoration for retinitis pigmentosa
UC Davis Spring Ophthalmology Symposium
Napa, CA

Idiopathic no more: Insights into infectious eye disease from deep DNA sequencing (keynote talk)
UC Davis Spring Ophthalmology Symposium
Napa, CA

Pearls in laboratory testing for uveitis: sarcoid, syphilis, and TB
UC Davis Spring Ophthalmology Symposium
Napa, CA

What to look for in your first academic job
Association for Vision Research in Ophthalmology
Honolulu, HI

Neuropsin (OPN5)-mediated photic regulation of clock systems
Association for Vision Research in Ophthalmology
Honolulu, HI

Basics of laboratory testing for uveitis
Department of Ophthalmology
Kanazawa Hospital
Kanazawa, Japan

Understanding non-visual ocular photoreception
Keynote talk
Japanese Ophthalmological Society
Osaka, Japan

Time hacks
Service opportunities in your school
New chair bootcamp
Association of University Professors of Ophthalmology
Austin, TX

Managing your reputation in vertically integrated health care system
Association of University Professors of Ophthalmology
Austin, TX

Natural and synthetic inner retinal photoreception
National Eye Institute
National Institutes of Health
Bethesda, MD

2017 What you need to know from this year's literature
American Ophthalmological Society Symposium
American Academy of Ophthalmology
New Orleans, LA

Which is the greater need in uveitis: tests or treatments
American Academy of Ophthalmology
New Orleans, LA

Decoding the Uveitis Workup
Co-Instructor
American Academy of Ophthalmology
New Orleans, LA

Uveitis literature year in review 2017
American Uveitis Society
New Orleans, LA

Vision restoration using small molecule photoswitches: a progress report
Lighthouse Guild symposium
New York, NY

The secret world of microbes: Insights from deep DNA sequences of ocular biopsies
University of Southern California Resident Alumni Day
Pasadena, CA

Deep DNA Sequencing for infectious eye disease
Fishing for a Diagnosis: Pearls for diagnostic testing in uveitis
Visiting Professor
Department of Ophthalmology
Cornell-Weill Medical College
New York, NY

Infectious ocular inflammatory disease: lessons learned from next generation sequencing
Beyond melanopsin: novel pathways for light entrainment of mammalian circadian oscillators.
University of Aberdeen
Aberdeen, Scotland

2016 Fishing for a uveitis diagnosis: pearls and pitfalls
Visiting Professor
New York Eye and Ear Infirmary of Mt. Sinai
New York, NY

A glimpse into the future of molecular pathogen detection in inflammatory eye disease
Ophthalmic Laser and Surgical Society
New York, NY

More than meets the eye: Functions of novel opsin photopigments in the retina and beyond
Distinguished professor lecture
Cole Eye Institute, Cleveland Clinic
Cleveland, OH

Toward vision restoration with small molecule photoswitches: path to translation
Department of Pharmacology
Case Western School of Medicine
Cleveland, OH

Deep DNA sequencing for ocular pathogen detection and discovery
Uveitis fellows forum
Cole Eye Institute, Cleveland Clinic
Cleveland, OH

Orphan no more: Neuropsin (Opn5) as a retinal and corneal photoreceptor
Department of Ophthalmology

University of California, Los Angeles
Los Angeles, CA

Insights from animal models of uveitis
Spanish Ocular Inflammation Society
Madrid, Spain

Next generation molecular diagnostics for infectious and inflammatory eye disease
Spanish Ocular Inflammation Society
Madrid, Spain

Natural and artificial inner retinal photoreception
Resident Alumni Day
Department of Ophthalmology, Mayo School of Medicine
Rochester, MN

The ocular virome
International uveitis study group
Dublin, Ireland

Adventures in circadian photoreception
Inaugural symposium
Cincinnati Circadian Institute
University of Cincinnati/Cincinnati Childrens Hospital
Cincinnati, OH

Neuropsin and local circadian photoentrainment
Alcon Research Institute
La Jolla, CA

Longitudinal Molecular Analysis of Microbial and Viral DNA in Blepharitis
Ocular Microbiology and Immunology Group
Chicago, IL

Uveitis literature year in review
American Uveitis Society
Chicago, IL

Reading the tea leaves: the future of uveitis diagnosis and patient management
Uveitis Subspecialty Day
American Academy of Ophthalmology
Chicago, IL

Patient engagement: what the AAO is doing
Senior Ophthalmologist Symposium
American Academy of Ophthalmology
Chicago, IL

Decoding the Uveitis Workup
Co-Instructor
American Academy of Ophthalmology
Chicago, IL

Deep DNA Sequencing in Ocular Inflammatory Diseases
Department of Ophthalmology
University of Toronto
Ontario, Canada

Beyond melanopsin: novel pathways for light entrainment of mammalian circadian oscillators.
Dartmouth College School of Medicine
Hanover, NH

Deep DNA Sequencing in Ocular Inflammatory Diseases
Grand Rounds
Dartmouth Department of Ophthalmology
Hanover, NH

2015 Opening session address
American Academy of Ophthalmology
Las Vegas, NV

The ocular surface microbiome
American Academy of Ophthalmology
SYM38 Controversies in Infectious Eye Disease
Las Vegas, NV

More than meets the eye: novel non-visual photopigments in retina and cornea
Bressler Award Symposium
Guild/Lighthouse
New York, NY

Pharmacology of photons: functions of novel opsins in mammals
Symposium in honor of Dr. Kris Palczewski
Case Western Reserve Medical School
Cleveland, OH

Deep DNA Sequencing for Pathogen Detection and Discovery in Inflammatory Eye Diseases
President's symposium, opening session
International Ocular Inflammation Society Biennial Meeting
San Francisco, CA

The Ocular Microbiome in Intraocular Inflammation
International Ocular Inflammation Society Biennial Meeting
San Francisco, CA

Advances in understanding the ocular surface microbiome: a progress report
Biofilms and microbiome SIG
ARVO
Denver, CO

Clinician-Scientists: Perspectives of a (practicing) chair
ARVO

Denver, CO

Top 10 mistakes in the workup of uveitis
Asia Pacific Academy of Ophthalmology
Guangzhou, China

Advances in molecular diagnostics for ocular inflammatory disease Asia Pacific
Academy of Ophthalmology
Guangzhou, China

Ophthalmology residencies should have tracks
Association of University Professors of Ophthalmology
Tucson, AZ

2014 More than meets the eye: New retinal photoreceptors and the promise of vision
restoration
Science in Medicine Lectureship
University of Washington School of Medicine
Seattle, WA

Natural and synthetic non-visual ocular photoreception
Vision Science Group
University of Cincinnati/Cincinnati Childrens
Cincinnati, OH

Deep DNA sequencing for pathogen discovery in inflammatory eye disease
Kellogg Eye Institute, University of Michigan
Ann Arbor, MI

Beyond melanopsin: new layers of non-visual photoreception in the mammalian
eye
Kellogg Eye Institute, University of Michigan
Ann Arbor, MI

Pearls in laboratory testing for uveitis
SUNY Downstate Department of Ophthalmology
Brooklyn, NY

Deep DNA sequencing for pathogen discovery in inflammatory eye disease
SUNY Downstate Department of Ophthalmology
Brooklyn, NY

Frontiers in deep DNA sequencing for infectious eye disease
Massachusetts Eye and Ear Infirmary
Harvard University Medical School
Boston, MA

2013 Deep DNA Sequencing for Ocular Pathogen Discovery
An Update on Ocular Toxoplasmosis
New England Ophthalmological Society (NEOS)
Boston, MA

Decoding the Uveitis Workup
Co-Instructor
American Academy of Ophthalmology
New Orleans, LA

Uveitis literature year in review
American Uveitis Society Annual Meeting
New Orleans, LA

Torque teno virus associated with culture-negative endophthalmitis
Ocular Microbiology Interest Group (OMIG) Annual Meeting
New Orleans, LA

Deep DNA sequencing of the ocular surface
Gained in Translation 4th annual meeting
Seattle, WA

Layers of visual and non-visual photoreception in the mammalian eye
Representational deep DNA sequencing for potential pathogen discovery in idiopathic
ocular inflammation
Departments of Pharmacology and Ophthalmology
Case Western Reserve University
Cleveland, OH

Session moderator
Ocular circadian rhythms
Association for Research in Vision and Ophthalmology (ARVO)
Seattle, WA

Small molecule photoswitches for restoration of vision
Department of Ophthalmology
University of Pennsylvania
Philadelphia, PA

Small molecule photoswitches for restoration of vision
National Eye Institute Audacious Goals Meeting
Potomac, MD

Uses and abuses of practice extenders in ophthalmology
(Moderator)
American Academy of Ophthalmology Midyear Forum
Washington, DC

Deep DNA sequencing for pathogen discovery in inflammatory eye disease
Visiting professor
Department of Ophthalmology
George Washington University
Washington, DC

2012

Keynote Speaker
Thinking about etiologies of uveitis
Novartis Institute for Biologic Research Annual Retreat

Ft Lauderdale, FL

The Siren Song of Clinical Practice
Association of University Professors of Ophthalmology
Miami, FL

Ocular pathogen detection and discovery using biome representational in silico
karyotyping (BRiSK)
Division of Medical Genetics
University of Washington Medical School
Seattle, WA

Toward restoration of vision in outer retinal blindness: the one-component chemical
photoswitch
Podos Symposium
Alcon Research Institute/ARVO
Ft. Lauderdale, FL

One component chemical photoswitches for restoration of vision
Foundation Fighting Blindness Symposium
Harvard University Department of Ophthalmology
Boston, MA

Chemical reanimation of the retinal degenerate retina
Molecular pathogen detection and discovery in uveitis
Resident Alumni Day
University of Missouri Kansas City/Sabates Eye Institute
Kansas City, MO

Molecular Methods for Ocular Pathogen Detection
and Discovery
Appropriate Laboratory Testing Strategies for Uveitis
Nebraska Academy of Eye Physicians and Surgeons
Omaha, NE

Nuts and Bolts of the Uveitis Workup
Alaska Society of Eye Physicians and Surgeons
Anchorage, AK

Further studies of a red shifted, one-component photoswitch
NDC semi-annual meeting
University of California, Berkeley
Berkeley, CA

Uveitis Literature Year in Review
American Uveitis Society
Chicago, IL

Board of Trustees Update
American Academy of Ophthalmology Council
Chicago, IL

Is it infectious, immune-mediated, or neoplastic? The importance of ocular biopsy
Uveitis Subspecialty Day
American Academy of Ophthalmology
Chicago, IL

Decoding the Uveitis Workup (co-instructor)
American Academy of Ophthalmology
Chicago, IL

Nuts and Bolts of the Uveitis Workup
Reanimation of the Blind Retina
Non-visual photoreception: the next generation
Winter Update
University of Texas Southwestern
Dallas, TX

Pathogen detection and discovery in inflammatory eye disease
Non-visual photoreception: the next generation
Emory University
Atlanta, GA

2011 Update on laboratory testing
Non-visual ocular photoreception
Visiting Professor
Department of Ophthalmology
University of Kentucky
Lexington, KY

Resident research should be a graduation requirement for ophthalmology residents
Association of University Professors of Ophthalmology
Phoenix, AZ

Photoswitch Compounds for Treatment of Blindness
NIH NDC Investigator Meeting
National Institutes of Health
Bethesda, MD

Update on Sarcoid, Syphilis, and Tuberculosis Laboratory Testing
Laboratory Testing in Uveitis (including workshop)
Autoimmune Retinopathies
Immunomodulation Treatment of Uveitis
PCR for Ocular Pathogen Discovery
New Orleans Academy of Ophthalmology
New Orleans, LA

Mining the ocular microbiome
27th Biennial Cornea Conference
Department of Ophthalmology
Harvard Medical School
Boston, MA

Molecular techniques for ocular pathogen detection and discovery
Department of Ophthalmology
University of British Columbia
Vancouver, BC

Natural and artificial non-visual ocular photoreception
Department of Ophthalmology
University of British Columbia
Vancouver, BC

Application of biome representational in silico karyotyping to characterization of the
contact lens ocular microbiome
Ocular Microbiology Interest Group (OMIG)
Orlando, FL

Co-Moderator, uveitis section
Retina Subspecialty Day
American Academy of Ophthalmology
Orlando, FL

Uveitis literature year in review 2011
American Uveitis Society
Orlando, FL

Pilot assessment of a novel, hand-held ocular flare meter
American Uveitis Society
Orlando, FL

Discussant, uveitis free paper session
American Academy of Ophthalmology
Orlando, FL

Molecular diagnosis of ocular inflammatory disease
Department of Ophthalmology Grand Rounds
University of Toronto

2010 Molecular pathogen discovery
American Uveitis Society Winter Meeting
Salt Lake City, UT

Visiting Professor
Deep sequencing for pathogen discovery
Bascom Palmer Eye Institute
University of Miami School of Medicine
Miami, FL

cis and *trans*-retinal preference of murine melanopsin
Association for Research in Vision and Ophthalmology
Ft. Lauderdale, FL

Advances in molecular diagnostics for uveitis
Retinal reanimation

Casey Eye Institute
Oregon Health Sciences University
Portland, OR

Nuts and bolts of the uveitis workup
Clinical pearls in the use of immunomodulation
Non-visual ocular photoreception
Western States Regional Roundup Ophthalmology meeting
Jackson Hole, WY

Deep sequencing for ocular pathogen discovery
Washington State Medical Association
Tacoma, WA

Literature Year in Review
American Uveitis Society
Chicago, IL

Photoswitch therapies for retinal reanimation
Retina subspecialty day
American Academy of Ophthalmology
Chicago, IL

The role of rapid diagnostic modalities in the management of ocular infections
American Academy of Ophthalmology
Chicago, IL

Instructor
'Decoding the Uveitis Workup'
American Academy of Ophthalmology
Chicago, IL

2009

Visiting Professor
Shiley Eye Institute
University of California, San Diego

Pathogen discovery in inflammatory eye disease
Non-visual ocular photoreception
Montana Academy of Ophthalmology
Big Sky, MT

Workup of the uveitis patient
Technician's course
Washington Academy of Eye Physicians and Surgeons
Seattle, WA

Adventures in Non-visual Ocular Photoreception
Department of Ophthalmology
Yale School of Medicine
New Haven, CT

Mechanisms of uveitis

Genentech Eye-Q Program
San Francisco, CA

Natural and Synthetic Non-visual Ocular Photoreception
Case Western Medical School
Cleveland, OH

Natural and Synthetic Non-visual Ocular Photoreception
Institute for Systems Biology
Seattle, WA

Natural and Synthetic Non-visual Ocular Photoreception
Jackson Laboratories
Bar Harbor, ME

Year in Review in Literature
American Uveitis Society
San Francisco CA

Pathogen detection and discovery in inflammatory eye disease
Hamilton Eye Institute
University of Tennessee, Memphis

2008

Adventures in non-visual ocular photoreception
Department of Ophthalmology
University of Iowa Medical School
Iowa City, IA

Insights into idiopathic uveitis
Non-visual ocular photoreception
Washington Academy of Eye Physicians and Surgeons
Seattle, WA

Session moderator
Session 156: Retinitis and endophthalmitis
Association for Research in Vision and Ophthalmology
Ft. Lauderdale, FL

Pathogen discovery in the eye
New England Ophthalmologic Society
Boston, MA

Autoantibodies in human uveitis
New England Ophthalmologic Society
Boston, MA

Mechanisms of ocular inflammatory disease
Arthritis Research Foundation
Seattle, WA

Pathogen Discovery and Detection
Adventures in Non-visual Photoreception

Department of Ophthalmology
Stanford Medical School
Stanford, CA

Adventures in non-visual ocular photoreception
Visiting Professor
Department of Ophthalmology
University of Wisconsin Medical School
Madison, WI

The year in review
Keynote talk
American Uveitis Society
Atlanta, GA

Uveitic Glaucoma: control of uveitis
American Academy of Ophthalmology Course
Atlanta, GA

2007 Medical therapy for delayed onset endophthalmitis
American Uveitis Society
Snowmass, CO

What the h#ll is uveitis
North American Neuro-ophthalmologic Society
Snowbird, UT

Uses and abuses of polymerase chain reaction diagnostics in ophthalmology
North American Neuro-ophthalmologic Society
Snowbird, UT

Review of uveitis
University of Pennsylvania Ophthalmology Board Review Course
Philadelphia, PA

Mechanisms of non-visual photoreception
University of California
Berkeley, CA

Mechanisms of non-visual photoreception
Emory University
Atlanta, GA

21st century pathogen hunting
University of Pennsylvania/Scheie Eye Institute 133rd Annual Meeting
Philadelphia, PA

Mechanisms of non-visual photoreception
National Eye Institute
Bethesda, MD

Beam me up, Bones: Uveitis diagnosis in the 21st century

International Ocular Inflammation Society
9th International Congress
Paris, France

Nuts and bolts of the uveitis work-up
Visiting Professor
California Pacific Medical Center, Dept. Ophthalmology
San Francisco, CA

Uveitis: the year in review
American Uveitis Society Annual Meeting
New Orleans, LA

Idiopathic reconsidered: exploring the etiology of uveitis
Uses and Abuses of the polymerase chain reaction in ophthalmology
Department of Ophthalmology, University of Iowa
Iowa City, IA

2006

Review of uveitis
University of Pennsylvania Ophthalmology Board Review Course
Philadelphia, PA

Frontiers in polymerase chain reaction diagnostics in uveitis
Cleveland Clinic Foundation
Cleveland, OH

Non-visual ocular photoreception
Neurosciences Institute
Oregon Health Sciences University
Portland, OR

Mechanisms of non-visual photoreception
Case Western Reserve Department of Ophthalmology (keynote speaker at retreat)
Cleveland, OH

Visiting Professor, Uveitis
Rocky Mountain Lions Eye Center
University of Colorado Health Sciences Center
Denver, CO

Clinician-Scientist Forum
ARVO
Ft. Lauderdale, FL

Multielectrode array recording of intrinsically photosensitive retinal ganglion cells
FASEB Retinal Cell Biology Meeting
Indian Wells, CA

Mechanisms of non-visual photoreception
Vision Science Program
University of Utah
Salt Lake City, UT

Transgenic mouse models for birdshot chorioiditis
2nd World Congress on Birdshot Chorioretinopathy
Paris, France

Non-visual ocular photoreception: a guided tour
Grand Rounds
University of California, San Francisco

Polymerase chain reaction diagnostics in ophthalmology
Grand Rounds
University of California, Davis

2005 Learning from the pupils: non-visual photoreception
Winter Brain Research Conference
Breckenridge, CO

Investigation of non-visual ocular photoreception using multi-electrode array
technology.
Neuroimaging the Retina (ARVO pre-meeting)
Ft. Lauderdale, FL

Photopotential of inner retinal photoreception
ARVO
Ft. Lauderdale, FL

Learning from the pupils: Lessons in non-visual photoreception
Frontiers in Pharmacology Lecture Series
University of California, Davis

Polymerase chain reaction diagnostics
Diagnosis of ocular lymphoma
Milano Vitreoretina 2005
Milan, Italy

Deciphering non-visual phototransduction
FASEB Chemistry and Biology of Vision Meeting
Tucson, AZ

Genetic and pharmacologic rescue of pupillary light responses in *Irat*^{-/-} mice
Western Eye Research Conference
Laguna Beach, CA
(Session co-chair)

Autoimmune uveitis: Seronegative spondyloarthropathies, HLA-B27 disease, Reiter's
disease and others
Uveitis Subspecialty Day
American Academy of Ophthalmology
Chicago, IL

Risk factors for mortality from AIDS in the era of HAART
(Discussant)

'Editor's choice' Symposium
American Academy of Ophthalmology
Chicago, IL

Bench to bedside with the polymerase chain reaction
Grand Rounds
University of California, San Francisco
San Francisco, CA

Mechanisms of non-visual phototransduction
Massachusetts Eye and Ear Infirmary
Harvard University
Boston, MA

Mechanisms of non-visual photoreception
Rockefeller University
New York, NY

Molecular diagnostics in ophthalmology
Columbia University College of Physicians and Surgeons
Department of Ophthalmology
New York, NY

2004 K08 and beyond: perspectives of a young clinician-scientist
Association of University Professors of Ophthalmology
Sarasota, FL

Polymerase chain reaction from bench to bedside
Los Angeles Ophthalmology Society
Brentwood, CA

Sensing without seeing: non-visual photoreception
National Cancer Institute
Frederick, MD

Forum on Academic Ophthalmology: Program Director's Perspective
American Academy of Ophthalmology
Mid-year forum
Washington, DC

Choroiditis secondary to *Prototheca wickerhammii* algaemia
American Uveitis Society
Ft. Lauderdale, FL

Learning from the pupil(s)
Pineal cell biology Gordon research conference
Oxford, UK

Animal models of uveitis
Alcon Research Laboratories
Ft. Worth, TX

Instructor
Uveitis, a clinical update
Massachusetts Eye and Ear Infirmary
Boston, MA

Instructor
Uveitis, LEO (Lifelong education for the ophthalmologist)
American Academy of Ophthalmology
New Orleans, LA

Instructor
Polymerase Chain Reaction Diagnostics in Ophthalmology
American Academy of Ophthalmology
New Orleans, LA

Learning from the pupils
Department of Genetics
Dartmouth Medical School
Hanover, NH

Session moderator: Nuts and bolts of being a clinician scientist
David Cogan Clinician Scientist Forum
National Eye Institute
Bethesda, MD

2003 Diagnosis of macular edema secondary to retinitis pigmentosa using
optical coherence tomography
American Uveitis Society Winter Meeting
Deer Valley, UT

Dissecting non-visual ocular photoreception
Neuroscience Program
University of Massachusetts School of Medicine
Worcester, MA

Dissecting non-visual ocular photoreception
Department of Zoology
University of Toronto
Toronto, ON

Visiting Professor
Department of Ophthalmology
University of Louisville
Louisville, KY

Invited Speaker
Western Pennsylvania School for the Blind
Pittsburgh, PA

Dissecting non-visual ocular photoreception
Visual Science Training Program
Johns Hopkins University Medical School

Baltimore, MD

Genetic physiology of non-visual ocular photoreception
Platform speaker
Gordon Research Conference in Chronobiology
Il Ciocco, Italy

Making (a) sense of non-visual ocular photoreception
Department of Biology
Vanderbilt University
Nashville, TN

Microarray analysis of intraocular immune response
Western Eye Research Conference (ARVO)
Laguna Beach, CA

Visiting Professor
Department of Ophthalmology
Dean McGhee Eye Institute
Oklahoma City, OK

Making (a) sense of non-visual phototransduction
Department of Ophthalmology
University of California, San Francisco
San Francisco, CA

Instructor
Uveitis, LEO (Lifelong education for the ophthalmologist)
American Academy of Ophthalmology
Anaheim, CA

Instructor
Polymerase Chain Reaction Diagnostics in Ophthalmology
American Academy of Ophthalmology
Anaheim, CA

Laboratory evaluation of the uveitis patient
Uveitis Subspecialty Day
American Academy of Ophthalmology
Anaheim, CA

2002 Frontiers of polymerase chain reaction diagnostics
Keynote talk
Sociedad Panamericana de Enfermedades Inflamatorias Oculares
Orlando, FL

Sleep disorders in young subjects with visual dysfunction
Platform presentation
American Academy of Ophthalmology
Orlando, FL

Non-visual ocular photoreception

Invited speaker
Novartis Symposium
London, UK

Retinal functions of mammalian cryptochromes
Invited symposium talk
American Society for Photobiology
Quebec City, QC

What and where are the circadian photoreceptors in mammals?
Invited platform talk
Society for Research on Biological Rhythms
Amelia Island, FL

Shedding light on ocular immune privilege
Keynote talk, American Uveitis Society
Ft. Lauderdale, FL

Clinical uveitis II (co-moderator)
ARVO
Ft. Lauderdale, FL

Constraints on non-visual ocular photoreception
Gordon Research Conference (Pineal Cell Biology)
Ventura, CA

Transpupillary Thermotherapy
Discussant
Association of University Professors of Ophthalmology
Amelia Island, FL

2001 Pathogen discovery in uveitis: target diseases and model approaches.
American Uveitis Society, Vail, CO

Function of Cryptochromes in Non-visual Phototransduction
Casey Eye Institute, Oregon Health Sciences University
Portland, OR

Visiting Professor
Cleveland Ophthalmologic Society/Cole Eye Center
Cleveland, OH

Grand Rounds Invited Discussant
Eye Foundation of Kansas City
University of Missouri Medical School at Kansas City, MO

Tales from the crypt(ochrome)
NSF Center for Biological Timing/University of Virginia
Charlottesville, VA

Associate Instructor, "Review of Retina"

American Academy of Ophthalmology
New Orleans, LA

Frontiers of polymerase chain reaction diagnosis for uveitis
Pan American Ophthalmologic Association
New Orleans, LA

2000 Invited discussant, "Serpiginous choroidopathy"
National panel on immunosuppressive medication in uveitis therapy
Jules Stein Eye Institute, Los Angeles, CA

Function of cryptochromes in the mouse eye
Program in Genetics
University of North Carolina
Chapel Hill, NC

Senior Instructor, "The Eye and the Clock"
American Academy of Ophthalmology
Dallas, TX

Associate Instructor, "Review of Retina"
American Academy of Ophthalmology
Dallas, TX

1999 Senior Instructor, "The Eye and the Clock"
American Academy of Ophthalmology
Orlando, FL

Associate Instructor, "Forum on Uveitis"
American Academy of Ophthalmology
Orlando, FL

Invited discussant, "Polymerase chain reaction diagnosis of delayed-onset
endophthalmitis"
American Academy of Ophthalmology
Orlando, FL

Polymerase chain reaction diagnosis of uveitis
Department of Ophthalmology
Cleveland Clinic Foundation
Cleveland, OH

Multiplex polymerase chain reaction for the diagnosis of uveitis
Resident and Fellow Research Forum
Association of University Professors of Ophthalmology
Captiva, FL

1998 Associate Instructor, Forum on Uveitis
American Academy of Ophthalmology
New Orleans, LA

Polymerase chain reaction diagnosis of uveitis

Scheie Eye Institute, University of Pennsylvania
Philadelphia, PA

Predictability of LASIK, astigmatic LASIK, PRK, and astigmatic PRK.
Association for Research in Vision and Ophthalmology (talk)
Ft. Lauderdale, FL

The polymerase chain reaction in the diagnosis and study of uveitis.
Session moderator and discussant
American Uveitis Society, Breckenridge, CO

1997 Validation of a neural network computer program for prediction of PRK treatment
nomograms.
International Society of Refractive Surgeons, San Francisco, CA

1996 Analysis of a commercial neural network computer program for the prediction of PRK
treatment outcomes.
International Society of Refractive Surgeons, Chicago, IL

1993 Circadian control of gene transcription in *Drosophila melanogaster*: Oscillator and
output.
Gordon Research Conference, New London, NH

Circadian control of gene expression
Department of Medicine, Division of Endocrinology, Brigham and Women's
Hospital, Boston, MA

1992 Circadian control of gene expression in *Drosophila melanogaster*. NSF Center for
Biological Timing Annual Symposium, University of Virginia

Circadian control of gene expression in *Drosophila melanogaster*.
Department of Biology, University of California, Santa Cruz

1991 Circadian control of gene expression in *Mus musculus* and *Drosophila melanogaster*.
World Federation of Sleep Societies, Cannes

1990 Molecular cloning and characterization of two diurnally expressed cDNAs from the
murine suprachiasmatic nucleus.
Swiss Federation for Experimental Biology, Zurich

1989 Molecular approaches to sleep and circadian function. Basic Sciences Colloquium,
Sleep Research, Institute of Medicine, Newport, California

Molecular cloning of diurnally variant cDNAs in the murine suprachiasmatic
nucleus.
Department of Physiology, UCLA.

Reviewer

Editorial Boards

- Ophthalmology (Editorial Board Member 2013-, Editorial Advisory Board Member 2017-)

- Ophthalmology Retina (Editorial Board Member 2017-)
- Ophthalmology Science (Editorial Board Member 2020-)
- Translational Vision Science and Technology (Editorial Board Member 2011-2017; Associate editor 2017-)
- Molecular Vision (Editorial Board member 2007-)
- Investigative Ophthalmology and Visual Sciences (Editorial Board Member 2004-2011, Associate Editor 2011-2018)
- Journal of Biological Rhythms (Editorial Advisory Board member, 2004-2013)
- Ocular Immunology and Inflammation (Associate Editor 2003-2013, Editorial Board Member 2003-)
- EyeNet (Editorial Board Member, 2011-2013)
- American Journal of Ophthalmology (Editorial Board member 2005-2012)

Ad hoc:

Science
Nature
Cell
New England Journal of Medicine
Neuron
Nature Neuroscience
Current Biology
Proceedings of the National Academy of Sciences
Journal of Clinical Investigation
PLoS Biology
PLoS One
Journal of Neuroscience
Journal of Biological Chemistry
Journal of Molecular Biology
Journal of Comparative Neurology
European Journal of Neuroscience
Brain Research
Development
FASEB Journal
Physiologic Genomics
Neuroscience Letters
Journal of Clinical Virology
Insect Biochemistry and Molecular Biology

Archives of Ophthalmology/JAMA Ophthalmology
British Journal of Ophthalmology
European Journal of Ophthalmology
Retina
Cornea
Current Eye Research
Experimental Eye Research

Professional affiliations

Diplomate, American Board of Ophthalmology, 2000, Maintenance certificate 2020
Medical licensure, Missouri Board of Registration for the Healing Arts, 1997-2008

Medical licensure, Washington State 2008-
National Board of Medical Examiners Diplomate, 1996
Fellow, American Academy of Ophthalmology, 2000-
Member, Association of University Professors of Ophthalmology, 2008-
Associate member, Association of University Professors of Ophthalmology, 1999-2004
Association for Research in Vision and Ophthalmology (ARVO, Gold Fellow)
American Uveitis Society (Director)
American Association for the Advancement of Science
Society for Research on Biological Rhythms
Macula society

Personal Information

Date and place of birth	March, 1963 New York, NY, USA
Citizenship	USA
Spouse	Suzanne M. Dintzis, MD, PhD
Children	Rachel D. Van Gelder, 1995 Maxwell D. Van Gelder, 1998



111 Israel Road SE, Tumwater, WA 98501

DATE: July 15, 2021

TO: Washington State Department of Health, Optometrist scope of practice Sunrise Review

FROM: *MM* Micah Matthews, Deputy Executive Director
Washington Medical Commission

SUBJECT: Optometrist scope of practice Sunrise Review

The Washington Medical Commission (WMC) is the regulatory body for the practice of Allopathic Medicine, also referred to as conventional medicine. The WMC currently regulates about 35,000 physician and physician assistant licenses, approximately 31,000 MDs and more than 4,000 PAs. It is the purpose and responsibility of the WMC to protect the public, by ensuring quality healthcare is provided by our licensed practitioners.

The WMC establishes, monitors, and enforces qualifications for licensure, consistent standards of practice, and continuing competency. Rules, policies, and procedures developed by the WMC promote the delivery of quality healthcare to the people in Washington.

I thank the Washington Department of Health for the opportunity to review and comment on the legislatively requested Sunrise Review regarding the increase to Optometrist scope of practice¹. My comments today on behalf of the WMC reflect considerable concerns from the medical regulator regarding various aspects of the proposal from the Optometric Physicians of Washington².

Background

Before going into our concerns, I would like to take this opportunity to provide some historical context as provided by our regulatory colleagues in Vermont³ who went through this same expansion proposal in 2019. Vermont's Office of Professional Regulation (OPR) found, "after consulting with stakeholders and conducting extensive and thorough research, OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures. Further, OPR finds that there is little need for, and minimal cost savings associated with, expanding the optometric scope of practice to include advanced procedures."

The action in Vermont and in Washington regarding scope expansion is part of a national effort by the American Optometric Association (AOA) to expand the optometric scope of practice in each state. In the February 2012 edition of the AOA's *Journal Optometry*, Sherry L. Cooper, Associate Director of State Government Relations for the AOA, laid out a comprehensive movement to increase

every state's scope of optometric practice⁴. The article states the goal, to permit a license holder "to examine, diagnose, treat, and manage diseases or conditions of the vision system, eye, and related structures with any appropriate means" including "every facet of the practice of modern optometry." As you can see from the statements within the application, the movement has advanced in a least eight states. It is important to note that scope expansion can and does occur regularly in all states for nearly all professions. Successful scope expansions are evidence based and collaborative efforts with agreement and compromise by the participating parties. This unilateral proposal contains none of those needed characteristics for responsible scope expansion in the public interest.

In response to these efforts, ophthalmologists and physicians have found themselves opposing proposed scope expansions nationwide in order to protect the public from harm. Ophthalmologist groups argue that optometric scope expansion poses a threat to patient safety because optometrists lack the education and training necessary to perform the procedures proposed. Similarly, while the concerns from the medical profession as a whole extend to practitioner continuum and patient experience, the WMC comments will be limited to training and regulatory concerns.

WMC Concerns Regarding Training

- Post-graduate training for physicians is accredited through the Accreditation Council for Graduate Medical Education (ACGME)⁵, which requires numerous standards be in place prior to accreditation. These standards range from supervision ratios and cohort sizes to the number and type of procedures performed. They also have standards that require training and procedures be performed on human patients. One such standard currently in place is the requirement of 3,000 outpatient ophthalmologic visits with documentation, 1,000 of which require direct supervision by a trained and licensed ophthalmologist.⁶ To date, there are no equivalent accreditation standards for optometry postgraduate training according to the information submitted by the applicant. A simple comparison of ACGME standards for ophthalmology to the additional education requirements proposed by the applicant to access advanced surgeries reveal the vast shortcomings in education and training proposed for optometrists.
- There is currently no requirement for Optometrists to complete a standardized training program after their formalized education. The extensive education provided for Ophthalmologists (MDs) gives them the training and expertise needed to safely prescribe systemic medications, perform surgery including laser procedures and biopsies, as well as more complex microsurgeries on the eye and surrounding tissue.
 - Optometrists are required to have a college degree, then do a four-year specialized degree (total of 4 years after college) Clinical experience in the final year, is for approximately 2,000 hours total. Most of the time is spent in class without one to one mentoring or one to one patient contact.
 - Ophthalmologists (MDs) have a college degree, four years of medical school, four years of residency, then many do 1-2 year additional fellowships for a total of 8-10 years after college. Ophthalmology programs have extensive one to one contact with patients and mentors. Clinical experience totals 12,000-20,000 hours of proctored, hands-on education.
 - An Ophthalmologist MD meeting the minimum training standards completes a program with thousands of hours more experience with human subjects and instruction

regarding the full systems of the body as compared to an optometrist.

- In the previously noted 2019 Vermont Study of Optometric Advanced Procedures⁶ they find, “the proposed advanced procedures, if performed by untrained individuals, pose risks to the health and well-being of the public. This is evidenced by the complexity of each procedure and the potential complications thereof” and there is a, “lack of evidence showing that optometric education prepares optometrists to perform these proposed advanced procedures.” This is implicit in the comparison of medical school versus optometry school in that physicians are trained to understand the whole human system. Optometrists do not have a broad-spectrum background and are therefore limited in their ability to assess, diagnose, and understand the impacts on other systems inherent in advanced Ophthalmologic MD surgeries. This could lead to both patient safety and health system cost issues due to optometrist error or delayed referrals to treating practitioners who can deliver safe and appropriate patient care.

Concerns Regarding Regulatory Best Practices

- Section 6 (3) of the proposed draft legislation⁷ gives the Board of Optometry, “sole authority to determine what constitutes the practice of optometry.” This provision, in combination with unilateral rule-making authority on scope and surgeries, is an inappropriate departure from historic and statutory norms within Washington law and Washington’s regulatory framework.
- Section 6 (3) could impede the authority of the Secretary of Health to regulate unlicensed practice⁸. Currently, no regulators are permitted to self-determine when someone is, or is not, practicing a profession without a license. The addition of this language would appear to allow the Board of Optometry to determine when someone, even an ARNP, PA, DO, or MD is practicing optometry without a license in the normal course of their duties. This could initiate a regulatory conflict based on disagreements within the profession that would likely need to be resolved by the courts at great expense to the regulators and the department. It is recommended to strike this provision.
- As written the draft legislation is inappropriate for ensuring safe practice, the public interest and would likely result in great expenditures so it is therefore in conflict with the purpose of the Sunrise Review Process as stated by the Washington Department of Health⁹ to:
 - Protect the public from harm;
 - Provide assurance of professional ability to perform the increased scope of practice (such as education and training); and
 - Provide the most cost-beneficial option to protect the public.

Concerns Regarding Safety

- The applicant report ¹⁰ says, letters provided from states that have laser procedures within their scope illustrate that there have been no reported negative outcomes related to the procedures being sought in Washington. However, the data from the National Practitioner Data Bank¹¹ seems to contradict these reports. Between 1992-2019, there were 59 malpractice payments and adverse events reported to the NPDB for Oklahoma optometrists. The applicant report has not sufficiently addressed these significant discrepancies that represent real patient harm and

potential significant costs to participants in the health system.

- Washington Medical Commissioner Janet Barrall, Ophthalmologist MD, has provided feedback to the WMC explaining the inherent dangers of this proposed increased scope of practice. In Dr. Barrall's professional opinion what is being asked for is, "laser and scalpel surgery privileges," and "laser surgery is not any different than scalpel surgery. One cuts with a sharp instrument, and one uses a light beam to cut inside the eye. Both are real surgery, with real consequences and require an extremely high level of training and experience, which includes the management of potentially blinding complications." The proposal uses innocuous language such as "procedure" instead of surgery but from Dr. Barrall's explanation this claim by the applicant simply is not accurate.

Concerns Regarding Improper Delegation of Authority in Rulemaking

- WMC regulatory concerns are further compounded by page 38 of the applicant report¹¹ where the Optometric Physicians of Washington, a professional association, supplies a complete set of suggested rule language for the consideration of the Board of Optometry, the regulator. The profession must not self-regulate by proxy. International regulatory history is rich with examples of patient harm and disregard of public interest when the professional association attempts to assume the role of the regulator as is being displayed in the applicant report. While collaboration in the public interest is appropriate between the regulator and the association, what is displayed in the applicant report goes far beyond collaboration.
- WMC recommends placing the requested Optometry scope expansion in statute so there can be no doubt about intent or outcome. If scope expansion is to exist in rule, we oppose unilateral authority. Rulemaking must include collaboration or preferably consent from the WMC and other regulators of impacted professions. Scope expansion in rule must be reasonable, transparent, and not directed by an interest or advocacy group.

Concerns Regarding Board Composition

- WMC suggests the legislature consider implementing the public member majority structure for the Board of Optometry to ensure the regulator truly is acting in the public interest. In section 3 of the draft bill¹² the composition of the board is altered to incorporate five optometrists and one public member. Current best practice targets for public member involvement are at least 25 percent of the membership of the board. To achieve this goal, the bill will need to change the composition to four optometrists and two public members.

It should be noted that there is an international trend based on research in regulatory best practice¹³ to change composition on regulatory bodies to public member majority, or 50 percent plus one. This change has been implemented for most health and social care professions in Ireland, the United Kingdom, and is in progress in Canada. Given the concerns of unilateral board action regarding the practice of optometry, and the appearance of improper collaboration with the association, following this best practice in statute would not only void adverse inferences but begin to make Washington a peer with its worldwide counterparts.

Thank you for your time, consideration and recognition of the requests regarding the Sunrise Review to examine increasing the Optometrist scope of practice in Washington state. If you have any questions or follow up requests, please contact me at your convenience.

¹ Legislative request of Sunrise Review application for a scope of practice proposal for optometry
<https://www.doh.wa.gov/Portals/1/Documents/2000/2021/OptomterySunriseRequest.pdf>

² Optometric Physicians of Washington Sunrise Application
<https://www.doh.wa.gov/Portals/1/Documents/2000/2021/OptomterySunriseAppReport.pdf>

³ Vermont Secretary of State, Office of Professional Regulation: Study of Optometric Advanced Procedures, January 15, 2020:
<https://legislature.vermont.gov/assets/Legislative-Reports/Optomtery-Report-FINAL-2020.pdf>

⁴ Sherry L. Cooper, 1971-2011: *Forty Year History of Scope Expansion Into Medical Eye Care* (Saint Louis, MO: American Optometric Association, 2011). https://www.researchgate.net/publication/233899902_1971-2011_Forty_Year_History_of_Scope_Expansion_Into_Medical_Eye_Care

⁵ Accreditation Council for Graduate Medical Education <https://www.acgme.org/>

⁶ACGME cite, page 26,
https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/240_Ophthalmology_2021.pdf?ver=2021-06-23-111656-350

⁷Key Excerpts Vermont Office of Professional Regulation (PDF addendum one)

⁸ S-3085.2/21 2nd draft <https://www.doh.wa.gov/Portals/1/Documents/2000/2021/S-30852-DraftBillOptometry.pdf>

⁹ Washington RCW18.130.190 Practice without license <https://app.leg.wa.gov/rcw/default.aspx?cite=18.130.190>

¹⁰ Sunrise Review Health Professions Washington DOH
<https://www.doh.wa.gov/AboutUs/ProgramsandServices/HealthSystemsQualityAssurance/SunriseReviews/HealthProfessions>

¹¹ Optometric Physicians of Washington Sunrise Application
<https://www.doh.wa.gov/Portals/1/Documents/2000/2021/OptomterySunriseAppReport.pdf>

¹² National Practitioner Data Bank, U.S. Department of Health and Human Services (2020). Query on State-by-State Data Regarding Discipline and Malpractice Suits Against Optometrists. Retrieved from
<https://www.npdb.hrsa.gov/guidebook/EOverview.jsp>.

¹³ Optometric Physicians of Washington Sunrise Application
<https://www.doh.wa.gov/Portals/1/Documents/2000/2021/OptomterySunriseAppReport.pdf>

¹⁴S-3085.2/21 2nd draft <https://www.doh.wa.gov/Portals/1/Documents/2000/2021/S-30852-DraftBillOptometry.pdf>

¹⁵ Council on Licensure Enforcement and Regulation Board presentation. *Professional Self-Regulation – Is the Model Past Its Sell By Date?* https://www.clearhq.org/resources/2017%20AEC%20Handouts/091517_ProfessionalSelfRegulationModel.pdf

KEY EXCERPTS

Vermont Office of Professional Regulation (OPR):

Study of Optometric Advanced Procedures (a.k.a. "Surgery")
Submitted to the Vermont General Assembly - January 15, 2020

On Lack of Proper Education & Training

"Most significant for OPR is the lack of evidence showing that optometric education prepares optometrists to perform these proposed advanced procedures. Despite multiple efforts through various sources, OPR was unable to gather specific or detailed information about the curricula and courses offered by the U.S. schools of optometry in these advanced procedures. Other states attempting to gather such information have met with similar refusal to disclose detailed curricula." (pages 7-8)

"Even the more stringent and comprehensive optometric educational programs do not provide the level of training and experience obtained by ophthalmologists. What information is available about U.S. optometry schools shows that:

(a.) curriculums vary widely (there is no standardized course of study regarding these advanced procedures); and

(b.) courses on lasers, injections and minor surgical procedures are very limited – they are short courses, with little to no lab time, and minimal practical experiences.

Continuing education courses on advanced procedures present similar limitations. They are very short and have negligible practical experience requirements." (page 8)

"Providers who perform the proposed advanced procedures need to be trained in assessing the systemic condition of patients, to be educated on how to adjudge whether a patient is a candidate for a procedure, and to be qualified to address medical complications. OPR cannot conclude that optometrists have this necessary education and training. OPR is thus concerned that permitting optometrists to perform these advanced procedures poses a risk to the public's safety." (page 8)

Nathan Schlicher, MD, JD, MBA
President

July 16, 2021

Mika Sinanan, MD, PhD
President-Elect

William Hirota, MD
Past President

Katina Rue, DO
1st Vice President

Nariman Heshmati, MD
2nd Vice President

John Bramhall, MD, PhD
Secretary-Treasurer

Jennifer Hanscom
Executive Director/CEO

Cori Tarzwell, Optometrist Sunrise Review Lead
Health Systems Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504

Re: Optometrist scope of practice sunrise review

Dear Ms. Tarzwell,

On behalf of the Washington State Medical Association (WSMA), we appreciate the opportunity to comment on the Department of Health's (Department) Sunrise Review concerning the optometry scope of practice. Ensuring access to high quality health care for all Washingtonians is a paramount priority for the WSMA. However, the draft proposal threatens the health and safety of Washingtonians who will seek out care and treatment for their vision over the course of their lifetime. For the following reasons, we strongly urge the Department to oppose the proposal.

Surgical procedures on or around the eye are exceedingly invasive and require the highest level of clinical expertise and skill

The draft language offered by the Optometric Physicians of Washington would allow for a dramatic increase in the profession's scope of practice without requisite education and training or regulatory guardrails. This includes the ability to diagnose and treat without comprehensive medical training, as well as the use of injections, scalpels, and lasers on the eyes and tissues surrounding the eyes. **All of these surgical procedures are invasive, including those that are performed with lasers.** These procedures include:

YAG Laser Capsulotomy: This procedure follows cataract surgery – sometimes immediately following surgery, sometimes years after – to clear cloudy vision. After dilating pupils and applying local anesthetic, the ophthalmologist will use a laser to create an opening in a cloudy film that has formed behind the lens implant. This restores normal vision. Complications that can arise during or after the procedure include but are not limited to inflammation, macular edema, lens implant dislocation, and retinal detachment.

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o / 360.352.4848 fax 360.352.4303

Argon and Selective Laser Trabeculoplasty: In this procedure, laser energy is applied to the trabecular meshwork of patients who have high eye pressures or glaucoma. Often these patients have failed other medical therapy in terms of controlling their eye pressure at a target level. Spots of energy are placed along the meshwork and, it should be noted, overtreatment will damage the structures and limit their function – exacerbating the pressure problem. Similarly, if energy is delivered to surrounding structures, there would likely be no pressure lowering effect and damage could occur to those structures. Complications include inflammation, scar tissue formation with angle closure and subsequent glaucoma, corneal decompensation and abrasions, and cataracts.

Laser Peripheral Iridotomy: This procedure places a hole in the iris to allow free flow of aqueous fluid from behind the iris to the front of the iris, deepening the anterior chamber and preventing angle closure. Placement and size of the iridotomy are important to avoid double vision and a “second pupil,” as well as to avoid bleeding and extreme pain from hitting nerves. The energy level must be carefully selected to avoid distorting and disfiguring the pupil. In addition to complications possible with laser trabeculoplasty, iridotomy can cause intraocular bleeding, pupil distortion, double images, extreme ocular pressure elevation, and cataracts.

Scalpel surgery to remove “lumps and bumps”: Removing these lesions requires an ophthalmologist to utilize the full range of their medical and clinical knowledge to evaluate the patient, differentially diagnose, and determine if surgery is appropriate. The procedure requires local anesthesia, removal or biopsy of lesion via excision/incision/etc., and coordination with a pathologist. If malignancy is suspected, an ophthalmologist must resect widely enough to achieve clear margins but preserve function and cosmesis. They may also need to cauterize, administer adjunct treatment, address any intraoperative abnormalities, and suture or close the wound. If the sutures are not closed properly, the eyelid will not function properly. This can cause chronic problems – even blindness. Potential complications include scarring, blurred or impaired vision, dry eyes, bleeding, infection, blood clots, pain, eyelid disfiguration, anesthesia risks, and loss of eyesight.

Section two of the bill draft specifies that the practice of optometry does not include “**surgery of the eyelid for malignancies** or for incisional cosmetic or mechanical repair of blepharochalasis, ptosis, or tarsorrhaphy.” This statement is at best misleading and at worst shows a concerning lack of clinical knowledge, as the only way to know if a lesion is malignant or benign is to test the lesion once it is removed.

Injections and prescriptive authority: Ophthalmologists utilize injections to treat a number of conditions. They inject intraocularly (into the eye), periocularly, and into the subconjunctival space (under the thin layer covering the white shell of the eye), as well as into the eyelids, eyebrows, scalp, nose, and lacrimal apparatus. Additionally, ophthalmologists utilize intravenous injections and anesthesia when they perform certain surgical procedures.

This proposal would lift a ban on optometrists performing injections and infusions, as well as allowing them to prescribe oral steroids. This means optometrists would have access to

anesthetics, Botox, fillers, steroids and other immune modulating medicines, and possibly chemotherapy drugs, as well as IV sedation. Complications from these injections can include infection, blindness and loss of eye, and even death, in addition to general complications due to the use of anesthesia.

These are just a few of the surgical procedures an optometrist would apparently be able to perform under this proposal if approved. **Complications that can arise during these procedures are serious and often irreversible – impacting a patient over their lifetime.** The stakes are far too high for the Department to endorse allowing anyone but an ophthalmologist – who has the appropriate training and experience – to perform these surgical procedures successfully.

Proposed educational and training requirements are not equivalent to medical or osteopathic doctors and are insufficient to ensure safe surgery and prescribing

The medical education of an ophthalmologist begins before they even enter medical school with pre-med requisites included in their bachelor’s degree programs. Once at medical school, ophthalmologists spend four years focusing on the entire human body and all of its systems – sensory, nervous, endocrine, cardiovascular, and more. A medical school’s curriculum is highly regulated by the Liaison Committee on Medical Education (LCME).

After medical school, ophthalmologists complete a year-long internship, and then spend three more years completing a postgraduate residency training where they clinically apply the knowledge and skills acquired during medical school. Many also complete another one to two years of fellowship. According to the American Medical Association (AMA), this includes 12,000 to 16,000 hours of patient care under the supervision of other medical or osteopathic physicians. **This clinical training teaches an ophthalmologist the safest and most appropriate treatments – surgical, pharmacological, and other interventions based on a patient’s medical needs – as well as training in surgical procedure, technique, and medical response.**

By comparison, an optometrist’s education is highly variable. Optometrists attend four years of post-graduate school and there is no residency requirement. The optometric education focuses on examining the eye for vision prescription, dispensing corrective lenses, and performing some eye screening functions. **Optometric education is observation-based and students receive less than 2,000 hours of hands-on clinical training.** Because injections, laser and other surgical techniques are not within the scope of practice of optometrists in most states, their education in these areas are limited to didactics, and practice on animal and model eyes, and other inanimate objects.

Application materials state that “all optometry schools teach these procedures in their curriculum” and imply that any additional training that may be required could be accomplished through continuing education courses. The Vermont Office of Professional Regulation (OPR) recently conducted a [comprehensive study](#) that considered, among other things, the claim that surgery is taught in optometric school. Their conclusions are as follows:

Even the more stringent and comprehensive optometric educational programs do not provide the level of training and experience obtained by ophthalmologists. What information is available about U.S. optometry schools shows that (a) curriculums vary widely (there is no standardized course of study regarding these advanced procedures);

and (b) courses on lasers, injections and minor surgical procedures are very limited – they are short courses, with little to no lab time, and minimal practical experiences. Continuing education courses on advanced procedures present similar limitations. They are very short and have negligible practical experience requirements.

The same study also concludes that optometrists do not have the education or training to safely perform surgery, including injections and procedures with a laser. We strongly encourage the Department to reach out to the relevant professionals at the Vermont OPR to discuss the proposal that was considered there and the conclusion they reached in response.

For all of these reasons, the education and training requirements included in the proposal are insufficient and should not receive the Department's support.

There are no uncomplicated surgeries involving the eye or tissues around the eye – increasing the scope of practice for optometrists would compromise patient safety

Of all the applicant's claims offered in this proposal, the most concerning is the assertion that surgery on the eye is uncomplicated and essentially risk free. All of these surgical procedures are invasive, including those that are performed with lasers.

In order to mitigate the risk of complications, ophthalmologists not only need the technical skills to perform the procedure, but also the medical knowledge to know when surgery may or may not be clinically indicated. Physicians are trained in the most effective, safe and appropriate treatments, including surgical, pharmacologic, and other interventions based on each patient's medical needs. Recognizing when the procedure should be done and when it should not be done can be as challenging and important as being able to perform the procedure.

When surgery is clinically indicated, only an ophthalmologist has the medical knowledge and training to safely conduct surgical preparation, performance of the procedure, and post-operative patient care. Most importantly, **only an ophthalmologist has the medical training to respond to an adverse event that may result from any surgery and the use of anesthesia. This includes blood clots, infection, spread of local anesthetic, and decreased heart rate – all of which can result in death.** We cannot overstate how critical this is to the safety of Washington patients.

In any scope of practice proposal, the consideration of patient safety and ensuring high quality care must be foremost. The risks associated with allowing underqualified providers to perform surgery does not, in this case, outweigh the potential benefits and do not warrant the Department's support.

The proposal fails to ensure appropriate parameters and oversight for the profession

The draft legislation offered by the applicant includes a provision that would grant the Board of Optometry "...the sole authority to determine what constitutes the practice of optometry." In our state, a health profession's scope of practice is codified in RCW and only the legislature can amend the practice act. In fact, no other board or commission in our state has the ability to set their own scope of practice. **Granting the Board of Optometry the authority to determine future scope expansions for their own profession circumvents the legislative process and removes critical checks and balances.** This is an exceedingly dangerous concept for the Department to consider endorsing.

The sunrise review application also states that “The board will continue its mission to protect public health by designating what is required to demonstrate proficiency in advanced procedures.” **As optometrists do not receive adequate education and training to allow them to safely perform surgery, it follows that they are not able to appropriately design curriculum for practitioners to undergo to be able to safely perform these procedures.** Furthermore, individuals without a history of performing these surgical procedures cannot in good faith regulate a program that would teach others to do so.

Put simply, this is exemplary of a proposal that is not credible and not worthy of the Department’s support.

Most rural Washingtonians live within close proximity to an ophthalmologist and all rural Washingtonians deserve access to the highest quality of care

The applicants state access to eye care as the primary reason for the proposed scope of practice expansion noting that “...the costs inherent in traveling to see specialists and establish with new providers. This includes transportation and lodging, time off of work, and even the quality of life reduction related to delayed care.” The University of Washington has conducted an evaluation on this topic (attached) – evaluating access to eye care by drive time in Washington state. They studied Medicare provider utilization and payment data from the Centers for Medicare and Medicaid Services, US census geospatial data, and open street map data.

The University of Washington found that 90 percent of the population lives within 9.36 miles and 11.76 minutes of an eye care provider, and that **between 97.6% and 99.6% of optometrists practice within 1 and 2 hours of an ophthalmologist. The median distance to the nearest ophthalmologist was 1.81 miles.** They conclude that if a patient was seen by an optometrist and care had to be escalated to an ophthalmologist, then the majority of optometrists practice within close proximity to an ophthalmologist.

It is disingenuous to say that access is a widespread problem, as well as to imply that rural Washingtonians would choose convenience over the confidence of knowing that the physician operating on and around their eyes was educated and trained at the very highest level. In fact, recent polling says that 79% of United States voters oppose allowing optometrists without medical degrees to perform eye surgery (attached). **We also find the implication that rural Washingtonians somehow deserve compromised health care services at odds with the Department’s and WSMA’s shared mission to ensure a safer and healthier Washington.**

If the Department is interested in increasing the ophthalmologic workforce and access to care, there are a number of other policies that should be prioritized. This includes increased funding for the state’s health professional student loan repayment program, securing funding for additional physician residency slots, and continuing to advance the utilization of telemedicine.

States that have expanded the optometry scope of practice still have poor health outcomes

The applicants reference the fact that a handful of other states have expanded optometrists’ scope of practice to include certain surgical procedures. This list includes Indiana which does not allow optometrists to perform surgery. Furthermore, they omit that all these states are significantly worse

places to receive health care and have poorer population health than Washington. US News and World report has conducted a [comprehensive study](#) that ranks states from the best (1) to the worst (50) for health care. Among the provisions considered are access to health care, public health, and health care quality.

Washington state is ranked as the eighth best state overall to receive health care – significantly higher than states who have expanded optometric scope of practice. The rankings for Washington state, as well as the seven states that allow optometrists to perform surgery, are as follows:

Best to worst states for health care	Rank (1-50)
Washington	8
Alaska	22
Wyoming	38
Kentucky	44
Louisiana	46
Oklahoma	48
Arkansas	49
Mississippi	50

This proposal is not an access solution for Washington state. The WSMA has supported scope of practice proposals that appropriately increased access to care, including the proposal to license anesthesiologist assistants currently being reviewed by the Department. We supported the creation of a formal medical assistant profession and worked with physician assistants to modernize the PA practice act. In 2016, we supported a bill granting pharmacists the ability to be reimbursed by commercial health plans for services they provide beyond dispensing drugs.

While we are proud of our work on these policies and others, we know there is more work to be done to ensure improved access to high-quality, safe patient care. We request that the Department continue to partner with WSMA and other stakeholders to build on policies intended to improve access and increase the health care workforce, rather than supporting an inappropriate scope of practice increase.

There are few – if any – functions of the human body more important to a person’s quality of life than their ability to see the world clearly and without pain. This exceedingly dangerous proposal does not merit the Department’s support.

Thank you again for the opportunity to provide comments on the sunrise review proposal. Should you have questions, do not hesitate to contact WSMA Policy Analyst Billie Dickinson at billie@wsma.org. We appreciate your consideration and your continued partnership.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nathan Schlicher", enclosed in a thin black rectangular border.

Nathan Schlicher, MD, JD, MBA
President, Washington State Medical Association

Cc: WSMA Executive Committee
Jennifer Hanscom, WSMA CEO
Jeb Shepard, WSMA Director of Policy
Sean Graham, WSMA Director of Government Affairs

BACKGROUND

Access to eye care remains a challenge in geographically disparate locations such as the state of Washington. Traditional methods of assessing access to care involves either direct time of flight distance or formulas to estimate driving distance and time. The recent advancement and availability of large open-sourced Geographic Information Systems (GIS) tools as well as free street mapping data allow for direct assessment of driving distance and time.

PURPOSE

To determine access to eye care by empirically measuring driving distance between population centers and eye care providers in the state of Washington.

METHODS

- 2012 Medicare Provider Utilization and Payment Data from the Centers for Medicare and Medicaid Services:
 - Providers actively practicing as optometrists and ophthalmologists.
 - Primary office locations were geotagged to a GPS coordinate.
- Open Street Map Data:
 - GPS geospatial data for every street, road, highway in the state of Washington was downloaded (October 2015).
 - Speed limits were unlabeled from Open Street Maps.
- 2010 US Census geospatial data:
 - Total number of people living within each census block group.
 - GPS geospatial data for each census block group.
- Dijkstra's algorithm was used to calculate the shortest path by driving time using intersections as nodes and streets as edges.
- Software utilized include: Rsh, R (<http://r-project.org>), PostGIS, PostgresSQL, and Mapbox.

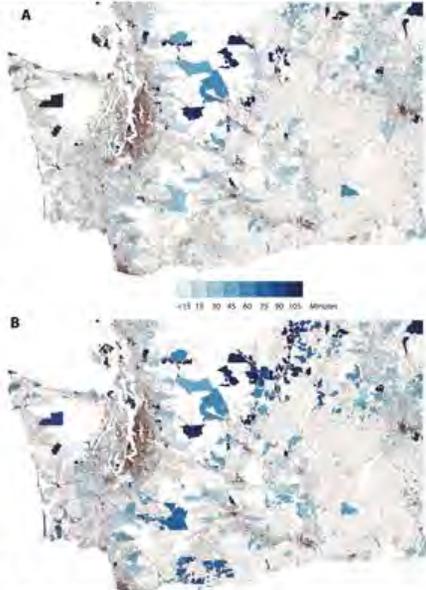


Figure 1: Driving paths for each census block group to the nearest optometrist (A) and ophthalmologist (B). Driving path for the nearest provider are shown as red lines. Each census block group is colored by the driving time in minutes.

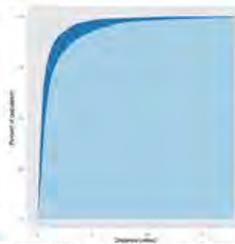


Figure 2: Cumulative population by driving miles to the nearest optometrist (dark blue) and the nearest ophthalmologist (light blue).

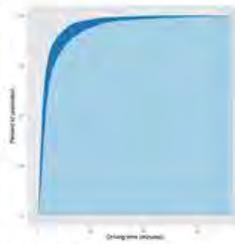


Figure 3: Cumulative population by driving time in minutes to the nearest optometrist (dark blue) and the nearest ophthalmologist (light blue).

RESULTS

- Of the 25,508 optometrists and 17,071 ophthalmologists in the national Medicare Provider Utilization and Payment Data from 2012, a total of 665 optometrists and 332 ophthalmologists were identified as practicing in the state of Washington.
- Over 2.6×10^7 driving routes were analyzed and the shortest driving path and time were collected for each census block group to the nearest optometrist and ophthalmologist.
- Ninety percent of the population lives within 9.56 miles and 11.76 minutes of an eye care provider.
- 97.6% and 99.6% of optometrists practice within 1 and 2 hours of an ophthalmologist.
- The median distance and driving time to the nearest ophthalmologist were 1.81 miles and 2.16 minutes respectively.

CONCLUSION

- In the state of Washington, the majority of the population lives within close proximity of an eye care provider.
- If a patient was seen by an optometrist and care had to be escalated to an ophthalmologist, then the majority of optometrists practice within close proximity to an ophthalmologist.
- Caveats:
 - 1) Driving time does not take into consideration stop signs, traffic lights, traffic patterns.
 - 2) Only primary office locations were available for analysis.
 - 3) Subspecialty care was not considered.

SUPPORTED BY
Research to Prevent Blindness
 NIH K23EY02492, P30-EY01730

National Toplines

The survey was conducted among 1,000 U.S. voters between January 27th and February 1st, 2021. The margin of error is +/- 3.5 at the 95% confidence interval.

95% of U.S. voters say it is important to them for a physician to be involved in diagnosis and treatment decisions.

Expectations extend across parties, with 65% of Republicans, 71% of Democrats, and 64% of independents saying it is very important.

3% of U.S. voters said it was not important to have a physician involved in specific treatments, such as anesthesia, surgery, and other invasive medical procedures.

U.S. voters are most concerned about allowing optometrists without medical degrees to perform eye surgery, with total opposition at 79% among Americans (64% strongly oppose).

62% of U.S. voters say patients are most likely to be harmed from scope of practice changes. Only 9% said patients would benefit.

This includes 66% of Republicans, 57% of Democrats, and 64% of independents.

35% of U.S. voters believe these changes will most benefit non-physician health care practitioners.

Seventeen percent (17%) say for-profit health care providers are most likely to benefit and 16% say health insurance companies.

62% of U.S. voters think these changes would make our health care system worse.

This includes majorities across parties, with the strongest sentiment among Republicans (69% worse). Fifty-five percent (55%) of Democrats and 64% of independents say these changes would make our healthcare system worse.

July 15, 2021

Umair A. Shah, MD, MPH
Director, Washington State Department of Health

RE: Optometry Scope of Practice Sunrise Review

Dear Dr. Shah,

My name is Dr. Paul Barney, I'm an optometric physician and have active optometric licenses in Alaska and Washington. I am the Center Director of Pacific Cataract and Laser Institute (PCLI) in Anchorage, AK. PCLI is a medical and surgical eye care practice consisting of optometrists and ophthalmologists with offices in several U.S. states. While Alaska is my primary location of practice, PCLI also has several offices in Washington, and occasionally I fill in for my colleagues in Washington.

I am also an Adjunct Professor at two accredited U.S. Optometry schools, I'm a past Chairperson of the Board of Examiners in Optometry for Alaska, and a past President of the Alaska Optometric Association.

Alaska's optometric scope of practice is very similar to the scope of practice changes being proposed for Washington. Alaska's scope of practice laws allows optometrists to perform anterior segment laser procedures (YAG laser posterior capsulotomy, selective laser trabeculoplasty, and laser peripheral iridotomy) as well as the removal of benign lesions of the eyelids and ocular adnexa. I personally have safely performed hundreds of these procedures on patients in Alaska. But, if I see patients in a PCLI facility in Washington who need these procedures, I cannot legally perform the procedure and must ask the patient to return to see one of our ophthalmologists. This is an unnecessary time and financial burden for WA patients, especially when you consider that I (and my optometric colleagues) have the education, training, and experience to safely perform these procedures, but we are restricted from providing that care due to an antiquated optometric scope law in Washington.

In my capacity as an Adjunct Professor, I work with optometric students. I frequently ask my students about their practice plans upon graduation. Although scope of practice is not the only factor in determining where a young doctor will practice, my students have indicated that it is a significant issue when they consider practice location. In my opinion, states that have restrictive scope laws lose many well

qualified young doctors who chose to practice in states that allow them to practice to the fullest level of their education and training.

While I served on the Board of Examiner's in Optometry for Alaska, I was involved in writing the regulations for Alaska's current scope of practice statute. Alaska's Board of Optometry as well as Boards of Optometry in other states with similar scope of practice laws, have demonstrated the ability to write regulations which protect the public and safely implement these expanded scope of practice statutes. If you look at the safety statistics from states with expanded optometric scope statutes, which I'm sure you have received from the Boards of those respective states, you'll see that optometrists are performing these procedures safely in other states. There's no reason to think that Washington's Board of Optometry would not also be equally diligent and responsible in protecting the public and safely implementing an expanded scope of practice statute, just as the Optometry Boards in other states have done.

As you know, health care technology and education advances quickly. With those advancements, periodic updates to scope of practice statutes and regulations are important for all health care professions to stay current with changing technology and education. Without periodic scope of practice advances the state's population is denied easy access to these technologic advances.

I respectfully ask you and your Department of Health colleagues to give a positive review of the proposed optometric scope expansion for Washington. This change is commensurate with current advances in optometric education and training, it will update Washington's optometric scope of practice to be more in line with many other U.S. states, and it will ultimately be good for the citizens of Washington.

Respectfully yours,

Paul M. Barney, O.D.
Center Director
Pacific Cataract and Laser Institute
1600 "A" Street, Suite 200
Anchorage, AK 99501

July 9, 2021

Umair Shah, MD, MPH
Secretary of Health
Washington State Department of Health

Re: Sunrise Review for Optometry bill

Dear Dr. Shah,

This letter is in support of amending and updating the Washington State Optometry practice act.

I have practiced in Washington State since 1984, initially at the Virginia Mason Medical Center, and the past 33 years at Northwest Eye Surgeons, with 6 medical clinics and 4 ambulatory surgical centers. I am currently the Director of Optometry and a partner. I feel blessed to have served the public and profession in many roles: as a clinician, educator with over 200 papers, posters, and lectures, as a residency coordinator, an administrator, and in leadership.

Over the past 30+ years, we have witnessed the benefits of optometry's growth and contributions to health care. Commensurate with our training, we have requested and been provided modifications to the authority and privileging of our profession to better serve Washington State patients. This includes topical diagnostic and therapeutic medicines, oral medicines and Schedule II-V Controlled Substances, and minor procedures such as ocular foreign body removal and naso-lacrimal dilation and irrigation. With passage of each measure, the Optometry State Board has judiciously sustained a high standard for implementation.

As with past law changes in Washington and nationwide, several key Optometry organizations have responsibly educated ahead of our legislative requests: the Schools and Colleges of Optometry have applied curriculum and scholarly additions, evidence-based guidelines established and referenced by the American Optometric Association, expanded post-graduate education and research endeavors of the American Academy of Optometry, restructured and expanded requirements for Board Certification by the American Board of Optometry, accreditation standards prescribed by the Council on Optometric Practitioner Education that meet the standards set by the Accreditation Council for Continuing Medical Education (ACCME), and with encouragement for continued interprofessional continuing education, and finally, the leadership and alignment of our primary stakeholder associations to build a foundation of continuous development, lifelong learning, and excellence in clinical practice.

In Washington State, the updated law will expand availability of care and access in areas where these ophthalmic procedures are less available from specialists. We believe this will help keep healthcare costs in check by circumventing secondary care referrals, lessen travel costs and second co-pays, and save patient time away from their jobs or other activities. This change will parallel state laws in effect and benefiting patients in other Pacific NW states such as Oregon, Idaho, and Alaska, as well as other US states that have had the foresight to add these procedures to primary care practice. In this regard, Washington State doctors of optometry are underutilized relative to our training.

The procedures we are requesting are now ingrained in the curriculum of all Optometry schools and colleges in the US who are credentialed by the Accreditation Council of Optometric Education. The procedures have been included in Part III of the National Board exam for many years and credentialed by the National Board of Examiners in Optometry. Finally, the Washington State Board of Optometry should be enabled to enforce the new law the same as other independent professions such as medicine, dentistry, and podiatry.

The proposed modified state law will authorize our doctors to prescribe oral corticosteroids, currently approved in over 30 US states. This will allow initiating treatment for several conditions where topical steroids provide inadequate ocular concentration. An example is management of diffuse lamellar keratitis from corneal trauma on a past corneal refractive surgery patient. More importantly, if a patient presents with giant cell arteritis and monocular loss of vision from arteritic anterior ischemic optic neuropathy (AAION), they need immediate oral or IV corticosteroids with the hope to prevent loss in the contralateral eye.

I was recently consulted regarding a case of AAION, correctly diagnosed by an optometric physician with confirming same day labs of elevated ESR and CRP and the patient with hallmark symptoms of GCA. They were immediately referred to their PCP with a request for stat oral corticosteroid treatment. Treatment was unfortunately delayed by their medical provider. Subsequently, the second eye became involved which led to permanent bilateral blindness. Had optometry's scope included oral corticosteroids, the OD who initiated care would have immediately placed them on corticosteroids which could have greatly improved the patient's chances of preserving vision in their unaffected eye. In this case, Optometry's role was to identify the working diagnosis of AAION and initiate corticosteroid treatment if a delay was anticipated in getting the patient to the Emergency Room or their physician. A temporal artery biopsy and other tests would be ordered to confirm the diagnosis, but the key is to immediately initiate corticosteroid treatment for this ocular emergency as we facilitate their medical referral and care.

Thank you in advance for the opportunity to provide comments.

Sincerely,

Brett G. Bence, OD, FAAO
Director of Optometry, Partner, Northwest Eye Surgeons

Past President, Optometric Physicians of Washington
Past President, American Academy of Optometry
Board Certified, American Board of Optometry
Member, Council on Optometric Practitioner Education

Umair A. Shah, MD, MPH
Director, Washington State Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

July 12, 2021

RE: Sunrise Review, Optometrist Scope of Practice

Dear Dr. Shah,

Please support the process and completion of updating Washington State's Scope of Practice for Optometric Physicians to stay current and reflect the standard that many states have already.

I have been practicing since graduating from the Illinois College of Optometry in 2000. In 21 years of practice and many different environments I have developed a deep respect and love for my patients, their families, and peers. Our practice has been in the business of medical eye care and vision care of our patients since 1950. We fully enjoy seeing 5th generation patients that come to us for their care because of the strong bonds and trust that we have developed and earned.

As you know, there are many challenges to providing the best, concise, caring, and efficient care to our patients. One of those challenges is the current framework and scope of practice wording for optometry. It does not allow for our profession to be streamlined and adapt to the ever-changing landscape of eyecare. Frequently we cannot provide expedited care which causes increased cost to the patient, the medical system, and puts the patients vision and eye health at risk. In some cases, the patients just don't receive the care. There are procedures and technology that we have been trained on that we cannot use due to the restrictions here in Washington State even though there are not the same restrictions in the states around us.

I know you practiced medicine for over 20 years and have seen the wide ranges of successes and failures with timely care and treatments sought by and provided for patients. I know you have seen how different ailments affect the lives of your patients and those that care for them. I am incredibly happy that someone with hardcore medical experience and educational experience is the Washington State Secretary of Health. I can only imagine how complex things become when moving from the exam room experience to the full scope bureaucratic experience. The doctors I work with and know often joke about the easiest thing is being the doctor in the exam room with the patient. Sometimes simple and sometimes complex, but all contained in one exam room. There is only the physician and the patient and the customization of the treatment plan to help the patient. We often find that the management of the business, dealing with prior authorizations, insurances, supplies, technical equipment, network servers, IT services, security, and the dreaded HR issues to be much more challenging.

As for me, I am completely biased by my passion for my profession on the importance of sight in our lives. That is my focus. This is based on the fact that 70-80% of what we perceive by all of our senses is by our sight. Most studies show that 70-80% of learning is by sight. On many top ten fears lists the fear of going blind is ranked higher than the fear of death. I have had patients tell me this outright. "Dr. Clayton I hope I am dead before I go blind." Sight is an awesome data stream for brains to perceive, interact, and enjoy the world around us.

Frequently for non medical professionals and for people that just don't understand how the loss of vision affects a person I draw an "impairment parallel" with something that we have all been focused on due to COVID 19 and working from home and education from home – its all about the bandwidth. Having sight in both eyes is like having dual ISP Super Fiber Internet with a speed that cannot be replicated or replaced. When you lose your vision you revert back to old school dial up phone calls only, auditory/verbal only. Even if you still had your vision imagine if you were banned from any type of internet connection, visual media, and electronic media. Now take it a step farther. Close your eyes and imagine the impact on your daily life. Try it for a couple of hours. You don't get to open your eyes and all you can do is make phone calls and talk to people. This is just small example and doesn't come close to the emotional, psychological, safety, productivity, and day to day impact on the person and the people that surround that individual. This perspective motivates me, my colleagues, my staff, my fellow physicians, and our peers serving in all aspects of medical care every day.

Of the many lessons we have learned from the COVID 19 Experience is we need to be able to adapt, innovate, and pivot to best care for our patients. New technology and procedures can be implemented to safely and efficiently help our patients to maintain and preserve their vision and eye health. We need a clearer and more adaptive pathway to do this.

By moving forward with the Washington State Board of Optometry facilitating how Washington State Optometric Physicians can practice and setting education and training requirements this will allow us to provide timely, cost effective, efficient, and quality standard of care services to our patients.

The Washington State Board of Optometry has the best understanding, education, and appropriate medical training to understand the specific eye and vision related issues at present and in the ever changing patient care landscape. They are just much better equipped and prepared than the Legislature to provide innovation and adaptation to best care for our patients.

We work side by side with Ophthalmology and the new proposal allows for Optometric Physicians with the appropriate education and training to perform some advanced procedures, just like in many other states. The new proposal also is very specific about excluding specific procedures that Ophthalmologists are better prepared to perform.

The goal is for Optometry to be able to provide more immediate, safe, cost effective, and available care. This allows for fewer patient visits and infrastructure costs while providing the standard of care to our patients.

Please support and recommend to the Legislature the proposed revisions to the Washington State's Scope of Practice for Optometric Physicians.

If you would like any additional information, have any questions, or would like to have a dialogue, please feel free to contact me at any time.

Thank you for your time and consideration.

Sincerely,

Charles Clayton OD

eyeballdr@comcast.net – personal email
425-442-1546 personal cell phone

Optometric Physician, Owner, Bellevue Vision Clinic, Bellevue, WA
King County Optometric Past President
Member of the Optometric Physicians of Washington
Member of American Optometric Association
Consultant/Speaker for Johnson & Johnson Vision Care Division (since 2010 – current)
Simple farm boy/Bread Maker/Outdoorsman/Eagle Scout from Central Washington

TO: Sunrise Review for Optometric Physicians

I'm retired now, for the most part. I still keep up with the technological development of the profession because I think it's important, since you never know when you could be "called to active duty" again, should some situation present itself and the President or the Governor needs healthcare professionals to "answer the call".

I started my career in 1984 as an Army optometrist. I was assigned as the Assistant Chief for Eye Services, within the Department of Surgery at US Army Hospital, Augsburg Germany and issued license 1596 by our State. The scope of my practice was my license and ultimately guided by the Hospital Commander. His guidance was simple... 'take care of the patients, treat everybody the same, whether active duty or retired, and you can practice up to your level of comfort. Do what you were trained to do in school and you'll do just fine'. Beyond that, the trust from my superior laid the foundation for my training. While we had the full medical support you'd normally get in a hospital, the optometrist on staff was the "eye guy" for the whole hospital. I wore a beeper, and it was me that got the call at 0200 when some soldier went through the windshield or a fragment was lodged in the eye of a scared 19 year old kid from an accident on the firing range or the motor pool, when banging on a brake drum sent a piece of rusty metal flying. I was charged to "do what I was trained to do in school", and that's what the hospital commander expected of his two optometrists. And if a patient needed to be hospitalized, it was up to me to write the order.

If I reached the limits of my training, and it wasn't urgent, I'd refer the patient to the hospital in Nuremberg, a 120 mile drive north. It wasn't a good situation, since the soldier had to be accompanied, and that meant two soldiers losing 8 hours of field and training time. For a child or dependent, it meant mom or dad (sometimes both) also making the trip. While occasionally we had an ophthalmologist visit our hospital for 2 working days a quarter to do surgeries, care was limited. His assistant? Me. And I accepted gladly, since the pediatric ophthalmologist was most generous as a teacher, and like he said, "you never know when this will come in handy." And occasionally, it helped with triaging patients and in coordinating care with ophthalmology in remote Army hospitals. Relationship for the most part, were excellent, since Optometry was recognized as the primary care providers and it lessened the burden on Ophthalmology who provided secondary care in Europe or tertiary care stateside.

Returning stateside in 1988, I started practicing in Vancouver and had to accept that my training over the last 4 year, taking care of soldiers, civilians, dependents and retirees, your potential sons and daughters, was going to be relegated to the backseat, because Washington law was behind that of the Federal government. The only difference was when I set foot on Fort Lewis to see patients as a Reservist where I was practicing to the military standard of care, again, under the guidance of the Hospital Commander. Indeed, in 2020, even the Veteran's Administration recognized that optometrists no longer be constrained by artificial limitations and directed that their doctors practice what they were taught to do in school, to best serve our veteran population of which I am proud to be a member, having retired as a Lieutenant Colonel. As a veteran who receives care in Vancouver, their eye clinic would best serve their local community without routing their patients into Oregon for more costly care that could easily be performed "on the spot" and thereby forgoing the shuttling of patients by bus or car "across the river". Many of our vets are aged, some with debilitating conditions that require caregivers and wheelchairs, and "just another trip to the VA Medical Center" is something the average veteran wishes could be avoided.

Thankfully much has changed over the years. But as times, instrumentation and capabilities have progressed, it seems like the profession is meeting stumbling blocks to providing timely care with things that could be accomplished by the family's local optometrist, who've they been going to for years, who they know and trust for advice and certainly to "do the right thing", not to be told something like, "well, if I were in Oregon or Alaska or Idaho, I could do this but I can't here and will have to refer you to someone else". And that 'someone else' may or may not be on your insurance panel, leaving the patient bewildered and frustrated on "what to do next". It reminds me of a comment I heard when I returned stateside after being called up for Desert Storm..."Dr J, you didn't lose all your clinical knowledge and skills when you crossed the International Dateline."

Young graduating Optometric Physicians training is top notch. My son is a testament to the training he has received and I marvel at his clinical skills. I trust his skill and judgement, and his patients trust him. Decisions about clinical practice, in my opinion, should be determined by the Board of Optometry up to the clinical skills taught by accredited Colleges and Universities where Optometry is taught. It's good for the patient, it's good for the doctors, and it's good for Washington, if we are to recruit and retain the current day's "Best and Brightest" doctors.

I certainly endorse a positive decision by the Department, and if you need any further information, I am at your service.

Very truly yours,

/S/ Christen Jankowski, O.D.

Christen Jankowski, OD

Hello!

I would like to submit comments in opposition to the OPW proposal that echo the stance taken by the WSMA, which is as follows:

Surgical procedures on or around the eye are exceedingly invasive and require the highest level of clinical expertise and skill. The draft language offered by the Optometric Physicians of Washington would allow for a dramatic increase in the profession's scope of practice without requisite education and training or regulatory sideboards. This includes the ability to diagnose and treat without comprehensive medical training, as well as the use of injections, scalpels, and lasers on the eyes and tissues surrounding the eyes. All of these surgical procedures are invasive, including those that are performed with lasers. These procedures include: YAG Laser Capsulotomy: This procedure follows cataract surgery – sometimes immediately following surgery, sometimes years after – to clear cloudy vision. After dilating pupils and applying local anesthetic, the ophthalmologist will use a laser to create an opening in a cloudy film that has formed behind the lens implant. This restores normal vision. Complications that can arise during or after the procedure include but are not limited to inflammation, macular edema, lens implant dislocation, and retinal detachment. Argon and Selective Laser Trabeculoplasty: In this procedure, laser energy is applied to the trabecular meshwork of patients who have high eye pressures or glaucoma. Often these patients have failed other medical therapy in terms of controlling their eye pressure at a target level. Spots of energy are placed along the meshwork and, it should be noted, that overtreatment will damage the structures and limit their function – exacerbating the pressure problem. Similarly, if energy is delivered to surrounding structures, there would likely be no pressure lowering effect and damage could occur to those structures. Complications include inflammation, scar tissue formation with angle closure and subsequent glaucoma, corneal decompensation and abrasions, and cataracts. Laser Peripheral Iridotomy: This procedure places a hole in the iris to allow free flow of aqueous fluid from behind the iris to the front of the iris, deepening the anterior chamber and preventing angle closure. Placement and size of the iridotomy are important to avoid double vision and a “second pupil”, as well as to avoid bleeding and extreme pain from hitting nerves. The energy level must be carefully selected to avoid distorting and disfiguring the pupil. In addition to complications possible with laser trabeculoplasty, iridotomy can cause intraocular bleeding, pupil distortion, double images, extreme pressure elevation, and cataracts. Scalpel surgery to remove “lumps and bumps”: Removing these lesions requires an ophthalmologist to utilize the full range of their medical and clinical knowledge to evaluate the patient, differentially diagnose, and determine if surgery is appropriate. The procedure requires local anesthesia, removal or biopsy of lesion via excision/incision/etc., and coordination with a pathologist. If malignancy is suspected, an ophthalmologist must clear margins. They may also need to cauterize, administer adjunct treatment, address any intraoperative abnormalities, and suture or close the wound. If the sutures are not closed properly, the eyelid will not function properly. This can cause chronic problems – even blindness. Potential complications include scarring, blurred or impaired vision, dry eyes, bleeding, infection, blood clots, pain, eyelid disfiguration, anesthesia risks, and loss of eyesight. Section two of the bill draft specifies that the practice of optometry does not include “surgery of the eyelid for malignancies or for incisional cosmetic or mechanical repair of blepharochalasis, ptosis, or tarsorrhaphy.” This statement is at best misleading and at worst shows a concerning lack of clinical knowledge, as the only way to know if a lesion is malignant or benign is to test the lesion once it is removed. Injections and prescriptive authority: Ophthalmologists utilize injections to treat a number of conditions. They inject intraocularly (into the eye), periocularly, and into the subconjunctival space (under the thin layer covering the white shell of the eye), as well as into the eyelids, eyebrows, scalp, nose, and lacrimal apparatus. Additionally, ophthalmologists utilize intravenous injections and anesthesia when they perform certain surgical procedures. This proposal would lift a ban on

optometrists performing injections and infusions, as well as allowing them to prescribe oral steroids. This means optometrists would have access to anesthetics, Botox, fillers, steroids and other immune modulating medicines, and possibly chemotherapy drugs, as well as IV sedation. Complications from these injections can include infection, blindness and loss of eye, and even death, in addition to general complications due to the use of anesthesia. These are just a few of the surgical procedures an optometrist would be able to perform under this proposal if approved. Complications that can arise during these procedures are serious and often times irreversible – impacting a patient over their lifetime. The stakes are far too high for the Department to endorse allowing anyone but an ophthalmologist to perform these surgical procedures. Proposed educational and training requirements are not equivalent to medical or osteopathic doctors and are insufficient to ensure safe surgery and prescribing. The medical education of an ophthalmologist begins before they even enter medical school with pre-med requisites included in their bachelor's degree programs. Once at medical school, ophthalmologists spend four years focusing on the entire human body and all of its systems – sensory, nervous, endocrine, cardiovascular, and more. A medical school's curriculum is highly regulated by the Liaison Committee on Medical Education (LCME). After medical school, ophthalmologists complete a year-long internship, and then spend three more years completing a postgraduate residency training where they clinically apply the knowledge and skills acquired during medical school. Many also complete another one to two years of fellowship. According to the American Medical Association (AMA), this includes 12,000 to 16,000 hours of patient care under the supervision of other medical or osteopathic physicians. This clinical training teaches an ophthalmologist the safest and most appropriate treatments – surgical, pharmacological, and other interventions based on a patient's medical needs – as well as training in surgical procedure, technique, and medical response. By comparison, an optometrist's education is highly variable. Optometrists attend four years of post-graduate school and there is no residency requirement. The optometric education focuses on examining the eye for vision prescription, dispensing corrective lenses, and performing some eye screening functions. Optometric education is observation-based and students receive less than 2,000 hours of hands-on clinical training. Because injections, laser and other surgical techniques are not within the scope of practice of optometrists in most states, their education in these areas are limited to didactics, and practice on animal and model eyes, and other inanimate objects. Application materials state that "all optometry schools teach these procedures in their curriculum" and imply that any additional training that may be required could be accomplished through continuing education courses. The Vermont Office of Professional Regulation (OPR) recently conducted a comprehensive study that considered, among other things, the claim that surgery is taught in optometric school. Their conclusions are as follows: Even the more stringent and comprehensive optometric educational programs do not provide the level of training and experience obtained by ophthalmologists. What information is available about U.S. optometry schools shows that (a) curriculums vary widely (there is no standardized course of study regarding these advanced procedures); and (b) courses on lasers, injections and minor surgical procedures are very limited – they are short courses, with little to no lab time, and minimal practical experiences. Continuing education courses on advanced procedures present similar limitations. They are very short and have negligible practical experience requirements. The same study also concludes that optometrists do not have the education or training to safely perform surgery, including injections and procedures with a laser. For all of these reasons, the education and training requirements included in the proposal are insufficient and not worthy of the Department's support. There are no uncomplicated surgeries involving the eye or tissues around the eye – increasing the scope of practice for optometrists would compromise patient safety. Of all the applicant's claims offered in this proposal, the most concerning is the assertion that surgery on the eye is uncomplicated and essentially risk free. All of these surgical procedures are invasive, including those that are performed with lasers. In order to mitigate the risk of complications, ophthalmologists not only need the technical skills to perform the procedure, but also the medical

knowledge to know when surgery may or may not be clinically indicated. Physicians are trained in the most effective, safe and appropriate treatments, including surgical, pharmacologic, and other interventions based on each patient's medical needs. Recognizing when the procedure should be done and when it should not be done can be as challenging and important as being able to perform the procedure. When surgery is clinically indicated, only an ophthalmologist has the medical knowledge and training to safely conduct surgical preparation, performance of the procedure, and post-operative patient care. Most importantly, only an ophthalmologist has the medical training to respond to an adverse event that may result from any surgery and the use of anesthesia. This includes blood clots, infection, spread of local anesthetic, and decreased heart rate – all of which can result in death. We cannot overstate how critical this is to the safety of Washington patients. In any scope of practice proposal, the consideration of patient safety and ensuring high quality care must be foremost. The risks associated with allowing underqualified providers to perform surgery does not, in this case, outweigh the potential benefits and do not warrant the Department's support. The proposal fails to ensure appropriate parameters and oversight for the profession. The draft legislation offered by the applicant includes a provision that would grant the Board of Optometry "...the sole authority to determine what constitutes the practice of optometry." In our state, a health profession's scope of practice is codified in RCW and only the legislature can amend the practice act. In fact, no other board or commission in our state has the ability to set their own scope of practice. Granting the Board of Optometry the authority to determine future scope expansions for their own profession circumvents the legislative process and removes critical checks and balances. This is an exceedingly dangerous concept for the Department to consider endorsing. T World report has conducted a comprehensive study that ranks states from the best (1) to the worst (50) for health care. Among the provisions considered are access to health care, public health, and health care quality. Washington state is ranked as the eighth best state overall to receive health care – significantly higher than states who have expanded optometric scope of practice. The rankings for Washington state, as well as the seven states that allow optometrists to perform surgery, are as follows: Best to worst states for health care Rank (1-50) Washington 8 Alaska 22 Wyoming 38 Kentucky 44 Louisiana 46 Oklahoma 48 Arkansas 49 Mississippi 50 This proposal is not an access solution for Washington state. The WSMA has supported scope of practice proposals that appropriately increased access to care, including the proposal to license anesthesiologist assistants currently being reviewed by the Department. We supported the creation of a formal medical assistant profession and worked with physician assistants to modernize the PA practice act. In 2016, we supported a bill granting pharmacists the ability to be reimbursed by commercial health plans for services they provide beyond dispensing drugs. While we are proud of our work on all of these policies, we know there is more work to be done to ensure improved access to high-quality, safe patient care. We request that the Department continue to partner with WSMA and other stakeholders to build on policies intended to improve access and increase the health care workforce, rather than supporting an inappropriate scope of practice increase. There are few – if any – functions of the human body more important to a person's quality of life than their ability to see the world clearly and without pain. This exceedingly perilous proposal does not merit the Department's support.

Thank you!

Mindy Juan, MD
Cardiac Anesthesiologist

Hello,

To Whom it May Concern,

The following are my comments on the optometry sunrise legislation. If there are any questions please let me know. Thank you and have a wonderful day!

"I am writing this letter to you in support of Washington optometry, and their efforts towards optometric scope expansion specifically including certain laser procedures and surgical procedures for the front half of the eye. I am a proud graduate of Pacific University College of Optometry (PUCO) in Forest Grove, OR where I graduated in 2009 one year after my wife who is also a PUCO grad in the class of 2008. We are both extremely proud of our education and training received while spending 4 years of optometry school, and spending extensive time in Washington doing portions of our training. My wife did her residency at the Tacoma VA Hospital in 2008-2009, and I did a 6-month internship at that same VA in 2009. While in optometry school, on our internships, and in residency, we received top notch education, both didactically and clinically, in all aspects of optometry including contact lenses, low vision, vision therapy, primary care optometry, ocular disease of the anterior segment (front half of the eye), ocular disease of the posterior segment (back half of the eye), pediatric optometry, systemic disease as it relates to the eyes, injections in and around the eyes, and laser procedures. These laser procedures are one of the key reasons as to why Washington optometry is pushing for scope expansion, with their goal to catch Washington up to the level of training that now happens for laser procedures for students at all schools and colleges of optometry.

I furthered my education after graduating from Pacific University in 2009, by doing a one-year residency in Oklahoma in 2009-2010. Since Oklahoma has had laser privileges for optometrists for over 20 years, I was able to take my wonderful training at Pacific University and build upon that by doing laser procedures in Oklahoma, specifically YAG laser capsulotomies, laser peripheral iridotomies (PI's), and selective laser trabeculoplasties (SLT's). In total, I have done, or supervised students and residents doing, well over 1,000 laser procedures in the nearly 12 years that I have been in Oklahoma.

These 3 laser procedures, YAG laser capsulotomy, laser PI, and SLT, are all procedures which optometrists are well equipped and trained to handle and perform. The laser procedures are done with laser slit lamps that require the exact same skill set as performing a slit lamp to examine the eyes. This is a skill that optometrists spend 4 years of optometry school working to master! Optometrists are masters of slit lamp exams. I can assure you that the most prominent skills needed to do a YAG cap, laser PI, or SLT are slit lamp skills and being able to focus on various structures in the eyes. Optometry students and optometrists do this every single day.

For all of the laser procedures mentioned, it would be a huge public health win for the Washington public to have increased access to these procedures from eye doctors that are well trained to do them, and especially for the SLT procedure. SLT originated as a glaucoma laser procedure that was done once a patient had exhausted eye drop therapy, usually meaning they were already on 2, 3 or even 4 eyedrops. Over the past decade SLT, due to its safety and efficacy, has emerged as a first line glaucoma treatment option with numerous advantages over eyedrops in that it removes the non-compliance aspect from glaucoma treatment. Many glaucoma patients struggle with putting in their eyedrops on a daily basis for glaucoma, or even remembering to put them in. An SLT laser done one time every 2-4 years has been shown to be equivalent to the best class of eye drops that we have for glaucoma. The recent groundbreaking LiGHT trial, released in March 2019 in The Lancet, concluded: "Selective laser trabeculoplasty (SLT) **should** be offered as a first-line treatment for open angle glaucoma and ocular hypertension, **supporting a change in clinical practice.**" Who usually treats glaucoma

first? Optometry does. Washington optometry is currently forced to treat their glaucoma patients with eye drops, when in many instances an SLT is just as good if not a better option due to patient compliance issues with drops, side effects of drops, etc. Washington citizens deserve to have their primary eye doctor be able to treat their glaucoma with the best and most current options available which now includes SLT.

In conclusion, I am sure you are very proud to represent the citizens of Washington as an elected member of the Washington House. It goes without saying that you want what's best for your constituents. You want the best and brightest optometrists caring for your citizens whether it pertains to laser procedures, infant eye exams, contact lens eye exams, low vision exams, or general eye exams. I was the valedictorian of my Pacific University optometry class of 2009, voted top clinician in my class, one of the top 4 residents in my residency class nationwide in regards to national boards scores, and recently was named one of top 250 optometrists in the nation (out of nearly 45,000). I don't say any of that to brag or pat myself on the back. Frankly, it does not matter. I say it for this reason: I practice in Oklahoma because the law in Oklahoma allows me to do what I have been trained to do. Washington's current optometry law does not. Passing this law in Washington will only help the Washington citizens receive top notch care from well qualified optometrists, and also will facilitate Washington being a location where the best and the brightest future eye doctors practice. We routinely have students decide where they are going to practice based on optometric laws and legislation of that state. Many of our students choose to stay in Oklahoma so they can do what they have been trained to do.

If you have any questions, please do not hesitate to contact me anytime.

Sincerely,

Nate Lighthizer, O.D., F.A.A.O.
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Associate Dean
Director of Continuing Education
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TO: Umair A. Shah, M.D., M.P.H.
Secretary, Washington State Department of Health

FROM: Matthew Niemeyer, MD
Board Certified Ophthalmologist
Sequim, Washington

RE: Optometrist Scope Sunrise

Dear Dr. Shah,

Brevity is an art and attention and interest in short supply. Please give me a few minutes. I will establish my credentials which are significant and give you succinct thoughts to consider. You are welcome to call me for more if you wish.

First, I am an eye surgeon certified by the American Board of Ophthalmology. I perform more surgery and have a lower complication and infection rate than almost any ophthalmologist in the Northwest. I have done an estimated 26,000 cataract surgeries and 10,000 laser procedures in addition to a few thousand miscellaneous procedures.

Second, I have worked alongside a team of optometrists for the last 14 years. We are tied into our community with 17 other optometrists forming the Eye Emergency Network. We, as a contracted group with our local hospital, cover both surgical and non-surgical eye care for the Olympic Peninsula. Our Eye Emergency Network has existed for over 20 years.

Now, having established that I am both experienced and have extensive interaction with optometrists, let me make a short and succinct argument in favor of optometrists having a broad scope of practice. First, I would like to address the argument in opposition to optometrist scope expansion. This is a battle for turf, a constant and well thought out and funded attempt to limit the practice of optometrists who have a four year doctorate in their field. It is not about protecting patients. To demonstrate this point, let's review one subject, YAG laser capsulotomies. This procedure is done at a slit lamp which is a stereo microscope attached to a laser. The laser is used to cut a hole in the back of the tissue that holds a previously placed intraocular lens during cataract surgery. This procedure is taught to a resident ophthalmologist in a few minutes by either their attending or another resident. It is about as simple and as low risk as any procedure. A few years back at a Washington State ophthalmology meeting the president of the society got up and proudly announced that we now had some physician assistants (PA) doing YAG lasers. Mind you, any PA will have limited experience in the field of ophthalmology and likely less than a few dozen hours at a slit lamp. At the same time ophthalmology argues that optometrists, who have thousands of hours at a slit lamp and a doctorate degree in the field of eye care, many with residencies to further their education, should not be doing YAG lasers. This argument does not hold water and is dispicable when they support PAs doing the same procedure with little to no training. Next, optometry as a field provides extensive medical training to its providers. Optometry has a different knowledge base than ophthalmology. In some areas it is far broader and deeper, specifically in optics, glasses, and contact lenses. In the medical area it is extensive and broad as well. Those optometrists who have completed optional residency training have extensive medical training that rival a graduating ophthalmologist and many of those without a residency can still stand head-to-head with a graduating ophthalmologist with regards to knowledge base. A review of curriculum from optometric and ophthalmology training programs will bear this out.

Furthermore, I would like to address medications. Optometrists have a doctorate in their field and are extensively trained to prescribe medications specific to diseases of the eye and surrounding

tissue. Limitations should not be placed on their prescribing abilities when medications are being used to treat ocular issues.

Now let's get down to the meat. The above is not really an argument. The meat is the question of eye surgery.

Let me spell out my argument at a fundamental core. Surgery is about experience. In medicine, both in our doctorate training and ophthalmology training a common saying is, "See one, do one, teach one." Simple procedures are taught from resident to resident or maybe even a nurse will teach you how to put in an IV or draw blood. As procedures progress in complexity, you have to see a lot more and the teaching becomes more complex. You start working on animal and virtual models and then perform small parts of procedures guided by your mentors. You gain a knowledge base and you progress. Now, back to the question, should an optometrist be able to operate. The answer is simple. If they have the training, yes. Turf warfare is not the government's business. Making sure there are qualified providers that can take care of citizens is the business of the government. Optometrists have a giant knowledge base. There are plenty of procedures that are taught from one resident to the next, learned from your reference material while you are on call as a resident, and simply done while your senior resident guides you. So to keep it simple, simple procedures can be taught in weekend seminars or mentorships under ophthalmologists who will share their knowledge. If optometrists want to become surgeons in any area of eye care then they would need to complete full surgical residencies. The training would be the same. A balance would quickly take place with some optometrists becoming surgeons. Just as some ophthalmologists will transition into full time medical eye care after they finish residency.

All providers develop their own niche. This is not a new concept. Oculofacialmaxillary surgery, for example, is a residency formed from dentistry and the medical side. We will only have a shortage of eye care providers in the future. There is no reason to create a bottleneck when it does not need to be created.

Sincerely,

Matthew Niemeyer, MD

To Whom It May Concern,

I am writing to you today to voice my significant concern that the DOH and Legislature is considering allowing Optometrists (non surgeons) the ability to do surgical procedures in our state. I can't believe that this is even a consideration once again if our ultimate goal is patient care and safety in the State of Washington. **I would hope that you reject this expanded scope of practice and understand how dangerous it is for our citizens of Washington State.**

This scope issue has little to do with access to care as there are plenty of properly trained eye surgeons (Ophthalmologists, Eye MDs) in Washington State to provide the surgical needs of the population. It is more an overreach from aggressive optometrists to perform procedures they are not well trained to perform.

There is a very significant education and surgical experience gap in the education of an optometrist and ophthalmologist. An ophthalmologist has gone to medical school and understands the intricacies of how surgical interventions can have a systemic effect and global effect on a patient. Optometrists do not attend medical school and do not have the breadth of education to perform surgery nor the constant mentorship and proctoring of case after case that comes with medical school and residency.

I have asked many of my Optometrist colleagues about this scope request, and I have yet to find one optometrist that wants to do surgery. All of them have indicated that it is their leadership that is pushing this aggressive agenda and incites the battle and that they state privately that there is no need for this. If an optometrist wishes to do surgery, then they can retrain as an ophthalmologist as a few of my colleagues have done like Dr. David Benson and Dr. Robert Nash. These doctors have both realized that the optometric education is inadequate to do surgical procedures on patients and went back to retrain as eye surgeons.

I personally rarely do injections as I defer those to my retinal colleagues to perform. It amazes me that optometrists feel with their limited education and experience, that this is something safe for them to do. I would not want any of my family members undergoing a surgical procedure by an optometrist. The education and experience is not just ample for them to provide these services.

Lasers can be damaging to the eye when performed improperly. We have seen many cases of poor outcomes after lasers in those states that have allowed optometry to perform these procedures. If you do your research and contact the American Academy of Ophthalmology, you will see the results of the dangers of letting optometry do surgery across the country.

Having the Washington Board of Optometry which has been seen to be very aggressive in their desires to become surgeons the ability to self govern which procedures they can perform is not wise and will lead to many harmed patients in our state.

We are lucky to have a state that has protections in place against optometry performing surgery. I hope you take the critical time to realize that allowing optometry the ability to do surgery is a mistake. When a patient is educated on the differences between an eye surgeon ophthalmologist that went to medical school versus an optometrist, they prefer the ophthalmologist almost always.

Please feel free to reach out to me anytime.

Sincerely,

Niraj Patel, MD

To whom it may concern,

I am a comprehensive ophthalmologist who trained in Washington. I currently practice in Alaska with the military. I am just going to cut to the point. Optometrists expanding their practice to include injections and surgery is not safe. Many patients do not know the difference between optometrists and ophthalmologists.

Ophthalmologists attend medical school and then spend one year as an intern learning general medicine, and three years as a surgical resident. My hours in said training were typically 60-80 hours a week. In that period I was trained how to recognize when a procedure is correct and safe, and how to do the procedure by people who had been doing them for decades.

The learning curve for these procedures is steep, and I've seen patients go blind from mistakes. Make no mistake, our procedures are micro surgeries, and a small misstep and lead to blindness.

As I progressed in my competency of each procedure, staff watched me and signed me off for independent practice as is standard by the ACGME. What this proposal suggests is opening patients to harm.

I've had the opportunity to work with many great optometrists, and many of them haven't seen any procedures done by anyone. Some of these optometrists have gone to the best optometry schools in the country, and they are completely unfamiliar with the surgical techniques we do. They don't attend medical school, so they are not familiar with very basic medications that patients take. Their training does not prepare them to be ophthalmologists. This is why optometrists in Canada are not able to prescribe medications despite the selection process for optometrists being much more stringent in that country.

There is no shortage of ophthalmologists in Washington. I knew retina specialists who would fly to North Dakota on weekends to provide care in places that actually have shortages. I should mention that not even all ophthalmologists are comfortable with injections, and I have had multiple of senior staff members ask me to do injections on their patients because they felt it was out of their scope.

Learning injections is a slow process that I mastered over the course of a year by doing hundreds of them. A bad injection can cause a retinal detachment, a traumatic cataract, or a blinding infection. The type of cataract caused by a bad injection can be dangerous to correct with surgery because the structure of the capsule that holds the lens can be permanently damaged. This is why a retina specialist carefully observed me for a year prior to me being signed off to do them independently.

Optometrists generally haven't even seen injections. There is no infrastructure to train them or to sign them off. They can't train themselves as no optometrists do injections. There are also medical contraindications that they aren't trained to recognize.

In short, this isn't about 99% of optometrists. Most know what they were trained to do. This is really about the 1% who think they know more than they know and are willing to experiment on patients. Would you want an optometrist doing your mother's injection? That is really the question on the table.

I hope I have impressed the importance of this issue. If you have questions about specifics please feel free to reach out to me at (708)212-0884. Alternatively you can reach me at this email. I appreciate your

consideration in this matter, and I believe that the Washingtonian government has patient care at heart and will do what is right for patients because that is what really matters.

Very Respectfully,
Matthew Snider M.D.
CPT(P), USA
JBER Ophthalmology