Washington State Department of Health

Certificate of Need Application
Ambulatory Surgical Facilities
Ambulatory Surgery Centers

Certificate of Need applications must be submitted with a fee in accordance with Washington Administrative Code (WAC) 246-310-990.

Application is made for a Certificate of Need in accordance with provisions in Revised Code of Washington (RCW) 70.38 and WAC 246-310, rules and regulations adopted by the Washington State Department of Health. I attest that the statements made in this application are correct to the best of my knowledge and belief.

Name, Title, and Signature of Responsible Officer: Howard Barnebey, MD - Medical Director Dated: 7/20/22	Phone Number: (425) 454-3937 Email Address: hbarnebey@specialtyeyecarecentre.com
Legal Name of Applicant: Specialty Eyecare Centre, LLC	Number of Operating Rooms requested – include procedure rooms: 2
Address of Applicant: 1920 – 116th Ave NE Bellevue, WA 98004	Estimated Capital Expenditure: $0.00

Identify the Planning Area for this project as defined in WAC 246-310-270(3):
EAST KING COUNTY

Applicant Description

Answers to the following questions will help the department fully understand the role of applicants. Your answers in this section will provide context for the reviews under Financial Feasibility (WAC 246-310-220) and Structure and Process of Care (WAC 246-310-230).

1. Provide the legal name(s) and address(es) of the applicant(s)
   Note: The term "applicant" for this purpose includes any person or individual with a ten percent or greater financial interest in the partnership or corporation or other comparable legal entity. WAC 246-310-010(6)

   Howard S. Barnebey, MD
   12026 NE 26 PL
   Bellevue, WA 98005

2. Identify the legal structure of the applicant (LLC, PLLC, etc.) and if known, provide the UBI number.

   DBA Specialty Eyecare Centre, PLLC
   1920 – 116th Ave NE
   Bellevue, WA 98004
   UBI # 602 342 765

3. Provide the name, title, address, telephone number, and email address of the contact person for this application.

   Howard Barnebey, MD Medical Director
   1920 – 116th Ave NE
   Bellevue, WA 98004
   (425) 454-3937
   hbarnebey@specialtyeyecarecentre.com

4. Provide the name, title, address, telephone number, and email address of any other representatives authorized to speak on your behalf related to the screening of this application (if any).

   Jennifer Jensen, Surgical Coordinator
   1920 – 116th Ave NE
   Bellevue, WA 98004
   (425) 278-1930
   jjensen@specialtyeyecarecentre.com

   Lance Baldwin, Consultant
   3621 – 156th Pl SE
   Bothell, WA 98012
   (318) 792-8215
   lance@m-exec.com

5. Provide an organizational chart that clearly identifies the business structure of the applicant(s) and the role of the facility in this application.

Specialty Eyecare Centre, LLC
I
Specialty Eyecare Centre ASC

Project Description

Answers to the following questions will help the department fully understand the type of facility you are proposing as well as the type of services to be provided. Your answers in this section will provide context for the reviews under Need (WAC 246-310-210) and Structure and Process of Care (WAC 246-310-230)

1. Provide the name and address of the existing facility.

   Specialty Eyecare Centre ASC
   1920– 116th Ave NE
   Bellevue, WA 98004

2. Provide the name and address of the proposed facility. If an address is not yet assigned, provide the county parcel number and the approximate timeline for assignment of the address.

   Specialty Eyecare Centre ASC
   1920– 116th Ave NE
   Bellevue, WA 98004

3. Provide a detailed description of the proposed project.

   There will be NO new construction. The intent is to expand the hours of operation of the existing facility. Currently the surgery center is open 1 day per week. The expansion would entail opening the surgery center to other surgeon(s) who are not employed by the practice.

4. With the understanding that the review of a Certificate of Need application typically takes at least 6-9 months, provide an estimated timeline for project implementation, below:
   Since there is no construction involved – there is no timeline. The surgery center is ready to provide service now. Project will be complete when the decision is made.

Event	Anticipated Month/Year
Design Complete	N/A
Construction Commenced	N/A
Construction Completed	N/A
Facility Prepared for Survey	N/A
Project Completion	Upon department decision

5. Identify the surgical specialties to be offered at this facility by checking the applicable boxes below. Also attach a list of typical procedures included within each category.

☐ Ear, Nose, & Throat	☐ Maxillofacial	☐ Pain Management
☐ Gastroenterology	X Ophthalmology	☐ Plastic Surgery
☐ General Surgery	☐ Oral Surgery	☐ Podiatry
☐ Gynecology	☐ Orthopedics	☐ Urology

☐ Other? Describe in detail:_____

See attachment 5A, page __ for a list of typical procedures included.

6. If you checked gastroenterology, above, please clarify whether this includes the full spectrum of gastroenterological procedures, or if this represents a specific sub-specialty:

☐ Endoscopy	☐ Bariatric Surgery	☐ Other:_____

7. For existing facilities, provide a discussion of existing specialties and how these would or would not change as a result of the project.
   This is a single specialty facility (ophthalmology) and we plan to remain a single specialty facility.

8. Identify how many operating rooms will be at this facility at project completion. Note, for certificate of need and credentialing purposes, “operating rooms” and “procedure rooms” are one and the same.
   We currently have 2 operating rooms. This number will not change.

9. Identify if any of the operating rooms at this facility would be exclusively dedicated to endoscopy, cystoscopy, or pain management services. WAC 246-310-270(9)
   None of our rooms will be used for endoscopy, cystoscopy, or pain management.
10. Provide a general description of the types of patients to be served by the facility at project completion (e.g. age range, etc.).

The majority of our patient base is geriatric. The Governing Board has limited our patients to those who are over 18 years old, do not require blood products during surgery, and who do not weigh more than 400 lbs.

11. If you submitted more than one letter of intent for this project, provide a copy of the applicable letter of intent that was submitted according to WAC 246-310-080.
    We submitted only one letter of intent. See attachment 11A, page ___ for a copy of the letter.

12. Provide single-line drawings (approximately to scale) of the facility, both before and after project completion.

    See attachment 12A, page ___ for the existing floor plan of the ASC. There are no changes planned.

13. Confirm that the facility will be licensed and certified by Medicare and Medicaid, which is a requirement for CN approval. If this application proposes the expansion of an existing facility, provide the existing facility's identification numbers.

    License #: ASF.FS._____

    Medicare #: 50C0001023 / 8802499_____

    Medicaid #: 129497_____

14. Identify whether this facility will seek accreditation. If yes, identify the accrediting body.
    We are accredited by AAAASF. (American Association of Accreditation of Ambulatory Surgery Facilities) Facility number 6014.

15. **OPTIONAL –** The Certificate of Need program highly recommends that applicants consult with the office of Construction Review Services (CRS) early in the planning process. CRS review is required prior to construction and licensure (WAC 246-330-500, 246-330-505, and 246-330-510). Consultation with CRS can help an applicant reliably predict the scope of work required for licensure and certification. Knowing the required construction standards can help the applicant to more accurately estimate the capital expenditure associated with a project.

    If your project includes construction, please indicate if you've consulted with CRS and provide your CRS project number.
    As our project does NOT include construction, we have not consulted with CRS.

Certificate of Need Review Criteria A. Need (WAC 246-310-210)

WAC 246-310-210 provides general criteria for an applicant to demonstrate need for healthcare facilities or services in the planning area. WAC 246-310-270 provides specific criteria for ambulatory surgery applications. Documentation provided in this section must demonstrate that the proposed facility will be needed, available, and accessible to the community it proposes to serve. Some of the questions below only apply to existing facilities proposing to expand. For any questions that are not applicable to your project, explain why.

Some of the questions below require you to access facility data in the planning area. Please contact the Certificate of Need Program for any planning area definitions, facility lists, and applicable survey responses with utilization data.

1. List all surgical facilities operating in the planning area – to include hospitals, ASFs, and ASCs.

Table 1- Surgical Facilities in East King Planning Area

Hospitals	**City/Zip**
Evergreen Health	Kirkland/98034
Overlake Hospital Medical Center	Bellevue/98004
Snoqualmie Valley Hospital	Snoqualmie/98065
Swedish Medical Center – Issaquah	Issaquah/98029
Ambulatory Surgery Centers	**City/ZIP**
Aesthetic Facial Plastic Surgery	Bellevue/98004
Aesthetic Physicians dba Sono Bello	Bellevue/98004
Aesthetic Eye Associate, PS	Kirkland/98033
Allure Laser Center	Kirkland/98033
Anderson Sobel Cosmetic Surgery	Bellevue/98004
Athenix Body Sculpting Institute	Bellevue/98005
Aysel Sanderson, MD	Kirkland/98033
Bellevue Plastic Surgery Center	Bellevue/98004
Bellevue Spine Specialists	Bellevue/98005
Bellevue Surgery Center	Bellevue/98009
Bel-Red ASC	Bellevue/98004
Carillon Point Surgery Center	Kirkland/98033
Center for Plastic Surgery	Bellevue/98004
Cosmetic Surgery and Dermatology of Issaquah	Issaquah/98027
Eastside Endoscopy Center-Bellevue site*	Bellevue/98004

Eastside Endoscopy Center-Issaquah site*	Issaquah/98027
UW Medicine General Surgery at Eastside Surgery Center	Issaquah/98027
Egrari Plastic Surgery Center	Bellevue/98004
Evergreen Endoscopy Center*	Kirkland/98034
Evergreen Surgical Clinic ASC	Kirkland/980347
Gaboriau Center	Sammamish/98074
Group Health Cooperative Bellevue Endoscopy	Bellevue/98004
Kaiser Permanente Bellevue Medical Center: Surgery Clinic	Bellevue/98004
Naficy Plastic Surgery and Rejuvenation Center	Bellevue/98004
Northwest Center for Aesthetic Plastic Surgery	Bellevue/98004
Northwest Laser and Surgery Center	Bellevue/98005
Northwest Nasal Sinus Center	Kirkland/98033
Overlake Reproductive Health, Inc.	Bellevue/98004
Overlake Surgery Center	Bellevue/98004
Pacific Cataract and Laser Institute-Bellevue	Bellevue/98004
Proliance Eastside Surgery Center	Kirkland/98034
Proliance Highlands Surgery Center	Issaquah/98029
PRO Medical Surgery Center	Bellevue/98007
Redmond Ambulatory Surgery Center, LLC	Redmond 98034
Remington Plastic Surgery Center	Kirkland/98034
Retina Surgery Center	Bellevue/98004
Skin Surgery Center	Bellevue/98004
Seattle Children’s-Bellevue	Bellevue/98004
SoGab Surgery Center	Kirkland/98033
Specialty Eyecare Centre	Bellevue/98004
Stern Center for Aesthetic Surgery	Bellevue/98004
Valley Day Surgery ASC	Bellevue/98055
Valley Covington ASC	Covington/98042
Valley MAC ASC	Bellevue/98055
Virginia Mason-Bellevue Endoscopy*	Bellevue/98004

Virginia Mason-Issaquah Endoscopy*	Issaquah/98027
Washington Institute Orthopedic Center	Kirkland/98034
Yarrow Bay Plastic Surgery Center	Kirkland/98033

2. Identify which, if any, of the facilities listed above provide similar services to those proposed in this application.

Table 2 - East King Surgery Facilities that Provide Ophthalmic Services

Aesthetic Eye Associates
Proliance Eastside Surgery Center
Proliance Highlands Surgery Center
Pacific Cataract and Laser Institute- Bellevue
Kaiser Permanente Bellevue Medical Center: Surgery Clinic

3. Provide a detailed discussion outlining how the proposed project will not represent an unnecessary duplication of services.

The Interpretive Statement issued on January 19, 2018, instructs applicants that cannot show a need to utilize WAC 246-310-270(4). "This regulation provides discretion for the CN Program to approve operating rooms that would not ordinarily be approved. For example, the CN Program can issue a CN without a showing of numeric need if the applicant can show that through existing volumes the facility will have no impact on market share, the facility is necessary to provide access to specific surgical types, or the existing healthcare system supports continued operation of the facility." Specialty Eyecare Centre's application can satisfy these criteria:

No Impact on Market Share. **This ASF has been in operation over 15 years and continues to provide high quality outpatient surgical services to its patients. Specialty Eyecare Centre performs nearly 500 surgeries per year. Allowing Specialty Eyecare Centre to operate as a CON-approved facility will not detrimentally impact the other providers of outpatient surgeries in the planning area.**

WAC 246-310-270(4) utilizes literal operating rooms to define numerical need. This process requires flexibility when using this qualifier with ophthalmic surgery centers. Ophthalmic surgery can be done quickly with the majority of the time for a patient consisting of surgical prep, assessment, and discharge. A single surgeon will utilize two operating rooms simultaneously with one

patient being prepped or discharged and another patient having surgery performed. This maximizes the patient's time and provides the greatest comfort to a patient. See Exhibit 5 that describes this common practice in efficiency. Because Specialty Eyecare Centre will use this common practice in the new ASC, the number of ORs in the planning area will increase but only improve the quality of care not to increase volume.
Another example of how ophthalmic ORs differ from the measures established in WAC 246-310-270(4) is OR minutes. Per WAC 246-310-270(4) an outpatient OR provides 68,850 minutes per week based on 25% of the time used for prep and clean-up and a 37.5 hour work week. Calculating using this formula would show that Specialty Eyecare Centre has a "surplus" of ORs with a single OR.

	Market Share	2021	2022	2023	2024
Specialty Eyecare Centre	10.21%	419	438	445	452
Surgical Minutes	20	8,380	8,760	8,900	9,040
WAC Projected Turnover Time (25% of Surgery time)	5	2,095	2,190	2,225	2,260
Total Time	25	10,475	10,950	11,125	11,300
OR need		**0.15**	**0.16**	**0.16**	**0.16**
WAC Total Surgery Time	68,850	68,850	68,850	68,850	68,850

Ophthalmic surgeries require a significantly larger amount of cleanup/prep time in relation to actual surgery time. One benchmark lists surgical time as 20 minutes and cleanup/prep at 24 minutes (see exhibit 5) creating a 1:1.2 ratio vs 3:1. Utilizing the updated benchmark we see the OR "need" to be greater than 1.

4. Complete the methodology outlined in WAC 246-310-270, unless your facility will be exclusively dedicated to endoscopy, cystoscopy, or pain management. If your facility will be exclusively dedicated to endoscopy, cystoscopy, or pain management, so state. If you would like a copy of the methodology template used by the department, please contact the Certificate of Need Program.

Of the ASFs listed above in Table 1, 12 are CN approved ASFs, and the

number of surgeries and the number of ORs will be counted in the numeric methodology.

Of the 36 remaining ASFs, two provide endoscopy or endoscopy/pain management only. The numeric methodology excludes these special purpose rooms and cases from the calculations.

This exclusion leaves 34 ASFs remaining. All 34 are located within the offices of private physicians, whether in a solo or group practice that have received an exemption (considered a Certificate of Need-exempt ASF). The use of these ASFs is restricted to physicians that are employees or members of the clinical practices that operate the facility. Therefore, these 28 facilities do not meet the ASF definition in WAC 246-310-010. For Certificate of Need- exempt ASFs, the number of surgeries, but not ORs, is included in the methodology for the planning area.

In summary, surgical cases and ORs for the 4 hospitals and 12 CN approved surgery centers will be counted in the numeric methodology. Surgical cases, but not ORs, for the 34 CN exempt surgery centers will be counted in the numeric methodology.

The data points used in the department's numeric methodology are identified in Table 3.

Table 3 - Methodology Assumptions

Assumption		Data Used
Planning Area		East King County
		Claritas 2022
	Population Forecasts	Age Group: 0-85+ Year 2021 – 651,247

	Year 2025 – 691,130
Use Rate	Divide total calculated surgical cases by 2021 population results in the service area use rate of 134.681/1,000 population
Year 2021 Total Number of Surgical Cases	50,1714 – Inpatient or MixedUse; 36,196 – Outpatient 83,368 – Total Cases
Percent of surgery: outpatient vs. inpatient	Based on DOH survey and ILRS: 41.91% outpatient; 58.09% inpatient

Estimation of numeric need as defined in WAC 246-310-270 requires calculation of current surgical capacity (exclusive of capacity dedicated to endoscopy and pain management).1 Hospitals and ASCs voluntarily report OR utilization through an annual utilization survey distributed by the Washington Department of Health. In all cases, we have utilized the most recent data available. Table 4 lists the current supply of operating rooms in the East King Planning Area not dedicated to endoscopy or pain management.

From Table 4, there are 79 CN-approved ORs in the East King Planning Area, including 39 inpatient/mixed use ORs and 40 CN-approved outpatient ORs (this includes the 2 ORs proposed for this project). Operating rooms dedicated to GI/endoscopy pain management are neither counted in the number of planning area ORs nor is their utilization used to determine planning area surgery use rates.

The data and assumptions used in the numeric need calculations are

presented in Table 3. These are generated from population forecasts by Claritas and planning area utilization data from the 2020 Department of Health ASC Survey, the 2019 Department of Health ASC Survey, and the 2018 Department of Health ASC Survey, where priority is given to the most recent data.

WAC 246-310-270(9) — Methodology

(a) Existing Capacity

(i) Assume the annual capacity of one operating room located in a hospital and not dedicated to outpatient surgery is ninety-four thousand two hundred fifty minutes. This is derived from scheduling forty-four hours per week, fifty-one weeks per year (allowing for five weekday holidays), a fifteen percent loss for preparation and cleanup time, and fifteen percent time loss to allow schedule flexibility. The resulting seventy percent productive time is comparable to the previously operating hospital commission's last definition of "billing minutes" which is the time lapse from administration of anesthesia until surgery is completed.

(ii) Assume the annual capacity of one operating room dedicated to ambulatory surgery is sixty-eight thousand eight hundred fifty minutes. The derivation is the same as (a)(i) of this subsection except for twenty- five percent loss for prep/cleanup time and scheduling is for a thirty- seven and one-half hour week. Divide the capacity minutes by the average minutes per outpatient surgery (see (a)
(vii) of this subsection). Where survey data are unavailable, assume fifty minutes per outpatient surgery, resulting in a capacity for one thousand three hundred seventy-seven outpatient surgeries per room per year.

(iii) Calculate the total annual capacity (in number of surgeries) of all dedicated outpatient operating rooms in the area.

Dedicated outpatient CN- approved ORs in the planning area = 40

Capacity = 68,850 minutes per year per OR

Total annual capacity in minutes: 40*68,850 = 2,754,000 minutes

Minutes per surgery = 45.13 minutes

Total annual capacity in outpatient surgeries:

2,754,000 / 45.13 = **61,024 annual [dedicated] outpatient surgeries**

(iv) Calculate the total annual capacity (in number of minutes) of the remaining inpatient and outpatient operating rooms in the area, including dedicated specialized rooms except for twenty-four hour dedicated emergency rooms. When dedicated emergency operating rooms are excluded, emergency or minutes should also be excluded when calculating the need in an area. Exclude cystoscopic and other special purpose rooms (e.g., open heart surgery) and delivery rooms.

Inpatient/mixed use, CN-Approved ORs in the planning area = 39

Capacity = 94,250 minutes per year per OR

Total annual capacity in minutes: 39*94,250 = 3,675,750 minutes

Minutes per surgery = 102.33 minutes

Total annual capacity in inpatient/mixed use surgeries:

3,675,750 / 102.33 = **35,921 annual inpatient/mixed use surgeries**

(b) Future need

(i) Project the number of inpatient and outpatient surgeries performed within the hospital planning area for the third year of operation. This shall be based on the current number of surgeries adjusted for forecasted growth in the population served and may be adjusted for trends in surgeries per capita.

Based on the forecast population in 2025 and the use rate of 134.681 per 1,000 residents, there is a projected total of 93,082 surgeries in the East King Planning area. [(b) (i)]

An estimated 58.09 of surgeries were performed as inpatient/mixed use and 41.91% as outpatient surgeries. Thus, of the 93,082 forecasted surgeries for 2025, 54,071 would be inpatient/mixed use surgeries and 39,011 outpatient surgeries [(b) (i)].

(ii) Subtract the capacity of dedicated outpatient operating rooms from the forecasted number of outpatient surgeries. The

difference continues into the calculation of (b) (iv) of this subsection.

Outstanding demand for outpatient surgeries:

39,011 – 61,024 = -22,013 outpatient surgeries

(iii) Determine the average time per inpatient and outpatient surgery in the planning area. Where data are unavailable, assume one hundred minutes per inpatient and fifty minutes per outpatient surgery. This excludes preparation and cleanup time and is comparable to "billing minutes."

Inpatient/mixed use surgery minutes = 5,533,135

Inpatient/mixed use cases = 35,921

Average inpatient/mixed use minutes per case = 102.33

Outpatient surgery minutes = 1,760,556

Outpatient cases = 61,024

Average outpatient minutes per case = 45.13

(iv) Calculate the sum of inpatient and remaining outpatient (from (b)(ii) of this subsection) operating room time needed in the third year of operation.

Inpatient minutes: 54,071 surgeries * 102.33 minutes/surgery = 5,533,135 minutes, or [(b)(i) * (b)(iii)]

Remaining outpatient minutes: (22,013) surgeries (b)(i) * 45.13 minutes/surgery (b)(iii) = (993,444) minutes, or [(b)(ii) * (b)(iii)]

Sum of projected inpatient operating room time needed and projected remaining outpatient operating room time needed:

5,533,135 minutes + (993,444) minutes = 4,539,692 minutes (b)(iv)

(c) Net Need

(ii) If (b)(iv) of this subsection is greater than (a)(iv) of this subsection, subtract (a)(iv) of this subsection from the inpatient component of (b)(iv) of this subsection and divide by ninety-four thousand two hundred fifty minutes to obtain the area's shortage of inpatient operating rooms. Divide the outpatient component of (b)(iv) of this subsection by sixty- eight thousand eight hundred fifty to obtain the area's shortage of dedicated outpatient operating rooms.

b.iv. 1,857,385 /94,250 = 19.71

The model shows a shortage of inpatient ORs: 19.71

5. If the methodology does not demonstrate numeric need for additional operating rooms, WAC 246-310-270(4) gives the department flexibility. WAC 246-310-270(4) states: "Outpatient operating rooms should ordinarily not be approved in planning areas where the total number of operating rooms available for both inpatient and outpatient surgery exceeds the area need."

   These circumstances could include but are not limited to: lack of CN approved operating rooms in a planning area, lack of providers performing widely utilized surgical types, or significant in-migration to the planning area. If there isn't sufficient numeric need for the approval of your project, please explain why the department should give consideration to this project under WAC 246-310-270(4). Provide all supporting data.

   The methodology does not demonstrate a numeric need for additional operating rooms. Nevertheless, there are also qualitative arguments that support approval of the proposed project. These include:
   1. Increasing use rate
   2. Significant shifting of surgical care to outpatient settings, driven by changing clinical practices, improved technology and patient preference;
   3. Lower cost of care for patients and their insurers in freestanding ASFs as compared to hospital-based providers;

1. Increasing use rate

The model as presented above assumes a constant use rate. However, this

use rate will increase over time, and it is very likely this use rate will continue to increase over the forecast period given (1) the planning area population is aging, and (2) older persons have much higher surgical utilization rates.
Higher population growth rates for older persons in the East King County Planning Area. Population forecasts project average annual growth rates over 3% for persons aged 65+ in the East King County planning area. This rate reflects growth about three times higher than the rate of population growth for the planning are as a whole.

Higher surgical use rates for older persons
Surgical utilization by major age group are published within the latest National Center for Health Statistics ("NCHS") survey study, "Ambulatory Surgery in the United States." Table 6 uses this data to present use rates by age group. From Table 6, surgical utilization rates for persons 65+ year of age are about 2.5 times greater than overall population surgical utilization rates (Exhibit 6). Table 5: ASC Utilization Rates by Age Group for the U.S. Population,2010

Table 5: ASC Utilization Rates by Age Group for the U.S. Population, 2010

Age Group	U.S. Total, 2010		
	ASC Procedures (Thousands)	Population	Utilization Rate per 10,000
Total	48,263	309,326,085	1,560.26
Under 15	2,916	61,200,686	476.47
15 to 44	10,478	125,876,000	832.41
45 to 64	18,783	81,770,617	2,297.04
65+	16,086	40,478,782	3,973.93

Sources: National Health Statistics Reports, No. 102, February 28, 2017, Table 2: Number and percent distribution of ambulatory surgery procedures, by age and sex: United States, 2010; Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2010 to July 1, 2018

In summary, the planning area population is aging, with a greater proportion of its population expected to fall within the older age group of 65+. This aging, combined with the much higher surgical utilization rates for the older age cohorts, will drive up the overall surgical utilization rate.

2. *Significant shift to outpatient-based surgeries*

The Department's ASF numeric need methodology was adopted nearly thirty years ago. See WAC 246-310- 270 (effective Jan. 23, 1992). Clearly, much has changed in healthcare during the past three decades. Among those changes is a massive shift of outpatient surgery from hospitals to ASFs. This shift to outpatient settings is due to at least two reasons:

- *Improved clinical practices/technologies that allow surgeries to be performed on an outpatient basis. Thus, even if the use rate were not increasing, there would be increased demand for outpatient surgeries relative to inpatient surgeries.*
- *Patient Preference for Outpatient ORs.*

Adding capacity to a freestanding surgery center is preferred by patients since ASFs are typically much more convenient and easier to access compared to hospital ORs. This includes scheduling and patient care, given hospitals must also focus on inpatient surgeries, which are typically much more complex. Outpatient surgery centers, on the other hand, can focus exclusively on outpatient care, increasing efficiency and care delivery.

3. *Greater efficiency and lower cost of care with outpatient, freestanding surgery centers*

Freestanding facilities are more cost-effective, i.e., lower cost in comparison to hospital outpatient surgery departments, leading to lower contractual rates for purchasers and cost savings for patients. As demand for outpatient surgeries increases over time, if hospital-based ORs are expanded, not freestanding ORs, then relatively higher cost care is being created. This is a less efficient option for patients and their insurers. In other words, without additional

outpatient OR capacity at freestanding ASFs, more patients will be treated in higher cost, hospital-based operating rooms, which lowers planning area resource efficiency overall.

6. For existing facilities, provide the facility's historical utilization for the last three full calendar years.

Table 4 - Historical Usage

2019	2020	2021
419	399	432

7. Provide projected surgical volumes at the proposed facility for the first three full years of operation, separated by surgical type. For existing facilities, also provide the intervening years between historical and projected. Include the basis for all assumptions used as the basis for these projections.

Projected Utilization			
2022	**2023**	**2024**	**2025**
438	**445**	**452**	**458**

Growth is based on population growth and established volumes.

8. Identify any factors in the planning area that could restrict patient access to outpatient surgical services. WAC 246-310-210(1) and (2)

None noted.

9. In a CN-approved facility, WAC 246-310-210(2) requires that "all residents of the service area, including low-income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly are likely to have adequate access to the proposed health service or services." Confirm your facility will meet this requirement.

Specialty Eyecare Centre provides ophthalmic services to all residents of the service area, including low-income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly are likely to have adequate access to the proposed health service or services

10. Provide a copy of the following policies:
    - Admissions policy
    - Charity care or financial assistance policy
    - Patient Rights and Responsibilities policy

- Non-discrimination policy
- Any other policies directly related to patient access to care.

See Exhibit 3

B. Financial Feasibility (WAC 246-310-220)

Financial feasibility of a project is based on the criteria in WAC 246-310-220.

1. Provide documentation that demonstrates that the immediate and long-range capital and operating costs of the project can be met. This should include but is not limited to:
   - Utilization projections. These should be consistent with the projections provided under "Need" in section A. Include the basis for all assumptions.
   - Pro Forma revenue and expense projections for at least the first three full calendar years of operation. Include the basis for all assumptions.
   - Pro Forma balance sheet for the current year and at least the first three full calendar years of operation. Include the basis for all assumptions.
   - For existing facilities, provide three years of historical revenue and expense statements, including the current year. Ensure these are in the same format as the pro forma projections. For incomplete years, identify whether the data is annualized.

See Exhibit 4

2. Provide the following applicable agreements/contracts:
   - Management agreement
   - Operating agreement
   - Medical director agreement
   - Development agreement
   - Joint Venture agreement

   Note that all agreements above must be valid through at least the first three full years following completion of the project or have a clause with automatic renewals. Any agreements in draft form must include a document signed by both entities committing to execute the agreement as submitted following CN approval.

   N/A

3. Certificate of Need approved ASFs must provide charity care at levels comparable to those at the hospitals in the ASF planning area. You can access charity care statistics from the Hospital Charity Care and Financial Data (HCCFD) website. Identify the amount of charity care projected to be provided at this facility, captured as a percentage of gross revenue, as well as charity care information for the planning area hospitals. The table below is for your convenience but is not required. WAC 246-310-270(7)

Planning Area Hospital 3-year Average Charity Care as a Percentage of Total Revenue	1.89%
Projected Facility Charity Care as a Percentage of Total Revenue	2.0%

4. Provide documentation of site control. This could include either a deed to the site or a lease agreement for the site. If a lease agreement is provided, the terms must be for at least five years following project completion. The costs identified in these documents should be consistent with the Pro Forma provided in response to question 1.

See Exhibit 8

5. For new facilities, confirm that the zoning for your site is consistent with the project.

N/A - This is an existing location

6. Complete the table below with the estimated capital expenditure associated with this project. Capital expenditure is defined under WAC 246-310-010(10). If you have other line items not listed below, please include the items with a definition of the line item. Include all assumptions used as the basis the capital expenditure estimate.

Item	**Cost**
a. Land Purchase	$
b. Utilities to Lot Line	$
c. Land Improvements	$
d. Building Purchase	$
e. Residual Value of Replaced Facility	$
f. Building Construction	$
g. Fixed Equipment (not already included in the construction contract)	$
h. Movable Equipment	$
i. Architect and Engineering Fees	$
j. Consulting Fees	$
k. Site Preparation	$
l. Supervision and Inspection of Site	$
m. Any Costs Associated with Securing the Sources of Financing (include interim interest during construction)	$
1. Land	$
2. Building	$
3. Equipment	$
4. Other	$
n. Washington Sales Tax	$
Total Estimated Capital Expenditure	**$ 0**

7. Identify the entity or entities responsible for funding the capital expenditure identified above. If more than one entity is responsible, provide breakdown of percentages and amounts for all.

N/A

8. Please identify the amount of start-up costs expected for this project. Include any assumptions that went into determining the start-up costs. If no start-up costs are needed, explain why.

N/A

9. Provide a non-binding contractor's estimate for the construction costs for the project.

N/A

10. Explain how the proposed project would or would not impact costs and charges to patients for health services. WAC 246-310-220

Specialty Eyecare Centre is an existing organization that provides over 400 procedures per year. This project will provide additional resources without increased cost or charges to patients for health services.

11. Provide documentation that the costs of the project, including any construction costs, will not result in an unreasonable impact on the costs and charges to patients for health services in the planning area. WAC 246-310-220

N/A

12. Provide the **projected** payer mix by gross revenue and by patients using the example table below. If "other" is a category, define what is included in "other."

13. If this project proposes CN approval of an existing facility, provide the historical payer mix by revenue and patients for the existing facility for the most recent year. The table format should be consistent with the table shown above.

Payer	**Percentage by Revenue WAC 246-310-220(1)**	**Percentage by Patient WAC 246-310-210(2)**
Medicare	38	42
Medicaid	4	6
Commercial Payer	41	39
Cash Services	17	13
Total	100	100

14. Provide a listing of new equipment proposed for this project. The list should include estimated costs for the equipment. If no new equipment is required, explain.

N/A

15. Provide a letter of financial commitment or draft agreement for each source of financing (e.g. cash reserves, debt financing/loan, grant, philanthropy, etc.). WAC 246-310-220.

N/A

16. If this project will be debt financed through a financial institution, provide a repayment schedule showing interest and principal amount for each year over which the debt will be amortized. WAC 246-310-220

N/A

17. Provide the applicant's audited financial statements covering the most recent three years. WAC 246-310-220

See Exhibit 4

C. Structure and Process of Care (WAC 246-310-230)

Projects are evaluated based on the criteria in WAC 246-310-230 for staffing availability, relationships with other healthcare entities, relationships with ancillary and support services, and compliance with federal and state requirements. Some of the questions within this section have implications on financial feasibility under WAC 246-310-220 and will be marked as such.

1. Identify all licensed healthcare facilities owned, operated by, or managed by the applicant. This should include all facilities in Washington State as well as out-of-state facilities, and should identify the license/accreditation status of each facility.

   Specialty Eyecare Centre ASC
   1921– 116th Ave NE
   Bellevue, WA 98004

2. Provide a table that shows FTEs [full time equivalents] by classification (e.g. RN, LPN, Manager, Scheduler, etc.) for the proposed facility. If the facility is currently in operation, include at least the last three full years of operation, the current year, and the first three full years of operation following project completion. There should be no gaps in years. All staff classifications should be defined.

	FTE						
Role	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
ASC Manager	1	1	1	1	1	1	1
RN	1	.25	.25	.25	.25	.25	.25
Technician	1	1	1	1	1	1	1

Biller	1	1	1	1	1	1	1

3. Provide the basis for the assumptions used to project the number and types of FTEs identified for this project.

Specialty Eyecare Centre assumptions are based on prior experience using this staffing ratio. The increase in number of procedures is minimal therefore the staffuing will remain constant.

4. Provide the name and professional license number of the current or proposed medical director. If not already disclosed under WAC 246-310-220(1) above, identify if the medical director is an employee or under contract.

Dr Howard Barneby MD00022352 is the medical director. He is the owner of Specialty Eyecare Centre.

5. If the medical director is/will be an employee rather than under contract, provide the medical director's job description.

N/A

6. Identify key staff by name, if known (e.g. nurse manager, clinical director, etc.)

ASC manager - Jennifer Jensen

7. Provide a list of physicians who would use this surgery center, including their names, license numbers, and specialties. WAC 246-310-230(3) and (5).

Howard Barneby MD00022352

8. For existing facilities, provide names and professional license numbers for current credentialed staff. WAC 246-310-230(3) and (5).

See Exhibit 9

9. Describe your methods for staff recruitment and retention. If any barriers to staff recruitment exist in the planning area, provide a detailed description of your plan to staff this project. WAC 246-310-230(1)

Specialty Eyecare Centre management recruit uses a combination of online services to display open positions and encouraging staff members to recruit amongst colleagues in their fields to great success. Retention is based on providing excellent training, annual compensation reviews, and providing a positive work culture.

10. For existing facilities, provide a listing of ancillary and support services already in place. WAC 246-310-230(2)

See Exhibit 11

11. For new facilities, provide a listing of ancillary and support services that will be established. WAC 246-310-230(2)

N/A

12. Identify whether any of the existing ancillary or support agreements are expected to change as a result of this project. WAC 246-310-230(2)

No existing ancillary or support agreements are expected to change

13. If the ASF is currently operating, provide a listing of healthcare facilities with which the ASF has working relationships. WAC 246-310-230(4)

See Exhibit 10

14. Identify whether any of the existing working relationships with healthcare facilities listed above would change as a result of this project. WAC 246-310-230(4)

No existing relationships would change as a result of this project.

15. For a new facility, provide a listing of healthcare facilities with which the ASF would establish working relationships. WAC 246-310-230(4)

N/A

16. Provide a copy of the existing or proposed transfer agreement with a local hospital. WAC 246-310-230(4)

See Exhibit 10

17. Provide an explanation of how the proposed project will promote continuity in the provision of health care services in the planning area, and not result in an unwarranted fragmentation of services. WAC 246-310-230(4)

Specialty Eyecare Centre is an existing organization that continuously provides services in the planning area. No new services are being added as part of this project. Because of this there will be no unwarranted fragmentation of services.

18. Provide an explanation of how the proposed project will have an appropriate relationship to the service area's existing health care system as required in WAC 246-310-230(4).

Specialty Eyecare Centre is an existing organization that continuously provides services

in the planning area. No new services are being added as part of this project. The organization will maintain its existing relationships with hospitals and referring physicians.

19. Identify whether any facility or practitioner associated with this application has a history of the actions listed below. If so, provide evidence that the proposed or existing facility can and will be operated in a manner that ensures safe and adequate care to the public and conforms to applicable federal and state requirements. WAC 246-310-230(3) and (5)
    a. A criminal conviction which is reasonably related to the applicant's competency to exercise responsibility for the ownership or operation of a health care facility; or
    b. A revocation of a license to operate a healthcare facility; or
    c. A revocation of a license to practice as a health profession; or
    d. Decertification as a provider of services in the Medicare or Medicaid program because of failure to comply with applicable federal conditions of participation.

Specialty Eyecare Centre has no history of the actions listed above.

D. Cost Containment (WAC 246-310-240)

Projects are evaluated based on the criteria in WAC 246-310-240 in order to identify the best available project for the planning area.

1. Identify all alternatives considered prior to submitting this project.

See analysis below

2. Provide a comparison of the project with alternatives rejected by the applicant. Include the rationale for considering this project to be superior to the rejected alternatives. Factors to consider can include, but are not limited to: patient access to healthcare services, capital cost, legal restrictions, staffing impacts, quality of care, and cost or operation efficiency.

Table 13- Alternative Analysis: Promoting Access to Healthcare Services

Option:	Advantages/Disadvantages:
No project	• Increasing facility costs due to rent increase, decreases the organizations ability to offer the highest quality services (Disadvantage) • The principal disadvantage is this option does nothing to address the ophthalmic ambulatory surgery OR shortages forecast in the Planning Area. (Disadvantage)
Requested Project	• The requested project best meets current and future access issues identified in the Planning Area and provides a low-cost alternative to all area ophthalmologists. (Advantage) • From an improved access perspective, there are no disadvantages. (Advantage)

Source: Specialty Eyecare Centre Director Discussion

Table 14- Alternative Analysis: Promoting Quality of Care

Option:	Advantages/Disadvantages:

No project	• There are no advantages from a quality of care perspective. However, there are no current quality of care issues. (Neutral) • The principal disadvantage with maintaining the current situation is driven by projected shortages of outpatient ambulatory surgery suites. Over time, as access in constrained, there will be adverse impacts on quality of care if Planning Area physicians and their patients either have to wait for surgical capacity or travel to other locations outside the Planning Area, assuming this is an option. (Disadvantage)
Requested Project	• The requested project best meets and promotes quality and continuity of care issues in the Planning Area. (Advantage) • From a quality of care perspective, there are only advantages. (Advantage)

Source: Specialty Eyecare Centre Director Discussion

Table 15 - Alternative Analysis: Staffing Impact

Option:	Advantages/Disadvantages:
No project	• There are no disadvantages from a staffing point-of-view. (Neutral)
Requested Project	• There are no disadvantages from a staffing point-of-view. Specialty Eyecare Centre will be able to maintain current staffing levels. (Neutral)

Source: Specialty Eyecare Centre Director Discussion

Table 16- Alternative Analysis: Legal Restrictions

Option:	Advantages/Disadvantages:
No project	• There are no legal restrictions to continuing operations as presently. (Advantage)

Requested Project	• The requested project will improve access, quality and continuity of care and promote highest, efficient use of Specialty Eyecare Centre assets as compared to the No Project option. (Advantage) • Requires certificate of need approval. This requires time and expense. (Disadvantage)

3. Identify any aspects of the facility's design that lead to operational efficiency. This could include but is not limited to: LEED building, water filtration, or the methods for construction, etc. WAC 246-310-240(2) and (3).

None noted

Certificate of Need Program Revised Code of Washington (RCW) and Washington Administrative Code (WAC)

Certificate of Need Program laws RCW 70.38

Certificate of Need Program rules WAC 246-310

Commonly Referenced Rules for Ambulatory Surgery Projects:

WAC Reference	Title/Topic
246-310-010	Certificate of Need Definitions
246-310-160	Regular Review Process
246-310-200	Bases for findings and action on applications
246-310-210	Determination of Need
246-310-220	Determination of Financial Feasibility
246-310-230	Criteria for Structure and Process of Care
246-310-240	Determination of Cost Containment
246-310-270	Ambulatory Surgery

Certificate of Need Contact Information:
Certificate of Need Program Web Page
Phone: (360) 236-2955
Email: FSLCON@doh.wa.gov

Construction Review Services Resources:
Construction Review Services Program Web Page
Phone: (360) 236-2944
Email: CRS@doh.wa.gov

Licensing Resources:
Ambulatory Surgical Facilities Laws, RCW 70.230
Ambulatory Surgical Facilities Rules, WAC 246-330
Ambulatory Surgical Facilities Program Web Page

Hospital Charity Care and Financial Data (HCCFD) Program Resources
HCCFD Web Page
Email: CharityCare@doh.wa.gov

Exhibit 1

Received 04/04/22

Expires 10/04/22

SPECIALTY EYECARE CENTRE

The accent is on care

HOWARD S. BARNEBEY, M.D.

Cataract & Glaucoma Consultation & Surgery
Dry Eye Evaluation & Treatment
Research & Clinical Studies

1920 116th Ave. N.E.
Bellevue, WA 98004

March 25, 2022

Certificate of Need Program
Department of Health
111 Israel Rd SE
Tumwater, WA 98501

RE: Letter of Intent - Specialty Eyecare Centre

In accordance with WAC 246-310-080, Specialty Eyecare Group, Inc., P.S. (Specialty Eyecare Centre) hereby submits a letter of intent proposing to establish and operate the Specialty Eyecare Centre at1920 116th Avenue North East Bellevue, WA, 98004 as a free-standing ambulatory surgery center (ASC) in the East King planning area. Specialty Eyecare Centre historically operates as a certificate of need exempt ASC.

In conformance with WAC 246-310-080, the following information is provided:

1. A description of the extent of services proposed:
    a. Specialty Eyecare Centre proposes to establish and operate the Specialty Eyecare Centre existing two-room surgical center as free-standing ASC.
2. Estimated cost of the proposed project:
    a. The estimated capital expenditure is $0. The ASC is fully built out and operational.
3. Description of the service areas:
    a. The primary service area will be the East King planning area.

Thank you for your interest in this matter. Please contact my office with any questions.

Sincerely,

Howard S Barnebey MD

Howard Barnebey
Owner

Clinic (425) 454 3937
Fax (425) 453.6646

Exhibit 2

Project Description-
12A

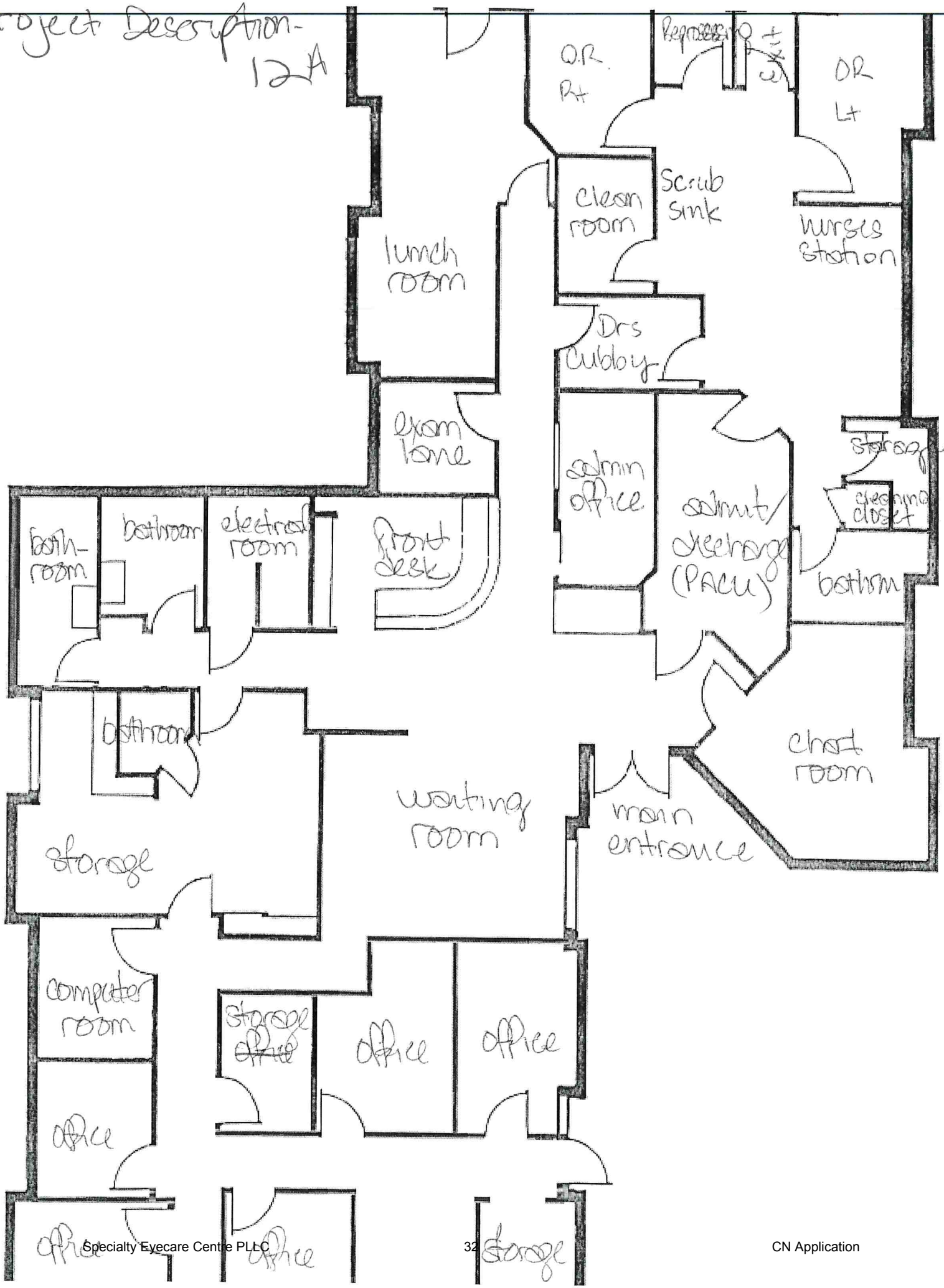

Exhibit 3

SPECIALTY EYECARE CENTRE *The accent is on care*	**25FEB2014**	**Privacy and Safety** **The patient has the right to 1) personal privacy, 2) receive care in a safe setting, and 3) be free from all forms of abuse of harassment.**
416.50(f)	Policy Effective Date	Policy Title & Purpose

1. The Governing Board directs and establishes a written policy that affirms that patients have the right to personal privacy;
2. The underlying principle of this policy is the patient's basic right to respect, dignity, and comfort. At a minimum this will mean patients have privacy during personal hygiene activities (unless a patient requires assistance), during medical treatments, and when requested as appropriate;
3. The Governing Board directs that people not involved in the care of the patient should not be present without the patient's consent while the patient is being examined or treated;
4. Video or other electronic monitoring or recording methods should not be used when the patient is being examined without the patient's consent;
5. It is the policy of the ASC that certain surgical procedures may be recorded for study purposes, however such recordings shall be of the operative area only (one eye) and shall have no patient identifiers attached.
6. The QAPI Committee is required to ensure that all personnel are familiar with the grievance policies and how to elevate such requests to proper management or authority;
7. The Governing Board directs and establishes a written policy that affirms that patients have the right to receive care in a safe setting;
8. The Governing Board directs that the ASC staff should follow current standards of practice for patient environmental safety, infection control, and security. The ASC staff should also provide protection for the patient's emotional health and safety as well as the patient's physical safety;
9. The Governing Board directs and establishes a written policy that affirms that patients have the right to be free from all forms of abuse of harassment;
10. The Governing Board directs that the ASC shall prohibit all forms of abuse, neglect and harassment from staff, other patients, or visitors;
11. The Governing Board directs that all ASC staff must pass a background check done as part of the new hire process, and that persons with a history of abuse or neglect will not be hired or retained as employees. The process for this will be that HR will initiate the background check with the State of Washington and the results known before an employee is scheduled to work with patients;
12. The Governing Board directs that every employee is encouraged to report any events and occurrences that may constitute or contribute to abuse and neglect, and that at orientation, and through on-going training, management shall provide all employees with information regarding patient abuse and neglect, and our grievance reporting process;
13. The Governing Board directs and establishes a written policy that restricts visitors to the ASC; all visitors must be preapproved by the Medical Director, the operating surgeon, and the administrator of the ASC;

25FEB2014	25FEB2014	Steven B. Rich, CEO *Steven B. Rich*
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

SPECIALTY EYECARE CENTRE *The accent is on care*	**16June2020**	**Exposure Control Plan** **Establishes a written policy for employees exposed to COVID-19**
416.51 S (5)	Policy Effective Date	Policy Title & Purpose

1. It is the policy of Specialty Eyecare Centre that any employee who may represent a potential risk or exposure to patients or staff due to identifiable infectious disease shall not perform duties within the ASC, and is required to remain away from the facility entirely;
2. If diagnosed with COVID-19 it is mandatory to report this to your supervisor, HR, and the medical director.
3. Exposed staff should self-monitor for symptoms (not necessary to get immediate testing) Testing required if symptomatic or 72 hours after exposure;
4. Quarantine is necessary if test results are positive, and we require 2 negative tests before returning to work.
5. We already have the ability to do contact tracing and notify any patients/staff who may also have been exposed.
6. See the attached list of testing sites for COVID-19.
7. See policy on Notifiable Conditions and reporting to the Dept of Health.

8. It is the policy of Specialty Eyecare Centre that any patient who presents with respiratory symptoms at check in or whose temperature is above 99.6° and/or oxygen level is below 90% will not be seen. They will be advised to see their primary care and can be rescheduled after symptoms resolve and/or have a negative COVID test.

16 June 2020		
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

SPECIALTY EYECARE CENTRE *The accent is on care*	**27MAR2014**	**Patient Admission and Pre-surgical Assessment (H&P)** **Each surgery patients must have a comprehensive medical history and physical assessment completed by a physician or other qualified practitioner.**
416.52(a)(1)ASL Interpretation	Policy Effective Date	Policy Title & Purpose

1. The Governing Body directs the establishment of a written policy requiring that each patient have a comprehensive medical history and physical assessment (called the H&P) done not more than 30 days before the date of the scheduled surgery. This assessment to include an EKG done within 6 months of surgery if the patient is over 60 years of age or has any history of cardiac related issues.
2. The core objectives of this policy are to determine whether there is anything in the patient's overall condition that would affect the planned surgery, such as a medication allergy, or a new or existing co-morbid condition that requires additional interventions to reduce risk to the patient, or which may even indicate that an ASC setting might not be the appropriate setting for the patient's surgery.

Policy related to deaf patients who utilize American Sign Language (ASL) for primary means of communication

ADA

Under the American's with Disabilities Act" (ADA), persons who are seeking medical treatment or educational opportunity and utilize American Sign Language as their primary means of communication must be provided an ASL interpreter. This is based on their disability and not on the language utilized. In the U.S.A. Courts have held that the provision of an ASL interpreter is not an undue hardship or an unreasonable accommodation. Whereas providing an interpreter who speaks Japanese Sign Language would be considered unreasonable. People who do not have a "communication based disability" do not fall into a protected classification and no interpreter is required under the law. Persons speaking a language other than "spoken English" are not a protected class either. (However, in Emergency Rooms- they are required to have the ability to provide interpretation of "common spoken languages of the community they serve." This is required under a law other than ADA). Deaf persons are required under the law to communicate their request in an appropriate manner. This means that a patient's use of "threatening behavior" is not protected under the law.

SEC Policy

If a patient seeking care and treatment through Specialty Eyecare Centre requires an ASL interpreter we will endeavor to provide an ASL interpreter. Patients are required to notify the practice in advance their need for such an interpreter. Patients who "show up" needing an interpreter are permitted to be rescheduled until we can provide the interpreter, or they can proceed without an interpreter by choice. (We are not required to provide an interpreter "instantaneously.") Steven Rich is a qualified ASL Interpreter and meets this standard under the ADA requirement. The Front Desk Staff should coordinate directly with Steven to establish date and times that interpretation is available. Deaf patients require the same referral letter, pre-authorization, or other standardized criteria for making an appointment as any other person seeking care. The use of "paper & pencil" as a mode of communication may be selected by the patient, and we can utilize this mode to communicate our need for sufficient time to make proper interpreter arrangements. However, we cannot require the patient to proceed utilizing this mode of communication. "English" is considered a 2nd language for culturally deaf persons so in many instances their proficiency in the English language is poor. All patients, utilizing whatever language they use, should always be treated with dignity and respect, and afforded our best care and treatment as medical professionals and representatives of Dr. Barnebey.

25FEB2014	25FEB2014	Steven B. Rich, CEO *Steven B. Rich*
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

SPECIALTY EYECARE CENTRE *The accent is on care*	**28FEB2014**	**Patient Admission Policy – MRSA and C Diff** **To ensure the safety of employees and patients and prevent exposure to communicable diseases.**
416.52(a)(2)	Policy Effective Date	Policy Title & Purpose

1. The Governing Body directs the establishment of a written policy requiring that any patient who has a history of MRSA, C Diff, or TB must be screened and test negative for active outbreak before being considered for surgery in the ASC. This assessment and a negative must be done within 6 months of surgery.

2. The core objectives of this policy are to determine whether there is anything in the patient's overall condition that would potentially affect the planned surgery, or which may even indicate that an ASC setting might not be the appropriate setting for the patient's surgery.

3. The Governing Body directs that any patient who tests positive for MRSA, C Diff, or TB shall be done in the hospital setting and NOT at the ASC.

25FEB2014	25FEB2014	Steven B. Rich, CEO **Steven B. Rich**
Policy Presentation Date	Policy Authorization Date	**Howard S. Barnebey, MD** Howard S. Barnebey, M.D., Medical Director

PATIENT PARAMETERS FOR THE ASC

In order to provide the highest level of service and safety for our patients, it is the policy of Specialty Eyecare Centre ASC that all patients must fall within the following parameters:

- Patients must be over the age of 18
- Patients must weigh less than 400 lbs. **
- Patients must not have any blood disorders that could require an infusion of blood products during surgery (this will be dependent on the type of surgery)

All patients who do not fall within these parameters will be done in a hospital or out patient surgery facility that can accommodate their special needs.

** Patients over 400lbs will be evaluated on a case by case basis and a determination made by the medical director based on the patients' overall health and the urgency of the proposed surgery.

Updated: Jan 1, 2019

SPECIALTY EYECARE CENTRE *The accent is on care*	**28FEB2014**	**Patient Admission Policy – Pregnancy** **To ensure the safety of patients ensure that the patient has the opportunity to have all questions answered and potential risks and benefits explained.**
416.52(a)(3)	Policy Effective Date	Policy Title & Purpose

1. The Governing Body directs the establishment of a written policy requiring that any patient who is under the age of 50 and having surgery at the Specialty Eyecare Centre – ASC shall sign a Pregnancy Test Consent Form before surgery.

2. The core objectives of this policy are to determine whether there is anything in the patient's overall condition that would potentially affect the planned surgery, or which may even indicate that an ASC setting might not be the appropriate setting for the patient's surgery.

3. The Governing Body directs that any patient who tests positive for pregnancy be referred back to the Medical Director for counseling about the risks of anesthesia during pregnancy and evaluation of the severity of the need for surgery and whether it can be delayed, or if surgery can proceed without sedation/anesthesia.

25FEB2014	25FEB2014	Steven B. Rich, CEO *Steven B. Rich*
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

SPECIALTY EYECARE CENTRE *The accent is on care*		**Patient Admission Policy – VTE** **To ensure the safety of patients ensure that the patient has the opportunity to have all questions answered and potential risks and benefits explained.**
416.52(a)(4)	Policy Effective Date	Policy Title & Purpose

1. The Governing Body directs the establishment of a written policy for risk assessment of surgical patients for VTE (venous thromboembolism);

2. The core objectives of this policy are to determine whether there is anything in the patient's overall condition that would potentially affect the planned surgery, or which may even indicate that an ASC setting might not be the appropriate setting for the patient's surgery;

3. The risk assessment shall be done for any patient who is scheduled for a surgical procedure expected to last greater than 60 minutes and the paperwork filed in the patient's surgery chart;

1NOV2015		
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

SPECIALTY EYECARE CENTRE *The accent is on care*	**10 Feb 2015** **REV. 6 Nov 18**	**Patient Admission Policy – Diabetics** **To ensure the safety of patients and quality of care.**
416.52 (a) 5	Policy Effective Date	Policy Title & Purpose

1. The Governing Board directs the establishment of a written policy requiring that any patient undergoing conscious sedation who has insulin controlled diabetes be scheduled as early as possible in the day.
2. The RN will take a blood sugar reading on insulin controlled diabetics who are NPO.
    a. Anyone whose readings are greater than 300 or less than 80 must be referred to the Medical Director and Anesthesia Provider to be reviewed on a case by case basis as to whether surgery can proceed.
3. The core objectives of this policy are to establish safe practices that minimize a patient's risk of complications because of fasting for their surgery.
4. If there is more than one diabetic patient scheduled for the same day, the patient who is Insulin dependent will be done ahead of patients who are diet controlled or on other medications.
5. It will be the ASC policy that we will request that patients take their blood sugar reading prior to surgery and report to us at check in.
6. It is understood that all circumstances will be reviewed by the Medical Director and decisions will be made on a case by case basis.

10 Feb 2015 **Rev. 6 Nov 2018**	**6 Nov 2018**	
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

SPECIALTY EYECARE CENTRE *The accent is on care*	**July 28, 2015**	**Patient Admission Policy – Ebola** **To ensure the safety of employees and patients and prevent exposure to communicable diseases.**
416.52 (a) 6	Policy Effective Date	Policy Title & Purpose

1. The Governing Board directs the establishment of a written policy requiring that all patients be screened for travel to a foreign country within the 90 days prior to surgery. This will be asked at the surgical counseling appointment, noted on the Health Questionnaire for Pre operative Patients, and verified at surgery check in.
2. The core objectives of this policy are to determine whether there is anything in the patient's overall condition that would potentially affect the planned surgery, or which may even indicate that an ASC setting might not be the appropriate setting for the patient's surgery.
3. The Governing Board directs that any patient who has been potentially exposed to the Ebola virus within the last 21 days shall not be admitted to the ASC.
4. According to CDC guidelines, any patient who has travelled to a country with widespread Ebola virus transmission or had contact with an individual with confirmed Ebola Virus Disease within the previous 21 days AND has signs and symptoms consistent with an Ebola diagnosis (fever >38.0C, fatigue, headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage) will be immediately isolated and the Washington State Dept. of Health immediately contacted.
5. It is understood that all circumstances will be reviewed by the Medical Director and decisions will be made on a case by case basis.

16 Dec 2014	**13 Jan 2015**	
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

PATIENT BILL OF RIGHTS NOTICE

It is the policy of SEC – ASC that all patients will receive a copy of the Patient's Bill of Rights as part of their Surgery Packet.

At the Surgical Counseling appointment, the patient, or their representative, will sign and date a copy of the Patient's Bill of Rights to be filed in their surgery chart. The patient or their representative, shall be given the opportunity to ask questions to make sure they understand their all their rights.

A copy of the Patient's Bill of Rights is to be posted at all times in the waiting room and in the check-in office of the ASC.

See copy of Patient's Bill of Rights

Patient's Bill of Rights

Understanding your Bill of Rights

The following describes aspects of the relationship between Specialty Eyecare Centre and the Surgical Center and our patients. Respecting your rights is very important to us. If you wish to discuss these rights further, please speak with anyone on our staff. Understanding your rights as a Specialty Eyecare Centre and Surgical Center patient will help us provide you with the best possible care. You, or the state if the patient is adjudged incompetent, may also designate a representative or surrogate who may exercise all your rights for you. You may designate this person in writing (as in a Medical Power of Attorney or Advanced Directive) or verbally to one of our staff.

Our Commitment to you

At Specialty Eyecare Centre and the Surgical Center, we exercise our judgments and technical skills in an environment of respect and compassion. We promote education and encourage you to ask questions of our doctors or any member of our staff. At times, eye problems can cause fear and confusion, but mutual trust builds confidence and comfort and aids in the healing process.

Dignity

You have the right to:

- Be treated respectfully and considerately.
- Obtain medically necessary care without regard to your race, age, gender, sexual orientation, income or national origin.
- Know the names and professional training of the staff involved in your care.
- Receive exams and treatments in a physically and environmentally safe and secure setting.
- Be free from all forms of abuse and harassment.

Privacy

You have the right to:

- Have information about your care handled in the strictest confidence. Facts about you, (including what is contained in your medical records) will not be revealed to anyone-family members included-without your permission.
- Review and have clarified in a timely manner any of your medical records, insurance forms, or billing statements.
- Be given personal privacy during medical treatment when requested.

Participation

You have the right to:

- Receive all information about your medical situation, including likely benefits and possible risks.
- Participate fully in treatment decisions.
- Refuse treatment, if you choose.

Responsibilities

You have the responsibility to:

- Follow office rules about no smoking, no pets in clinic, and no alcohol.
- Treat other patients, your physician and staff with respect.
- Provide complete information about your health and medical history.
- Make available all appropriate insurance information.
- Pay your bills promptly.

If your feel your rights have been violated

- Let our staff know immediately, you may ask for our Privacy Official: KD Barnebey
- You may also report complaints to the Washington State Dept. of Health Health Systems Quality Assurance PO Box 47857 Olympia, WA 98504 (360) 236-2620 fax (360)236-2626 toll free (800)633-6828 email HSQAComplaintIntake@doh.wa.gov
- If you are a Medicare recipient you may also contact the Medicare Beneficiary Ombudsman to receive help and information about understanding your options at : http://www.cms.hhs.gov/ombudsman.resources.asp Medicare Help and Support: (800) MEDICARE
- You may exercise your rights and file grievances without fear of discrimination or reprisal.

Policy on Advanced Directives

- We will ask you if you have an Advanced Directive and if you provide us with a copy we will keep it in your medical record. If you would like a form we can provide an official State advance directive form.
- Notice of Limitation: Our policy is to call 911 when there is any medical emergency that takes place on our premises. We will attempt to resuscitate a patient and transfer that patient to a hospital. We will provide a copy of your Advance Directive to emergency personnel.
- If you have a DO NOT RECUSITATE order, you must provide that on the day of surgery, and we will honor that order.

DISCLOSURE OF PHYSICIAN FINANCIAL INTEREST OF OWNERSHIP:

Specialty Eyecare Centre – ASC is wholly owned and operated by Dr Howard Barnebey.

I have received a copy of this Bill of Rights and had the opportunity to have my questions answered. Init: _____ Date:_____

SPECIALTY EYECARE CENTRE *The accent is on care*	**16 Dec 2014**	**Patient Admission Policy – MRSA and C Diff** **To ensure the safety of employees and patients and prevent exposure to communicable diseases.**
416.52 (a) 5	Policy Effective Date	Policy Title & Purpose

1. The Governing Board directs the establishment of a written policy requiring that any patient who has any history of MRSA, C Diff, or TB must be screened and test 'non-active' before being considered for surgery in the ASC. This assessment and a negative result must be done within 3 months of surgery.
2. The core objectives of this policy are to determine whether there is anything in the patient's overall condition that would potentially affect the planned surgery, or which may even indicate that an ASC setting might not be the appropriate setting for the patient's surgery.
3. The Governing Board directs that any patient who has active MRSA, C-Diff, or TB shall be done in the hospital setting and not at the ASC.
4. It will be the ASC policy that any patients with a history of MRSA, C-Diff, or TB shall be scheduled at the end of the surgery day and the room will be terminally cleaned after the case.
5. It is understood that all circumstances will be reviewed by the Medical Director and decisions will be made on a case by case basis.

16 Dec 2014	**13 Jan 2015**	
Policy Presentation Date	Policy Authorization Date	*Howard S. Barnebey, MD* Howard S. Barnebey, M.D., Medical Director

Exhibit 4

Specialty EyeCare Centre PLLC
Profit and Loss - Whole Organization
January 2019 - December 2021

	JAN - DEC 2019	JAN - DEC 2020	JAN - DEC 2021	Notes
Income5000 Patient Receipts				
5015 Patient Receipts - Ins	$2,582,853	$2,430,126	$2,274,379	Net receivables from insurance
5020 Patient Receipts - Cash Pay	$511,636	$559,542	$728,660	Net receivables - cash pay
Total 5000 Patient Receipts	**$3,094,490**	**$2,989,668**	**$3,003,039**	
5100 Retail Sales				Sales on retail items, e.g. dry eye treatment masks
5110 Retail Sales - Taxable	$14,813	$9,950	$13,227	
5115 Retail Sales - Taxable (PRN)	$27,353	$28,935	$31,044	
Total 5100 Retail Sales	**$42,165**	**$38,885**	**$44,271**	
5200 Other Income				
5030 HHS Stimulus Funds		$63,406		
5210 Research - Drug Studies	$7,142	$11,377		
5220 Dr Meeting Stipends	$4,962	$1,250		
8020 Interest Income	$1	$89	$18	
8021 Medicare Advance Repay Funds			$112,504	
EIDL Advance		$10,000		
PPP1 Loan Forgiveness			$165,000	
Total 5200 Other Income	**$12,105**	**$86,122**	**$277,521**	
5490 Refunds & Adjustments	$(26,093)	$(18,526)	$(13,626)	
Total Income	**$3,122,667**	**$3,096,149**	**$3,311,206**	
Cost of Goods Sold				
Cost of Goods Sold	$(24,852)	$(26,041)	$(30,848)	
Total Cost of Goods Sold	**$(24,852)**	**$(26,041)**	**$(30,848)**	
GROSS PROFIT	**$3,097,816**	**$3,070,108**	**$3,280,358**	
Expenses - STAFF EXPENSE				Employee wages for ASC, clinic, and administrative staff
6100 Wages - Staff Payroll				
6110 Wages - Technicians	$364,915	$345,542	$301,769	
6125 Wages - Front Office	$213,914	$237,222	$236,365	
6130 Wages - Nursing Staff	$65,267	$17,360	$15,893	
6135 Wages - Billing	$72,742	$90,580	$85,073	
6140 Wages - Research Coordinator	$75,392	$45,707	$55,654	
Total 6100 Wages - Staff Payroll	**$792,230**	**$736,410**	**$694,755**	
6400 Staff Benefits				
6420 Medical Ins. - Staff	$69,085	$57,163	$69,197	
6422 Dental Ins. - Staff	$6,645	$3,423	$1,085	
6424 AFLAC Ins. - Staff	$409	$46	$685	
6430 Payroll Taxes - Staff	$73,474	$67,490	$68,191	
6450 Conferences & Meetings - Staff	$1,435	$1,965	$309	
6470 Contract Labor	$1,064	$3,609	$2,067	
6480 Dues & Subscriptions - Staff	$2,245	$495	$2,223	
6490 Continuing Education - Staff	$1,000	$1,275	$30	
Total 6400 Staff Benefits	**$155,357**	**$135,466**	**$143,787**	
ERC Wage Adjustment		$(47,957)		
FFCRA Credits		$(1,623)		
Total STAFF EXPENSE	**$947,587**	**$822,295**	**$838,542**	
7000 GENERAL OPERATING EXPENSES				
7010 Accounting	$4,863	$9,230	$7,007	General accounting services
7012 Bookkeeping	$47,720	$59,150	$27,357	Accounts payable services
7015 Advertising & Promotion	$1,033	$536	$2,555	
7016 Referral Service	$60,880	$33,920		Marketing cost
7035 Bank Charges & Late Fees	$5,312	$8,829	$6,225	Bank associated charges, primarily credit card fees
7040 Billing Service	$107,100	$103,469	$105,566	Revenue cycle management
7045 Computer & Alarm Services	$59,142	$64,598	$74,321	IT costs
7046 EMR fees	$14,266	$8,814	$8,845	
7051 Equipment Lease	$10,743	$6,984	$7,201	
7060 Insurance - Business & Overhead	$20,465	$18,029	$23,505	Business related insurance, not malpractice
7065 Insurance - Malpractice	$7,003	$6,464	$8,508	
7067 Janitorial	$15,145	$18,175	$16,100	Janitorial services
7075 Laundry & Uniforms	$6,880	$7,772	$8,032	
7085 Licenses	$1,220	$1,815	$4,507	ASC licenses
7090 Meals - 50%	$1,730	$612		meals for employer convenience
7095 Meals - 100%	$814		$897	meals for employer convenience
7100 Medical Supplies				
7102 Lab Supplies	$376,650	$311,660	$266,367	Lab supplies related to clinic treatments
Untaxed			$16,391	
Total 7102 Lab Supplies	**$376,650**	**$311,660**	**$282,758**	
7105 Medical Supplies - Pay Use Tax			$2,260	
7106 Medical Implants & Lens	$124,053	$190,579	$180,034	
7110 Drugs & Medications	$22,056	$23,277	$23,608	
7112 Drugs - Cardinal	$4,059		$9,422	
Total 7100 Medical Supplies	**$526,818**	**$525,515**	**$498,081**	
7120 Merchant Fees	$43,421	$47,576	$33,683	
7130 Office Expense	$30,371	$29,268	$24,720	
7135 Office Supplies	$3,917	$8,234	$3,984	
7137 Office Supplies - Pay Use Tax			$1,062	
Total 7135 Office Supplies	**$3,917**	**$8,234**	**$5,046**	
7140 Small Office Equipment (<$2500)				
7115 Small Medical Equipment	$292	$730		
7141 Small Office Furniture & Fixtures	$1,873	$517		
7142 Small Computer Equipment	$879	$52,409		
Total 7140 Small Office Equipment (<$2500)	**$3,044**	**$53,656**	**$-**	
7143 Parking	$46			
7145 Payroll Service Fees	$3,852	$4,075	$4,292	
7150 Postage	$1,268	$2,266	$2,886	
7155 Professional Dues	$300	$1,750	$300	
7160 Professional Services & Consult	$205	$9,324	$7,260	
7165 Publications & Subscriptions	$945	$945		
7170 Rent	$268,349	$237,452	$271,406	Facility Lease
7175 Repairs & Maintenance	$32,682	$40,271	$54,784	Routine repairs & maintenance
7185 Storage	$10,878	$11,790	$16,763	offsite storage fees
7195 Travel	$1,380	$1,356		
7200 Taxes				
7210 Taxes - State B&O	$48,366	$51,694	$62,299	
7215 Taxes - City B&O	$4,367	$4,612	$4,888	
7220 Taxes - Personal Property	$4,596	$5,706	$5,819	
7230 Taxes - Real Estate	$28,594	$29,247	$36,283	
Total 7200 Taxes	**$85,922**	**$91,258**	**$109,288**	
7250 Telephone & Internet	$48,264	$42,043	$39,177	
7270 Research Expense	$995			
7300 Utilities	$19,487	$17,082	$19,137	
Total 7000 GENERAL OPERATING EXPENSES	**$1,446,459**	**$1,472,257**	**$1,387,449**	
Unapplied Cash Bill Payment Expense		$-	$-	
Total Expenses	**$2,394,046**	**$2,294,553**	**$2,225,990**	
NET OPERATING INCOME	**$703,770**	**$775,555**	**$1,054,367**	
Other Expenses				
7055 Interest Expense	$47,233	$26,985	$18,164	
7550 Depreciation Expense	$156,470	$19,590	$20,546	
7555 Amortization Expense	$934	$934	$17	
9000 PHYSICIAN EXPENSES				
9100 Howard Barnebey				
9110 Continued Education	$294		$1,155	
9115 Dues & Subscription	$1,345	$1,643	$2,203	
9118 Licenses & Dues	$300	$300	$888	
9170 Physicians Travel	$1,423	$1,313	$3,347	
Total 9100 Howard Barnebey	**$3,362**	**$3,256**	**$7,593**	
9200 Ernesto Golez				
9210 Contract Labor	$41,032			
Total 9200 Ernesto Golez	**$41,032**			
Total 9000 PHYSICIAN EXPENSES	**$44,394**	**$3,256**	**$7,593**	
Total Other Expenses	**$249,031**	**$50,766**	**$46,320**	
NET INCOME	**$454,739**	**$724,790**	**$1,008,048**	Dr Barneby as owner receives compensation based on net income, see balance sheet

	2,019	2,020	2,021	2022 - Proj	2023 - Proj	2024 - Proj	2025 - Proj	Notes
Income								
5000 Patient Receipts								
5015 Patient Receipts - Ins	$852,342	$801,942	$750,545	$ 761,878	$ 773,383	$ 785,061	$ 796,915	Net receivables from insurance
5020 Patient Receipts - Cash Pay	$168,840	$184,649	$240,458	$ 244,089	$ 247,774	$ 251,516	$ 255,314	Net receivables - cash pay
Total 5000 Patient Receipts	**$1,021,182**	**$986,590**	**$991,003**	**$1,005,967**	**$1,021,157**	**$1,036,577**	**$1,052,229**	
5100 Retail Sales								Sales on retail items, e.g. dry eye treatment masks
5110 Retail Sales - Taxable								
5115 Retail Sales - Taxable (PRN)								
Total 5100 Retail Sales	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	
5200 Other Income								
5030 HHS Stimulus Funds		$20,924						
5210 Research - Drug Studies								
5220 Dr Meeting Stipends								
8020 Interest Income								
8021 Medicare Advance Repay Funds			$37,126					
EIDL Advance								
PPP1 Loan Forgiveness			$54,450					
Total 5200 Other Income	**$-**	**$20,924**	**$91,576**					
5490 Refunds & Adjustments	$(26,093)	$(18,526)	$(13,626)					
Total Income	**$995,089**	**$988,989**	**$1,068,954**	**$1,005,967**	**$1,021,157**	**$1,036,577**	**$1,052,229**	
Cost of Goods Sold								
Cost of Goods Sold								
Total Cost of Goods Sold	**$-**	**$-**	**$-**					
GROSS PROFIT	**$995,089**	**$988,989**	**$1,068,954**	**$1,005,967**	**$1,021,157**	**$1,036,577**	**$1,052,229**	
Expenses - STAFF EXPENSE								Employee wages for ASC, clinic, and administrative staff
6100 Wages - Staff Payroll								
6110 Wages - Technicians	$120,422	$114,029	$99,584	$99,584	$99,584	$99,584	$99,584	
6125 Wages - Front Office	$70,591	$78,283	$78,000	$78,000	$78,000	$78,000	$78,000	
6130 Wages - Nursing Staff	$65,267	$17,360	$15,893	$15,893	$15,893	$15,893	$15,893	
6135 Wages - Billing	$24,005	$29,891	$28,074	$28,074	$28,074	$28,074	$28,074	
6140 Wages - Research Coordinator								
Total 6100 Wages - Staff Payroll	**$280,286**	**$239,563**	**$221,552**	**$221,552**	**$221,552**	**$221,552**	**$221,552**	
6400 Staff Benefits								
6420 Medical Ins. - Staff	$24,442	$20,891	$19,320	$ 19,320	$ 19,320	$ 19,320	$ 19,320	
6422 Dental Ins. - Staff	$2,351	$2,009	$1,858	$ 1,858	$ 1,858	$ 1,858	$ 1,858	
6424 AFLAC Ins. - Staff	$145	$124	$114	$ 114	$ 114	$ 114	$ 114	
6430 Payroll Taxes - Staff	$25,995	$22,218	$20,548	$ 20,548	$ 20,548	$ 20,548	$ 20,548	
6450 Conferences & Meetings - Staff	$508	$434	$401	$ 401	$ 401	$ 401	$ 401	
6470 Contract Labor	$376	$322	$298	$ 298	$ 298	$ 298	$ 298	
6480 Dues & Subscriptions - Staff	$794	$679	$628	$ 628	$ 628	$ 628	$ 628	
6490 Continuing Education - Staff	$354	$302	$280	$ 280	$ 280	$ 280	$ 280	
Total 6400 Staff Benefits	**$54,964**	**$46,979**	**$43,447**	**$43,447**	**$43,447**	**$43,447**	**$43,447**	
ERC Wage Adjustment								
FFCRA Credits								
Total STAFF EXPENSE	**$335,250**	**$286,542**	**$264,998**	**$264,998**	**$264,998**	**$264,998**	**$264,998**	
7000 GENERAL OPERATING EXPENSES								
7010 Accounting	$1,605	$3,046	$2,312	$ 2,312	$ 2,312	$ 2,312	$ 2,312	General accounting services
7012 Bookkeeping	$15,748	$19,519	$9,028	$ 9,028	$ 9,028	$ 9,028	$ 9,028	Accounts payable services
7015 Advertising & Promotion	$341	$177	$843	$ 843	$ 843	$ 843	$ 843	
7016 Referral Service	$20,090	$11,194	$-	$ -	$ -	$ -	$ -	Marketing cost
7035 Bank Charges & Late Fees	$1,753	$2,913	$2,054	$ 2,054	$ 2,054	$ 2,054	$ 2,054	Bank associated charges, primarily credit card fees
7040 Billing Service	$35,343	$34,145	$34,837	$ 34,837	$ 34,837	$ 34,837	$ 34,837	Revenue cycle management
7045 Computer & Alarm Services	$19,517	$21,317	$24,526	$ 24,526	$ 24,526	$ 24,526	$ 24,526	IT costs
7046 EMR fees	$4,708	$2,909	$2,919	$ 2,919	$ 2,919	$ 2,919	$ 2,919	
7051 Equipment Lease	$3,545	$2,305	$2,376	$ 2,376	$ 2,376	$ 2,376	$ 2,376	
7060 Insurance - Business & Overhead	$6,753	$5,950	$7,757	$ 7,757	$ 7,757	$ 7,757	$ 7,757	Business related insurance, not malpractice
7065 Insurance - Malpractice	$2,311	$2,133	$2,808	$ 2,808	$ 2,808	$ 2,808	$ 2,808	
7067 Janitorial	$4,998	$5,998	$5,313	$ 5,313	$ 5,313	$ 5,313	$ 5,313	Janitorial services
7075 Laundry & Uniforms	$6,880	$7,772	$8,032	$ 8,032	$ 8,032	$ 8,032	$ 8,032	
7085 Licenses	$403	$599	$1,487	$ 1,487	$ 1,487	$ 1,487	$ 1,487	ASC licenses
7090 Meals - 50%	$571	$202	$-	$ -	$ -	$ -	$ -	meals for employer convenience
7095 Meals - 100%	$269	$-	$296	$ 296	$ 296	$ 296	$ 296	meals for employer convenience
7100 Medical Supplies								
7102 Lab Supplies								Lab supplies related to clinic treatments
Untaxed								
Total 7102 Lab Supplies	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	
7105 Medical Supplies - Pay Use Tax			$2,260	$ 2,260	$ 2,260	$ 2,260	$ 2,260	
7106 Medical Implants & Lens	$124,053	$190,579	$180,034	$ 180,034	$ 180,034	$ 180,034	$ 180,034	
7110 Drugs & Medications	$22,056	$23,277	$23,608	$ 23,608	$ 23,608	$ 23,608	$ 23,608	
7112 Drugs - Cardinal	$4,059		$9,422	$ 9,422	$ 9,422	$ 9,422	$ 9,422	
Total 7100 Medical Supplies	**$150,168**	**$213,855**	**$215,323**	**$215,323**	**$215,323**	**$215,323**	**$215,323**	
7120 Merchant Fees	$14,329	$15,700	$11,115	$ 11,115	$ 11,115	$ 11,115	$ 11,115	
7130 Office Expense	$10,022	$9,659	$8,157	$ 8,157	$ 8,157	$ 8,157	$ 8,157	
	$-	$-	$-	$ -	$ -	$ -	$ -	
7135 Office Supplies	$1,293	$2,717	$1,315	$ 1,315	$ 1,315	$ 1,315	$ 1,315	
7137 Office Supplies - Pay Use Tax	$-	$-	$350	$ 350	$ 350	$ 350	$ 350	
Total 7135 Office Supplies	**$1,293**	**$2,717**	**$1,665**	**$1,665**	**$1,665**	**$1,665**	**$1,665**	
7140 Small Office Equipment (<$2500)								
7115 Small Medical Equipment	$96	$241	$ -	$ -	$ -	$ -	$ -	
7141 Small Office Fumiture & Fixtures	$618	$171	$ -	$ -	$ -	$ -	$ -	
7142 Small Computer Equipment	$290	$17,295	$ -	$ -	$ -	$ -	$ -	
Total 7140 Small Office Equipment (<$2500)	**$1,005**	**$17,707**	**$ -**	$ -	$ -	$ -	$ -	
7143 Parking	$15	$-	$ -	$ -	$ -	$ -	$ -	
7145 Payroll Service Fees	$1,271	$1,345	$1,416	$ 1,416	$ 1,416	$ 1,416	$ 1,416	
7150 Postage	$418	$748	$952	$ 952	$ 952	$ 952	$ 952	
7155 Professional Dues	$99	$578	$99	$ 99	$ 99	$ 99	$ 99	
7160 Professional Services & Consult	$68	$3,077	$2,396	$ 2,396	$ 2,396	$ 2,396	$ 2,396	
7165 Publications & Subscriptions	$312	$312	$-	$ -	$ -	$ -	$ -	
7170 Rent	$88,555	$78,359	$89,564	$ 89,564	$ 89,564	$ 89,564	$ 89,564	Facility Lease
7175 Repairs & Maintenance	$10,785	$13,289	$18,079	$ 18,079	$ 18,079	$ 18,079	$ 18,079	Routine repairs & maintenance
7185 Storage	$3,590	$3,891	$5,532	$ 5,532	$ 5,532	$ 5,532	$ 5,532	offsite storage fees
7195 Travel	$455	$447	$-	$ -	$ -	$ -	$ -	
7200 Taxes	$-	$-	$-	$ -	$ -	$ -	$ -	
7210 Taxes - State B&O	$15,961	$17,059	$20,559	$ 20,559	$ 20,559	$ 20,559	$ 20,559	
7215 Taxes - City B&O	$1,441	$1,522	$1,613	$ 1,613	$ 1,613	$ 1,613	$ 1,613	
7220 Taxes - Personal Property	$1,517	$1,883	$1,920	$ 1,920	$ 1,920	$ 1,920	$ 1,920	
7230 Taxes - Real Estate	$9,436	$9,651	$11,973	$ 11,973	$ 11,973	$ 11,973	$ 11,973	
Total 7200 Taxes	**$28,354**	**$30,115**	**$36,065**	**$36,065**	**$36,065**	**$36,065**	**$36,065**	
7250 Telephone & Internet	$15,927	$13,874	$12,928	$ 12,928	$ 12,928	$ 12,928	$ 12,928	
7270 Research Expense	$328	$-	$-	$ -	$ -	$ -	$ -	
7300 Utilities	$6,431	$5,637	$6,315	$ 6,315	$ 6,315	$ 6,315	$ 6,315	
Total 7000 GENERAL OPERATING EXPENSES	**$458,259**	**$531,488**	**$514,196**	**$514,196**	**$514,196**	**$514,196**	**$514,196**	
Unapplied Cash Bill Payment Expense		$-	$-	$-	$-	$-	$-	
Total Expenses	**$793,509**	**$818,029**	**$779,194**	**$779,194**	**$779,194**	**$779,194**	**$779,194**	
NET OPERATING INCOME	**$201,579**	**$170,960**	**$289,759**	**$226,773**	**$241,963**	**$257,382**	**$273,035**	
Other Expenses				$ 5,994	$ 5,994	$ 5,994	$ 5,994	
7055 Interest Expense	$15,587	$8,905	$5,994					
7550 Depreciation Expense	$51,635	$6,465	$6,780	$ 6,780	$ 6,780	$ 6,780	$ 6,780	
7555 Amortization Expense	$308	$308	$6	$ 6	$ 6	$ 6	$ 6	
9000 PHYSICIAN EXPENSES								
9100 Howard Barnebey								
9110 Continued Education								
9115 Dues & Subscription								
9118 Licenses & Dues								
9170 Physicians Travel								
Total 9100 Howard Barnebey	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	
9200 Ernesto Golez								
9210 Contract Labor								
Total 9200 Ernesto Golez	**$-**							
Total 9000 PHYSICIAN EXPENSES	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	**$-**	
Total Other Expenses	**$67,530**	**$15,678**	**$12,780**	**$12,780**	**$12,780**	**$12,780**	**$12,780**	
NET INCOME	**$134,049**	**$155,281**	**$276,979**	**$213,993**	**$229,183**	**$244,602**	**$260,255**	Dr Barneby as owner receives compensation based on net income

Specialty EyeCare Centre PLLC
Balance Sheet - Total Organization
As of December 31, 2021

	2019	2020	2021	2022- Proj	2023- Proj	20224 Proj	2025- Proj
ASSETS							
Current Assets							
Bank Accounts							
1060 First Cit Ops Checking 9792	$ 293.98	$ 137,608.21	$ 39,364.97	$ 39,364.97	$ 39,364.97	$ 39,364.97	$ 39,364.97
1062 First Cit Payroll 9039	$ 36,037.77	$ 36,605.53	$ 5,321.90	$ 5,321.90	$ 5,321.90	$ 5,321.90	$ 5,321.90
1064 First Cit Tax Savings 9020	$ 37,472.70	$ 56,040.87	$ 56,115.60	$ 56,115.60	$ 56,115.60	$ 56,115.60	$ 56,115.60
1066 First Cit Money Market	$ 539.98	$ 146,238.16	$ 35,701.46	$ 35,701.46	$ 35,701.46	$ 35,701.46	$ 35,701.46
1090 US Bank -Athena - 9787	$ 6,349.51	$ 32,338.41	$ 6,172.42	$ 6,172.42	$ 6,172.42	$ 6,172.42	$ 6,172.42
1100 Petty Cash - Corporate	$ 138.56	$ 95.95	$ 95.95	$ 95.95	$ 95.95	$ 95.95	$ 95.95
1110 Petty Cash - Front Desk	$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00
Total Bank Accounts	**$ 80,932.50**	**$ 409,027.13**	**$ 142,872.30**	**$ 142,872.30**	**$ 142,872.30**	**$ 142,872.30**	**$ 142,872.30**
Other Current Assets							
ERC Receivable		$ 47,957.26	$ 47,957.26	$ 47,957.26	$ 47,957.26	$ 47,957.26	$ 47,957.26
Total Other Current Assets	**$ -**	**$ 47,957.26**	**$ 47,957.26**	**$ 47,957.26**	**$ 47,957.26**	**$ 47,957.26**	**$ 47,957.26**
Total Current Assets	**$ 80,932.50**	**$ 456,984.39**	**$ 190,829.56**	**$ 190,829.56**	**$ 190,829.56**	**$ 190,829.56**	**$ 190,829.56**
Fixed Assets							
1500 Fixed Assets							
1510 Equipment - Medical	$ 938,863.74	$ 938,863.74	$ 943,201.69	$ 943,201.69	$ 943,201.69	$ 943,201.69	$ 943,201.69
1520 Equipment - Office	$ 47,701.56	$ 47,701.56	$ 47,701.56	$ 47,701.56	$ 47,701.56	$ 47,701.56	$ 47,701.56
1525 Equipment - Optical	$ 3,807.63	$ 3,807.63	$ 3,807.63	$ 3,807.63	$ 3,807.63	$ 3,807.63	$ 3,807.63
1530 Furniture & Fixtures	$ 111,328.85	$ 111,328.85	$ 111,328.85	$ 111,328.85	$ 111,328.85	$ 111,328.85	$ 111,328.85
1540 Computers & Software	$ 169,127.67	$ 172,510.17	$ 172,510.17	$ 172,510.17	$ 172,510.17	$ 172,510.17	$ 172,510.17
1580 Leasehold Improvements	$ 707,238.20	$ 707,238.20	$ 707,238.20	$ 707,238.20	$ 707,238.20	$ 707,238.20	$ 707,238.20
Total 1500 Fixed Assets	**$ 1,978,067.65**	**$ 1,981,450.15**	**$ 1,985,788.10**	**$ 1,985,788.10**	**$ 1,985,788.10**	**$ 1,985,788.10**	**$ 1,985,788.10**
1600 Less Accumulated Depreciation	$(1,575,046.88)	$(1,594,637.17)	$(1,615,182.91)	$(1,615,182.91)	$(1,615,182.91)	$(1,615,182.91)	$(1,615,182.91)
Total Fixed Assets	**$ 403,020.77**	**$ 386,812.98**	**$ 370,605.19**	**$ 370,605.19**	**$ 370,605.19**	**$ 370,605.19**	**$ 370,605.19**
Other Assets							
1700 Other Assets							
1710 Loan Fee	$ 4,758.00	$ 4,758.00	$ 4,758.00	$ 4,758.00	$ 4,758.00	$ 4,758.00	$ 4,758.00
1730 Goodwill	$ 336,500.00	$ 336,500.00	$ 336,500.00	$ 336,500.00	$ 336,500.00	$ 336,500.00	$ 336,500.00
1760 Intangibles	$ 203,891.50	$ 203,891.50	$ 203,891.50	$ 203,891.50	$ 203,891.50	$ 203,891.50	$ 203,891.50
Total 1700 Other Assets	**$ 545,149.50**	**$ 545,149.50**	**$ 545,149.50**	**$ 545,149.50**	**$ 545,149.50**	**$ 545,149.50**	**$ 545,149.50**
1800 Less Accumulated Amortization	$ (544,127.26)	$ (545,061.56)	$ (545,078.86)	$ (545,078.86)	$ (545,078.86)	$ (545,078.86)	$ (545,078.86)
Total Other Assets	**$ 1,022.24**	**$ 87.94**	**$ 70.64**	**$ 70.64**	**$ 70.64**	**$ 70.64**	**$ 70.64**
TOTAL ASSETS	**$ 484,975.51**	**$ 843,885.31**	**$ 561,505.39**	**$ 561,505.39**	**$ 561,505.39**	**$ 561,505.39**	**$ 561,505.39**
LIABILITIES AND EQUITY							
Liabilities							
Current Liabilities							
Credit Cards							
2057 American Express - 74009	$ -	$ 19,183.14	$ 29,032.29	$ 29,032.29	$ 29,032.29	$ 29,032.29	$ 29,032.29
2059 Chase Visa - #6538	$ 49,695.70	$ -	$ 15,294.57	$ 15,294.57	$ 15,294.57	$ 15,294.57	$ 15,294.57
2060 Citi Visa	$ 25,618.02	$ 23,399.77	$ 17,907.27	$ 17,907.27	$ 17,907.27	$ 17,907.27	$ 17,907.27
Total Credit Cards	**$ 75,313.72**	**$ 42,582.91**	**$ 62,234.13**	**$ 62,234.13**	**$ 62,234.13**	**$ 62,234.13**	**$ 62,234.13**
Other Current Liabilities							
2063 FC Line of Credit	$ 40,000.00	$ 59,650.41	$ -	$ -	$ -	$ -	$ -
2150 Stearns Bank - Equipment Loan	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2160 Alcon A/P Installment Loan	$ 127,443.36	$ 57,702.78	$ -	$ -	$ -	$ -	$ -
2200 Net Payroll	$ -	$ -	$ (16.50)	$ (16.50)	$ (16.50)	$ (16.50)	$ (16.50)
2450 Use Tax Payable	$ 508.00	$ 166.48	$ -	$ -	$ -	$ -	$ -
2460 Sales Tax Payable	$ 13,939.98	$ -	$ (195.72)	$ (195.72)	$ (195.72)	$ (195.72)	$ (195.72)
2470 Unclaimed Property Payable	$ 1.24	$ 1.24	$ -	$ -	$ -	$ -	$ -
Medicare COVID Advance		$ 211,876.12	$ 99,372.59				
Total Other Current Liabilities	**$ 181,892.58**	**$ 329,397.03**	**$ 99,160.37**				
Total Current Liabilities	**$ 257,206.30**	**$ 371,979.94**	**$ 161,394.50**	**$ 62,021.91**	**$ 62,021.91**	**$ 62,021.91**	**$ 62,021.91**
Long-Term Liabilities 3500 Capital Leases							
3540 Americorp Iridex Lease	$ 7,964.92	$ 3,307.08	$ -	$ -	$ -	$ -	$ -
Total 3500 Capital Leases	**$ 7,964.92**	**$ 3,307.08**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
3550 Other Long Term Loans							
3561 EverBank Loan #9949	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3566 Alcon Equipment Loan - ORA	$ 89,254.87	$ 74,230.09	$ 49,055.69	$ 34,030.91	$ 19,006.13	$ 3,981.35	$ -
3567 Alcon Centurion Loan - #7904	$ 120,000.00	$ 108,773.13	$ 96,773.13	$ 85,546.26	$ 74,319.39	$ 63,092.52	$ 51,865.65
3568 TIAA Bank - Equipment Loan	$ 17,028.62	$ 10,271.46	$ 3,109.41	$ -	$ -	$ -	$ -
3570 Silhouette Loan -- deferred	$ 19,276.18	$ 19,276.18	$ 19,276.18	$ 19,276.18	$ 19,276.18	$ 19,276.18	$ 19,276.18
3571 Silhouette Loan - deferred	$ 27,628.06	$ 27,628.06	$ 27,628.06	$ 27,628.06	$ 27,628.06	$ 27,628.06	$ 27,628.06
PPP Loan Payable		$ 165,000.00	$ -	$ -	$ -	$ -	$ -
Total 3550 Other Long Term Loans	**$ 273,187.73**	**$ 405,178.92**	**$ 195,842.47**	**$ 166,481.41**	**$ 140,229.76**	**$ 113,978.11**	**$ 98,769.89**
3700 First Citizen Loans							
3710 FC Consolidation Loan	$ 351,379.23	$ 275,024.86	$ 165,674.31	$ 89,319.94	$ 12,965.57	$ -	$ -
3720 FC Equipment Lease	$ 58,152.30	$ 21,006.96	$ -	$ -	$ -	$ -	$ -
Total 3700 First Citizen Loans	**$ 409,531.53**	**$ 296,031.82**	**$ 165,674.31**	**$ 89,319.94**	**$ 12,965.57**	**$ -**	**$ -**
Total Long-Term Liabilities	**$ 690,684.18**	**$ 704,517.82**	**$ 361,516.78**	**$ 255,801.35**	**$ 153,195.33**	**$ 113,978.11**	**$ 98,769.89**
Total Liabilities	**$ 947,890.48**	**$ 1,076,497.76**	**$ 522,911.28**	**$ 317,823.26**	**$ 215,217.24**	**$ 176,000.02**	**$ 160,791.80**
Equity							
4100 Member Equity	$ (525,836.88)	$ (462,914.97)	$ (232,612.45)	$ (232,612.45)	$ (232,612.45)	$ (232,612.45)	$ (232,612.45)
4110 Distributions - Barnebey							
4120 Regular Distributions	$ (290,005.30)	$ (303,613.69)	$ (345,810.00)	$ (345,810.00)	$ (345,810.00)	$ (345,810.00)	$ (345,810.00)
4140 Income Tax Payments	$ (116,350.00)	$ (93,163.00)	$ (300,629.00)	$ (300,629.00)	$ (300,629.00)	$ (300,629.00)	$ (300,629.00)
4150 Health Insurance	$ (27,506.38)	$ (29,382.89)	$ (29,547.84)	$ (29,547.84)	$ (29,547.84)	$ (29,547.84)	$ (29,547.84)
4160 Life Insurance	$ (25,935.63)	$ (19,690.36)	$ (18,404.24)	$ (18,404.24)	$ (18,404.24)	$ (18,404.24)	$ (18,404.24)
4165 Disability Insurance	$ (51,696.75)	$ (48,335.34)	$ (42,000.00)	$ (42,000.00)	$ (42,000.00)	$ (42,000.00)	$ (42,000.00)
4180 Charitable Contributions	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4190 Personal Expenses on Corp CCard	$ (11.00)	$ (302.03)	$ (449.97)	$ (449.97)	$ (449.97)	$ (449.97)	$ (449.97)
4195 Owner Contributions	$ 119,688.02	$ -	$ -	$ -	$ -	$ -	$ -
Total 4110 Distributions - Barnebey	**$ (391,817.04)**	**$ (494,487.31)**	**$ (736,841.05)**	**$ (736,841.05)**	**$ (736,841.05)**	**$ (736,841.05)**	**$ (736,841.05)**
Net Income	$ 454,738.95	$ 724,789.83	$ 1,008,047.61	$ 1,008,047.61	$ 1,008,047.61	$ 1,008,047.61	$ 1,008,047.61
Total Equity	**$ (462,914.97)**	**$ (232,612.45)**	**$ 38,594.11**	**$ 243,772.13**	**$ 346,378.15**	**$ 385,595.37**	**$ 400,803.59**
TOTAL LIABILITIES AND EQUITY	**$ 484,975.51**	**$ 843,885.31**	**$ 561,595.39**	**$ 561,595.39**	**$ 561,595.39**	**$ 561,595.39**	**$ 561,595.39**

Exhibit 5

Exhibit 6

An error discovered in the processing of the 2006 National Survey of Ambulatory Surgery procedure data resulted in a revised data set. All analyses involving procedure data were rerun and some reported findings have changed. The required revisions have been made. In addition, some standard errors for both visits and procedures were printed incorrectly in the original report and these have been corrected in this revised report. For more information, see the explanation at the end of the report.

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Ambulatory Surgery in the United States, 2006

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Abstract

Objectives—This report presents national estimates of surgical and nonsurgical procedures performed on an ambulatory basis in hospitals and freestanding ambulatory surgery centers in the United States during 2006. Data are presented by types of facilities, age and sex of the patients, and geographic regions. Major categories of procedures and diagnoses are shown by age and sex. Selected estimates are compared between 1996 and 2006.

Methods—The estimates are based on data collected through the 2006 National Survey of Ambulatory Surgery by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS). The survey was conducted from 1994–1996 and again in 2006. Diagnoses and procedures presented are coded using the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM).

Results—In 2006, an estimated 53.3 million surgical and nonsurgical procedures were performed during 34.7 million ambulatory surgery visits. Of the 34.7 million visits, 19.9 million occurred in hospitals and 14.9 million occurred in freestanding ambulatory surgery centers. The rate of visits to freestanding ambulatory surgery centers increased about 300 percent from 1996 to 2006, whereas the rate of visits to hospital-based surgery centers remained largely unchanged during that time period. Females had significantly more ambulatory surgery visits (20.0 million) than males (14.7 million), and a significantly higher rate of visits (132.0 per 1,000 population) compared with males (100.4 per 1,000 population).

Average times for surgical visits were higher for ambulatory surgery visits to hospital-based ambulatory surgery centers than for visits to freestanding ambulatory surgery centers for the amount of time spent in the operating room (61.7 minutes compared with 43.2 minutes), the amount of time spent in surgery (34.2 minutes compared with 25.1 minutes), the amount of time spent in the postoperative recovery room (79.0 minutes compared with 53.1 minutes), and overall time (146.6 minutes compared with 97.7 minutes).

Although the majority of visits had only one or two procedures performed (59.8 percent and 27.7 percent, respectively), 1.0 percent had five or more procedures performed. Frequently performed procedures on ambulatory surgery patients included endoscopy of large intestine (5.7 million), endoscopy of small intestine (3.5 million), extraction of lens (3.1 million), injection of agent into spinal canal (2.0 million), and insertion of prosthetic lens (2.6 million). The leading diagnoses at ambulatory surgery visits included cataract (3.0 million); benign neoplasms (2.0 million), malignant neoplasms (1.2 million), diseases of the esophagus (1.1 million), and diverticula of the intestine (1.1 million).

Keywords: Outpatients • Diagnoses • Procedures • ICD–9–CM • National Survey of Ambulatory Surgery

Introduction

This report presents data from the 2006 National Survey of Ambulatory Surgery (NSAS). The survey, previously conducted annually from 1994 through 1996, was conducted by NCHS to gather and disseminate data about ambulatory surgery in the United States. For NSAS, ambulatory surgery refers to surgical and nonsurgical procedures performed on an ambulatory (outpatient) basis in a hospital or freestanding center's general operating rooms, dedicated ambulatory surgery rooms, and other specialized rooms, such as endoscopy units and cardiac catheterization laboratories. NSAS is the principal source for national data on the characteristics of visits to hospital-based and freestanding ambulatory surgery centers.

Ambulatory surgery has been increasing in the United States since the early 1980s. Two major reasons for the increase are advances in medical technology and changes in payment arrangements. The medical advances include improvements in anesthesia, which enable patients to regain consciousness more quickly with fewer after effects and better analgesics for relief of pain. In addition, minimally invasive and noninvasive procedures have been developed and are being used with increasing frequency. Examples include laser surgery, laparoscopy, and endoscopy. These medical advances have made surgery less complex and risky (1) and have allowed many

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National Center for Health Statistics

procedures to move from inpatient to ambulatory settings (2–6).

At the same time, concern about rising health care costs led to changes in the Medicare program that encouraged the development of ambulatory surgery. In the early 1980s, the Medicare program was expanded to cover care in ambulatory surgery centers, and a prospective payment system based on diagnosis-related groups was adopted for hospital inpatient care that created strong financial incentives for hospitals to shift less complex surgery to outpatient settings. Many state Medicaid plans and private insurers followed the lead of the Medicare program and adopted similar policies (7).

Additional changes in the health care system, such as the growth of managed care along with consolidation of hospitals, have furthered the growth of ambulatory surgery (3,8). As these changes occurred, many types of surgeries done in hospitals were increasingly performed during ambulatory visits. Both in conjunction with and as a result of these changes, the number of freestanding ambulatory surgery centers (ASCs) grew from 239 in 1983 (9) to over 3,300 nearly two decades later (3,10). The number of procedures being performed in ASCs also increased dramatically—from 380,000 procedures in 1983 to 31.5 million in 1996 (5).

The National Hospital Discharge Survey (NHDS), which has been conducted by NCHS every year since 1965, includes information on surgical and nonsurgical procedures performed in inpatient settings (11–13). Although NHDS remains a good source of data for procedures that can be done only on an inpatient basis, such as open-heart surgery or cesarean delivery, NHDS estimates have become incomplete for procedures that can be performed on an ambulatory basis. NSAS was undertaken to obtain information about ambulatory procedures. For many types of procedures, data from both NHDS and NSAS are now required to obtain national estimates. Reports that present both ambulatory and inpatient procedure data for 1994, 1995, and 1996 have been published (14–16).

NSAS and NHDS are two of the NCHS provider-based surveys that constitute the National Health Care Surveys (NHCS). The NHCS were designed to provide nationally representative data on the use of health care resources of major sectors of the health care delivery system. Information on ambulatory procedures is also collected in two other NHCS surveys. The National Ambulatory Medical Care Survey obtains information on procedures ordered or performed during visits to physicians' offices (17), and the National Hospital Ambulatory Medical Care Survey (NHAMCS) collects data on procedures ordered or performed during visits to hospital outpatient and emergency departments (18).

Methods

Data source

NSAS covers procedures performed in ambulatory surgery centers, both hospital-based and freestanding. The hospital universe includes noninstitutional hospitals exclusive of federal, military, and Department of Veterans Affairs hospitals located in the 50 states and the District of Columbia. Only short-stay hospitals (hospitals with an average length of stay for all patients of fewer than 30 days), or those whose specialty was general (medical or surgical), or children's general were included in the survey. These hospitals must also have had six beds or more staffed for patient use. This universe definition is the same as that used for the NHDS and the NHAMCS. For the 2006 NSAS, the hospital sample frame was constructed from the products of Verispan, L.L.C., specifically its "Healthcare Market Index, Updated June 15, 2005" and its "Hospital Market Profiling Solution, Second Quarter, 2005" (19). These products were formerly known as the SMG Hospital Market Database. In 2006, the sample consisted of 224 hospitals. Of the 224 hospitals, 35 were found to be out-of-scope (ineligible) because they went out of business or otherwise failed to meet the criteria for the NSAS universe. Of the 189 in-scope (eligible) hospitals, 142 hospitals responded to the survey for a response rate of 75.1%.

The universe of freestanding facilities included ones that were regulated by the states or certified by the Centers for Medicare & Medicaid Services (CMS) for Medicare participation. The sampling frame consisted of facilities listed in the 2005 Verispan Freestanding Outpatient Surgery Center Database (20) and Medicare-certified facilities included in the CMS Provider-of-Services (POS) file (21). Facilities specializing in dentistry, podiatry, abortion, family planning, or birthing were excluded. However, procedures commonly found in these settings were not excluded from in-scope locations. In 1994–1996, pain block locations were also excluded; however, they were included in the 2006 NSAS. In 2006, the sample consisted of 472 freestanding ASCs. Of the 472 freestanding ambulatory surgery centers, 74 were found to be out-of-scope (ineligible) because they failed to meet the criteria for the NSAS universe. Of the 398 in-scope (eligible) freestanding ambulatory surgery centers, 295 responded to the survey for a response rate of 74.1%. The overall response rate was 74.4%.

Sample design

The NSAS sampled facilities were selected using a multistage probability design with facilities having varying selection probabilities. Independent samples of hospitals and freestanding ambulatory surgery centers were drawn. Unlike the 1994–1996 NSAS, which used a three-stage stratified cluster design, with the first stage consisting of geographic primary sampling units or PSUs, the 2006 NSAS used a two-stage list-based sample design. Facilities were stratified by facility type (hospital compared with freestanding), ambulatory surgery status of hospitals (i.e., whether or not the hospital performed such surgery), facility specialty, and geographic region.

The first stage of the design consisted of selection of facilities using systematic random sampling with probabilities proportional to the annual

number of ambulatory surgeries performed. For the stratum of hospitals which, according to the sampling frame data, did not have ambulatory surgery, a national sample of 25 hospitals was selected to permit estimates of surgery in hospitals that either added ambulatory surgery since the frame was selected or differed from the frame.

At the second stage, within sampled facilities, a sample of ambulatory surgery visits was selected using a systematic random sampling procedure. Selection of visits within each facility was performed separately for each location where ambulatory surgery was performed. These locations included main operating rooms; dedicated ambulatory surgery units; cardiac catheterization laboratories; and rooms for laser procedures, endoscopy, and laparoscopy. Locations within hospitals dedicated exclusively to abortion, dentistry, podiatry, or small procedures were not included. The exclusion of these specialty locations, as well as the exclusion of facilities dedicated exclusively to those specialties, was recommended based on the feasibility study for the NSAS that was conducted in 1989–1991. Based on the recommendation of outside experts who were consulted prior to the design of the 2006 NSAS, the 2006 NSAS includes pain block facilities, whereas the 1994–1996 NSAS did not (22). Because NSAS data are collected from a sample of visits, persons with multiple visits during the year may be sampled more than once. NSAS estimates are of the number of visits to or procedures performed in ambulatory surgery facilities, not the number of persons served by these facilities.

Data collection

Sample selection and abstraction of information from medical records were performed at the facilities. Facility staff did the sampling in about 40 percent of facilities that participated in the 2006 survey, and facility staff abstracted the data in about 30 percent of the participating facilities. In the remaining facilities, the work was performed by personnel of the U.S. Census Bureau acting on behalf of NCHS. Data processing and medical coding were performed by the Constella Group Inc., Durham, North Carolina. Editing and estimation were completed at NCHS.

The abstract form (''Technical Notes'') contains items relating to the personal characteristics of the patients such as age, sex, race, and ethnicity; and administrative items such as date of procedure, disposition, and expected sources of payment. The medical information includes up to seven diagnoses and six procedures, which were coded according to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM) (23).

A quality control program was conducted on the coding and entering of data from abstracts to electronic form. Approximately 10 percent of the abstractions were independently recoded by an NSAS coder at the Constella Group, Inc., with discrepancies resolved by a chief coder. The overall error rate for the 2006 NSAS was 0.3 percent for diagnosis coding and keying, 0.2 percent for procedure coding and keying, and 0.3 percent for demographic coding and keying.

Estimation

Because of the complex multistage design of the NSAS, the survey data must be inflated or weighted in order to produce national estimates. The estimation procedure produces essentially unbiased national estimates, and has three basic components: inflation by reciprocals of the probabilities of sample selection, adjustment for nonresponse, and population weighting ratio adjustments. These three components of the final weight are described in more detail in another report (22).

Standard errors

The standard error (SE) is primarily a measure of sampling variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. Estimates of the sampling variability for this report were calculated using Taylor approximations in SUDAAN, which takes into account the complex sample design of the NSAS. A description of the software and the approach it uses has been published (24). The SEs of statistics presented in this report are included in each of the tables.

Testing of significance and rounding

In this report, statistical inference is based on the two-sided *t*-test with a critical value of 2.58 (0.01 level of significance). Terms such as ''higher'' and ''less'' indicate that differences are statistically significant. Terms such as ''similar'' or ''no difference'' mean that no statistically significant difference exists between the estimates being compared. A lack of comment on the difference between any two estimates does not mean that the difference was tested and found not to be significant.

The feasibility of using one weight to calculate estimates and variances was assessed to determine whether the SEs produced from the single-weight variable were for the most part greater than the SEs produced by the variance weights for the same estimates. For certain estimates, the single weights produced variances that underestimated the true variances. This underestimation can lead to Type I errors in which the null hypothesis is incorrectly rejected when using the commonly used significance level of alpha=0.05. As a result, the decision was made that an alpha of 0.01 should be used to reduce the likelihood of committing a Type I error.

Estimates of counts in the tables have been rounded to the nearest thousand. Therefore, figures within tables do not always add to the totals. Rates and percentages were calculated from unrounded figures and may not precisely agree with rates or percentages calculated from rounded data.

Nonsampling error

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include

reporting and processing errors as well as biases due to nonresponse and incomplete response. The magnitude of the nonsampling errors cannot be computed. However, these errors were kept to a minimum by procedures built into the operation of the survey. To eliminate ambiguities and to encourage uniform reporting, attention was given to the phrasing of items, terms, and definitions. Quality control procedures and consistency and edit checks reduced errors in data coding and processing. The unweighted response rate for the 2006 NSAS was 74.4%. Table 1 presents weighted characteristics of NSAS respondents and nonrespondents, along with weighted response rates. Responding compared with nonresponding distributions were similar, with the exception of higher cooperation among facilities in a nonmetropolitan statistical area. The effect of this differential response is minimized in the visit estimates in most cases, as NSAS uses a nonresponse adjustment factor that takes annual visit volume, specialty, facility type, and geographic region into account. Item nonresponse rates in NSAS are generally low (5% or fewer). However, levels of nonresponse may vary considerably in the survey.

NSAS does not completely measure ambulatory procedures that are performed in locations such as physicians' offices, for example, injections of therapeutic substances, skin biopsies, and certain plastic surgery procedures. The National Ambulatory Medical Care Survey has data about procedures in physicians' offices (17) and the National Hospital Ambulatory Medical Care Survey provides information about procedures in other hospital outpatient and emergency departments (18). As medical technology continues to advance and changes in payment policy promote it, increasing numbers and types of procedures may move from NSAS facilities to elsewhere.

Because certain freestanding facilities and certain specialized locations within hospitals and freestanding facilities are excluded from the NSAS design, ambulatory procedures performed in some specialties are not completely measured by the survey. Excluded specialties include dentistry, podiatry, abortion, family planning, and birthing; and locations that perform small procedures, such as removal of skin lesions, were also excluded. However, procedures in these specialties performed in general operating rooms or other in-scope locations are included in the survey.

The determination of whether an ambulatory surgery facility is a hospital or a freestanding center is based on the universe from which the facility was selected. In most cases, it was apparent whether a facility was a hospital or a freestanding ambulatory surgery center, but some facilities were not easily classified. For example, a ''freestanding'' facility may be owned by a hospital but located some distance away. If such a facility is separately listed in the 2005 Verispan Freestanding Outpatient Surgery Center Database or in the CMS POS file and is selected into the NSAS sample from this universe, it is considered a freestanding facility. Additional definitions of terms used in the NSAS have been published (22).

Use of tables

The statistics presented in this report are based on a sample, and therefore may differ from the figures that would be obtained if a complete census had been taken. Visits are reported by first-listed diagnosis, which is the one specified as the principal diagnosis on the face sheet or discharge summary of the medical record, or if a principal diagnosis was not specified, the first one listed on the face sheet or discharge summary of the medical record. It was usually the main cause of the visit. The number of first-listed diagnoses is the same as the number of visits.

The estimates shown in this report include surgical procedures, such as tonsillectomy; diagnostic procedures, such as ultrasound; and other therapeutic procedures, such as injection or infusion of cancer chemotherapeutic substance. Up to six procedures are coded for each visit. All-listed procedures include all occurrences of the procedure coded regardless of the order on the medical record.

The diagnoses and procedures appear in separate tables of this report, presented by chapter of the ICD–9–CM. Within these chapters, subcategories of diagnoses or procedures are shown. These specific categories were selected primarily because of their large numbers or because they are of special interest.

According to the 2006 NSAS, an estimated 287,000 ambulatory surgery visits with procedures were admitted to the hospital as inpatients. Of these, 269,000 (93.8 percent) were visits to hospitals and 18,000 (6.2 percent) were visits to freestanding centers. In most instances, the ambulatory procedures for these patients become part of their inpatient records. People admitted as inpatients were included in this report, and procedures for these patients were included in the summaries of outpatient procedures, as described in the first version of this report for 1994 (5). These patients were excluded in the 1995 and 1996 *Advance Data Reports* (4,5) and will be excluded to avoid double counting from the Series 13 report in which data from the 2006 NHDS and 2006 NSAS will be presented together, following the same process as reports published using the 1994–1996 data (14–16).

The chances are about 40 in 100 that an estimate from the sample would differ from a complete census by more than the SE. The chances are 9 in 100 that the difference would be more than twice the SE, and about 4 in 100 that the difference would be more than 2.5 times as large as the SE.

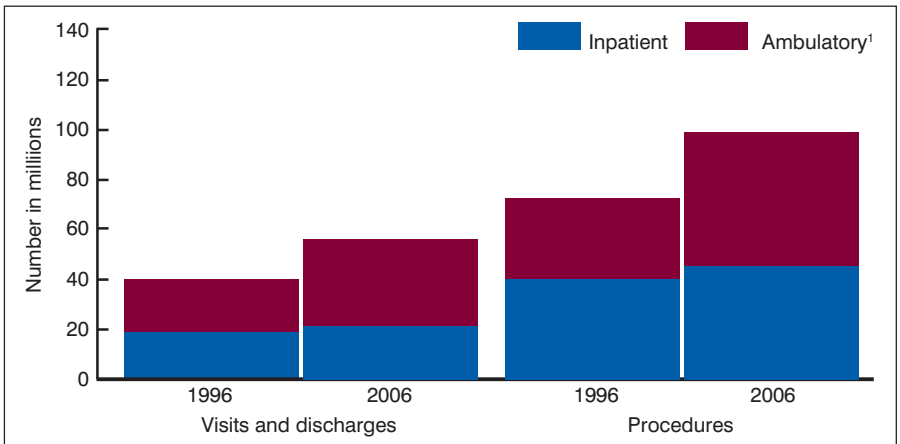
The relative standard error (RSE) of an estimate is obtained by dividing the SE by the estimate itself. The RSE is expressed as a percentage of an estimate and can be multiplied by the estimate to obtain the SE. Because of low reliability, estimates with a RSE of more than 30 percent or those based on a sample of fewer than 30 records are replaced by asterisks (*). The estimates that are based on 30 to 59 patient records are preceded by an asterisk (*) to indicate that they also have low reliability.

The population estimates used in computing rates are for the U.S. civilian population, including institutionalized persons, as of July 1, 2006. Rates are computed using adjustments made after the 2000 census (postcensal estimates) of the civilian population of the United States. The data are from unpublished tabulations provided by the U.S. Census Bureau. Facilities are classified by location into one of the four geographic regions of the United States that correspond to those used by the U.S. Census Bureau.

Results

Patient and facility characteristics

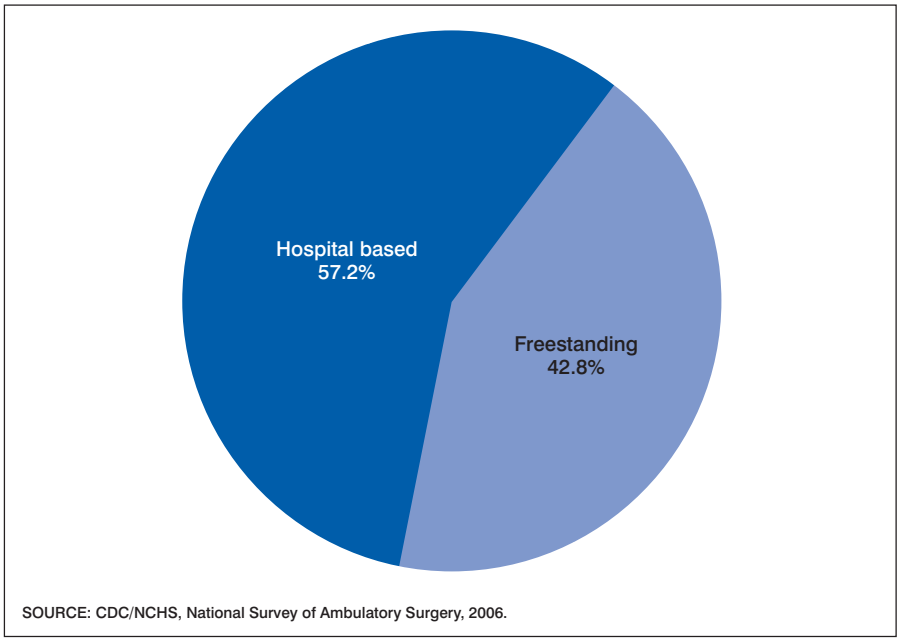
- In 2006, an estimated 53.3 million surgical and nonsurgical procedures were performed during 34.7 million ambulatory surgery visits (Table 2).
- The 34.7 million ambulatory surgery visits accounted for about 61.6 percent of the combined total of ambulatory surgery visits and inpatient discharges with surgical and nonsurgical procedures (56.4 million) (Figure 1).
- An estimated 19.9 million (57.2 percent) of the ambulatory surgery visits occurred in hospitals and 14.9 million (42.8 percent) occurred in freestanding centers (Table 2, Figure 2).
- From 1996 to 2006, the change in the rate of visits to freestanding centers was larger than that for visits to hospital-based ambulatory surgery centers. The rate of visits to freestanding ambulatory surgery centers increased about 300 percent from 1996 to 2006, while the rate in hospital-based centers was flat (Figure 3).
- Females had significantly more ambulatory surgery visits (20.0 million) than males (14.7 million), and a significantly higher rate of visits (132.0 per 1,000 population) compared with males (100.4 per 1,000 population) (Table 2).
- Although the vast majority of ambulatory surgery visits had routine discharges (93.1 percent), 0.8 percent were admitted as inpatients (Table 3).
- Although general anesthesia alone was provided in 30.7 percent of ambulatory surgery visits, 20.8 percent received anesthesia only intravenously, and 20.8 percent received multiple types of anesthesia (data not shown).



[1]The number of ambulatory surgery visits includes ambulatory surgery patients admitted to hospitals as inpatients for both 1996 and 2006. As a result, the data differ from those presented in the 1996 report (5).

SOURCES: CDC/NCHS, National Survey of Ambulatory Surgery, 2006 and National Hospital Discharge Survey.

Figure 1. Ambulatory surgery visits and discharges of hospital inpatients with procedures: United States, 1996 and 2006 (revised)

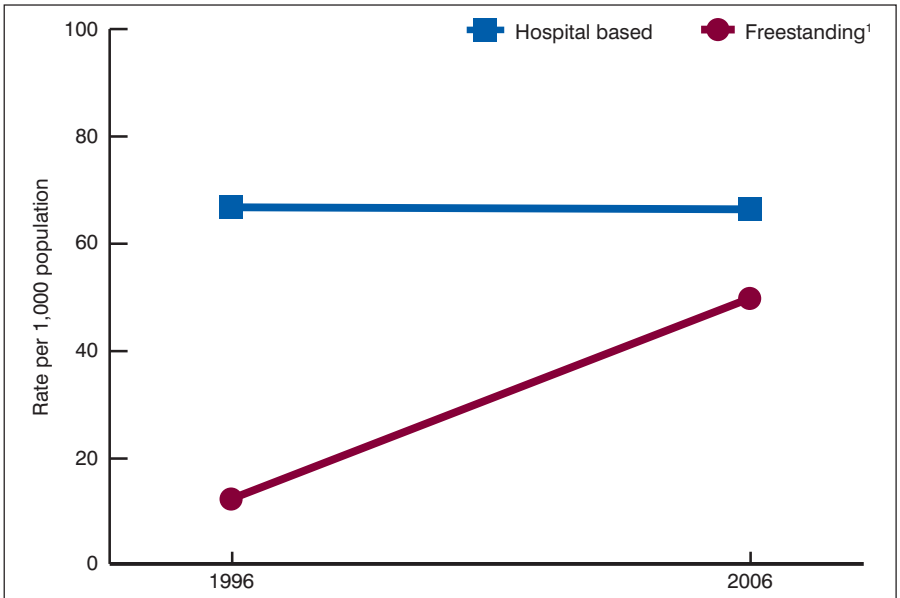


SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery, 2006.

Figure 2. Percent distribution of ambulatory surgery visits by type of facility: United States, 2006

Surgical times for ambulatory surgery visits

- Total time is defined as the length of time from when the patient enters the operating room to the time he or she leaves postoperative care. Operating room time is the length of time the patient is in the operating room. The surgical time is the portion of the



[1]The rate of ambulatory surgery visits includes ambulatory surgery patients admitted to hospitals as inpatients for both 1996 and 2006. As a result, the data differ from those presented in the 1996 report (5).

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Figure 3. Rates of ambulatory surgery visits by facility type: United States, 1996 and 2006

time spent in the operating room during which the surgical procedure occurs. Typically, the surgical time is the time from when the incision is made until the wound is closed. After the surgical procedure, the patient recovers in the postoperative room before he or she is discharged; the time spent here is considered the post operative room time. Average times for surgical visits were higher for ambulatory surgery visits to hospital-based ambulatory surgery centers than for visits to freestanding ambulatory surgery centers for the amount of time spent in the operating room (61.7 minutes compared with 43.2 minutes), the amount of time spent in surgery (34.2 minutes compared with 25.1 minutes), the amount of time spent in the postoperative recovery room (79.0 minutes compared with 53.1 minutes), and overall time (146.6 minutes compared with 97.7 minutes) (Table 4).

- The average time spent in surgery also varied with the diagnosis. The average surgical time for inguinal hernia diagnoses was more than twice that for diagnoses of benign neoplasm of the colon (49.4 minutes compared with 21.8 minutes) (Table 5).

Ambulatory procedures

- Females had significantly more ambulatory surgery procedures (30.6 million) than males (22.7 million) and a significantly higher rate of procedures (2,020.2 per 10,000 population) than males (1,548.1 per 10,000 population) (Tables 6,7). This was driven by differences for females between 15 and 64 years of age (Figure 4).
- Although the majority of visits had only one or two procedures performed (59.8 percent and 27.7 percent, respectively), 1.0 percent had five or more procedures performed (Figure 5).
- Frequently performed procedures on ambulatory patients included endoscopy of large intestine (5.7 million), endoscopy of the small intestine (3.5 million), extraction of lens (3.1 million), injection of agent into spinal canal (2.0 million), and insertion of prosthetic lens (2.6 million) (Table 6).
- Females had higher rates per 10,000 population than males for certain ambulatory procedures, such as extraction (125.5 compared with 78.8) and insertion (105.2 compared with 67.4) of lens and endoscopy of the small (134.7 compared with 97.1) and large (217.8 compared with 166.4) intestine (Table 7).
- Ambulatory procedures often performed on children under 15 years included myringotomy with insertion of tube (667,000), tonsillectomy with or without adenoidectomy (530,000), and adenoidectomy without tonsillectomy (132,000) (Table 6).
- Common ambulatory procedures for persons 15–44 years of age were endoscopy of large intestine (779,000); endoscopy of small intestine (770,000); injection of agent into spinal canal (533,000); injection or infusion of therapeutic or prophylactic substance (429,000); and operations on muscle, tendon, facia, and bursa (403,000) (Table 6).
- Ambulatory surgery procedures commonly performed on persons 45–64 years of age were endoscopy of large intestine (2.9 million), endoscopy of small intestine (1.4 million), injection of agent into spinal canal (835,000), and operations on muscle, tendon, fascia and bursa (755,000) (Table 6).
- For persons 65–74 years of age, endoscopy of large intestine (1.2 million), extraction of lens (1.1 million), insertion of lens (923,000), endoscopy of small intestine (648,000), and endoscopic polypectomy of the large intestine (424,000) were the most frequent ambulatory procedures (Table 6).
- Common ambulatory procedures for those 75 years of age or over were extraction of lens (1.3 million), insertion of lens (1.1 million), endoscopy of large intestine (778,000), endoscopy of small intestine (550,000), and injection of agent into spinal canal (336,000) (Table 6).

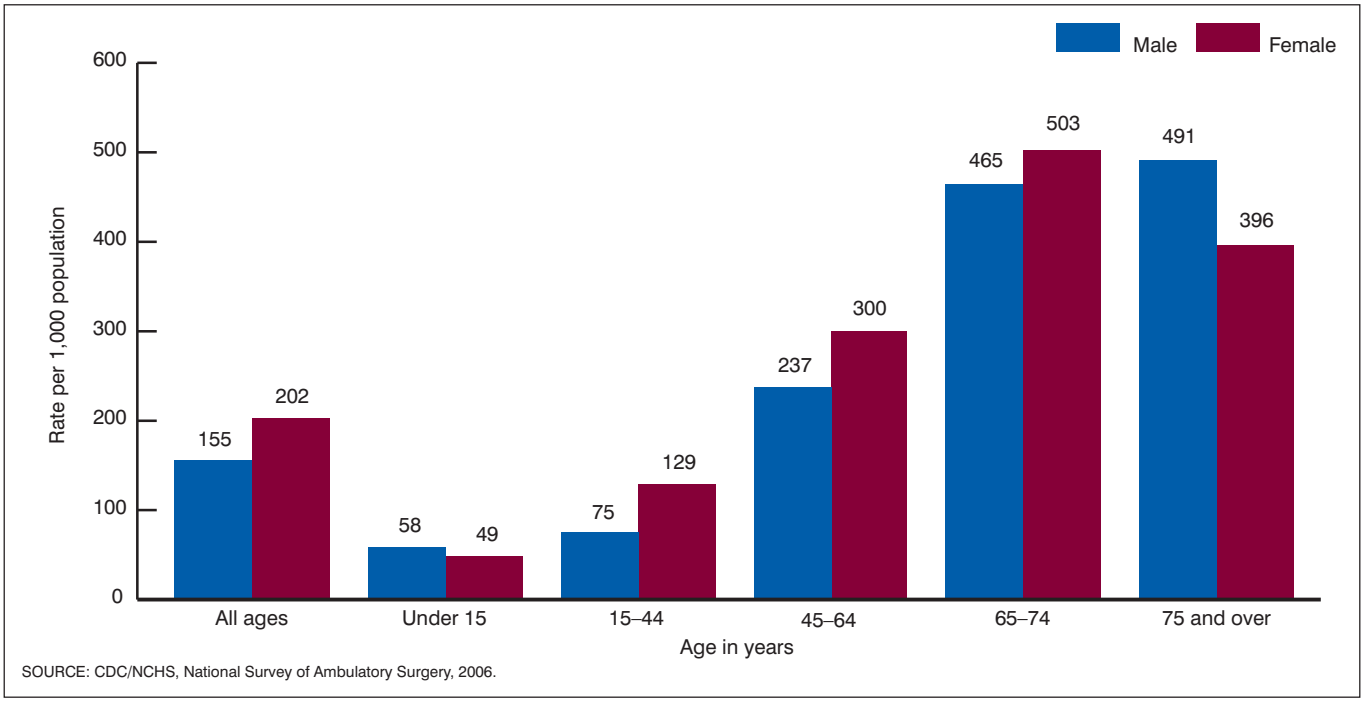


Figure 4. Rate of ambulatory surgery procedures by age and sex: United States, 2006 (revised)

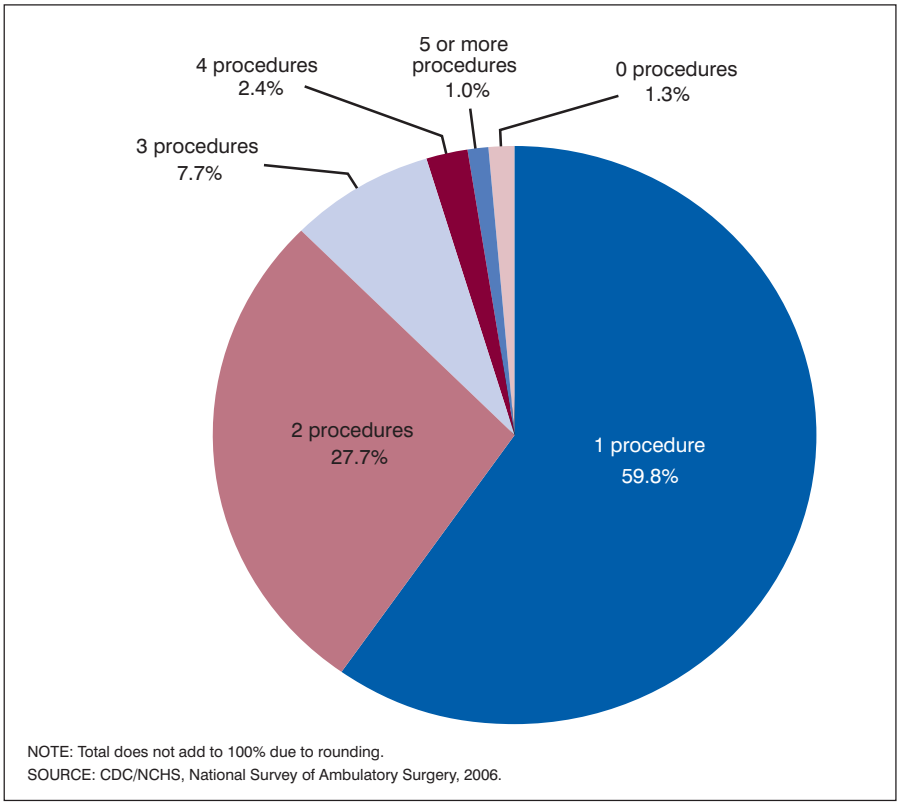


Figure 5. Percent distribution of the number of ambulatory surgery procedures performed per visit: United States, 2006 (revised)

Diagnoses for ambulatory surgery visits

- The leading diagnoses at ambulatory surgery visits included cataract (3.0 million); benign neoplasms (2.0 million), malignant neoplasms (1.2 million), diseases of the esophagus (1.1 million), and diverticula of the intestine (1.1 million) (Table 8).
- Rates of ambulatory surgery visits per 10,000 population varied by gender. For example, the rate of ambulatory surgery visits was higher for females than for males for first-listed diagnoses of cataract (123.5 compared with 77.5) (Table 9).

Discussion

May 2009 revisions of NSAS 2006 data file originally released on October 22, 2008

Identification of a double coding issue with NSAS 2006 data set

The 2006 NSAS public-use data files were released in October 2008. A

researcher contacted NCHS in mid February questioning the fact that the number of myringotomies in the 2006 NSAS was double the number of children under 15 years of age receiving this procedure. In the 1996 NSAS data, there was close to a one-to-one correspondence between these two estimates. The reason for the difference was that in 1996, myringotomy was coded once per record, even if the procedure was performed bilaterally; in 2006, myringotomy was coded twice if performed bilaterally. This inconsistency was unintentional.

Given this inconsistency, the entire 2006 NSAS data set was examined to see if there were other records with multiple identical procedure codes. It was determined that a total of 4,923 records (including myringotomies) of the original 52,233 records in 2006 NSAS had multiple coding (approximately 9%). Double coding was present in only 35 records of 125,000 in the 1996 NSAS.

Coding guidelines followed for the 2006 NSAS data

The 1994–1996 NSAS procedure coding guidelines were based upon *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM) inpatient coding guidelines that were in effect at that time. With the use of these guidelines, multiple coding rarely occurred, even if bilateral or other multiple procedures codes were listed in the record more than one time. Instead of using these ICD–9–CM inpatient coding guidelines, the 2006 NSAS used National Hospital Ambulatory Medical Care Survey (NHAMCS) procedure coding guidelines. Although NHAMCS guidelines were also based on ICD–9–CM codes, they differed in allowing double coding if the following circumstances occurred: if more than one site was specified, if a procedure was bilateral, and if an abstractor recorded a procedure multiple times. In NHAMCS, an editing process removed all double codes that were determined to be inappropriate. However, this step in the editing process was not incorporated into the 2006 NSAS data production, thereby creating the double coding issue.

Table A. A comparison of estimates of procedures from Table 2, by selected characteristics: United States, 2006

Characteristic	Original NSAS (Number in thousands)	Revised NSAS (Number in thousands)	Revised/ original (Percent)	Decrease	Percent decrease
Total procedures	57,062	53,329	93.5	3,733	7
Facility type					
Hospital based	32,320	30,761	95.2	1,559	5
Freestanding	24,742	22,568	91.2	2,174	9
Male					
Hospital based	14,051	13,286	94.6	765	5
Freestanding	10,277	9,395	91.4	882	9
Female					
Hospital-based	18,270	17,475	95.6	795	4
Freestanding	14,465	13,173	91.1	1,292	9
Region					
Northeast	8,551	8,018	93.8	533	6
Midwest	13,583	12,575	92.6	1,008	7
South	25,509	24,023	94.2	1,486	6
West	9,420	8,713	92.5	707	8
Male					
Northeast	3,710	3,486	94.0	224	6
Midwest	5,803	5,321	91.7	482	8
South	10,755	10,143	94.3	612	6
West	4,060	3,730	91.9	330	8
Female					
Northeast	4,841	4,532	93.6	309	6
Midwest	7,780	7,254	93.2	526	7
South	14,754	13,879	94.1	875	6
West	5,359	4,983	93.0	376	7
Metropolitan status					
Metropolitan statistical area	48,874	45,691	93.5	3,183	7
Nonmetropolitan statistical area	8,189	7,638	93.3	551	7
Male					
Metropolitan statistical area	20,821	19,399	93.2	1,422	7
Nonmetropolitan statistical area	3,507	3,282	93.6	225	6
Female					
Metropolitan statistical area	28,053	26,292	93.7	1,761	6
Nonmetropolitan statistical area	4,682	4,356	93.0	326	7

NOTES: Table A is a comparison of the January 28, 2009, *National Health Statistics Report*, Number 11, procedure estimates (taken from Table 2) to the revised estimates in this September 4, 2009, revision. NSAS is the National Survey of Ambulatory Surgery.

Revising the NSAS Data Set and How It Affected the Data

To maintain comparability with the 1994–1996 NSAS data, since multiple codes were not included in the 1996 NSAS, all multiple procedure codes were removed from the 2006 NSAS data. As a result, the estimate for the total number of 2006 NSAS procedures fell from 57,062,000 to 53,329,000, a 6.5% decrease. Categories were differentially affected. Tables A and B show the 2006 NSAS original and the 2006 NSAS revised estimates for some of the major procedure categories included in this and the January 28, 2009, NSAS *National Health Statistics Report*. The tables also include ratios of the revised estimates to the original estimates to show relative changes. As expected, the revised estimates decreased most for bilateral and other multiple site procedures.

Table B. A comparison of estimates of procedures from Table 6, by selected characteristics: United States, 2006

Characteristic	Original NSAS (Number in thousands)	Revised NSAS (Number in thousands)	Revised/ original (Percent)	Decrease	Percent decrease
Total procedures	57,062	53,329	93.5	3,733	7
Age					
Under 15 years	4,034	3,266	81.0	768	19
15–44 years	13,691	12,780	93.3	911	7
45–64 years	21,369	20,167	94.4	1,202	6
65–74 years	9,622	9,182	95.4	440	5
75 years and over	8,345	7,934	95.1	411	5
Sex					
Male	24,328	22,681	93.2	1,647	7
Female	32,734	30,648	93.6	2,086	6
Procedure category					
Nervous system	4,106	3,198	77.9	908	22
Eye	7,296	7,085	97.1	211	3
Ear	1,723	1,114	64.7	609	35
Nose, mouth, and pharynx	3,179	2,864	90.1	315	10
Respiratory system	448	445	99.3	3	1
Cardiovascular system	1,395	1,376	98.6	19	1
Digestive system	14,677	14,414	98.2	263	2
Urinary system	1,799	1,776	98.7	23	1
Male genital organs	655	631	96.3	24	4
Female genital organs	2,503	2,497	99.8	6	0.2
Musculoskeletal system	8,439	7,944	94.1	495	6
Integumentary system	4,108	3,581	87.2	527	13
Misc diagnostic/therapeutic and new technologies	6,387	6,060	94.9	327	5
Other (includes endocrine system, hemic and lymphatic system, and obstetrical procedures	346	344	99.4	2	1

NOTES: Table B is a comparison of the January 28, 2009, *National Health Statistics Reports*, Number 11, procedure estimates (taken from Table 6) to the revised estimates in this September 4, 2009, revision. NSAS is the National Survey of Ambulatory Surgery.

The procedure estimates for the following chapters were most affected by the deletion of multiple codes:

- Operations on the nervous system decreased 22% largely due to multiple coding of injection of agent into spinal canal.
- Operations on the ear decreased 35% largely due to double coding of myringotomy with insertion of tube.
- Operations on the nose, mouth, and pharynx decreased 10%.
- Operations on the integumentary system decreased 13% largely due to multiple coding of excision or destruction of lesion or tissue of skin and subcutaneous tissue.

Since myringotomies are a common procedure for children, estimates for both myringotomies and for overall procedures for children decreased a great deal after double coding was eliminated. The children's estimate decreased by 19% and the myringotomy estimate decreased by 44%.

Steps taken to improve coding in the future

A coding manual for the 2009 Ambulatory Surgical Center (ASC) data (now being gathered through NHAMCS) that clarifies the multiple coding issue is being prepared for coding of NHAMCS data. The differences between CPT and ICD–9–CM coding principles are discussed in the new manual along with what to do if the record contains only CPT codes. For the 2009 coding of ASC data, a crosswalk has been developed to generate ICD–9–CM codes from CPT codes. Instructions detailing how to handle duplicate codes are also included.

When the 2009 NHAMCS data are processed, NCHS will examine all double coding and remove any codes that are found to be inappropriate.

Your suggestions are welcomed on how to handle multiple codes in future ASC data. Please send any suggestions to Nancy Sonnenfeld at nsonnenfeld@cdc.gov.

Steps data users should take upon receiving the revised data

All data analyses based on the original NSAS data set should not be used. Instead, the analyses should be rerun using the revised data set. Similarly, any estimates or standard errors taken from the original NSAS *National Health Statistics Reports* (January 28, 2009) should not be used. Instead, these numbers should be obtained from this revised (September 4, 2009) report. Changes in this report are not limited to procedure estimates and standard errors affected by the method of handling multiple codes. Printing errors were also discovered, which affected some of the standard errors for visits and for procedures. These errors have been corrected in this revised report.

What has changed in the revised NSAS data set

As was indicated previously in the discussion of the data set revision, the estimates of some procedures (PROC1-PROC6), particularly those that were coded multiple times, have changed. They are lower because duplicates have been deleted. The values for other variables that were derived from the procedure data had to be derived again from the newer data set. The variables affected were NUMPROC (number of procedures per visit), SGFLAG1-SGFLAG6 (flags indicating if the procedures were surgical or nonsurgical), and PD1CLASS-PD6CLASS (the Agency for Health Care Research and Quality's Procedure Class Tool variables). Because of the changes in certain estimates, standard errors for these estimates may also have changed.

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Table 1. Characteristics of the 2006 National Survey of Ambulatory Surgery facility respondents and nonrespondents: United States

Facility characteristic	Number of sampled in-scope facilities	Total percent distribution (weighted)	Responding facility percent distribution (weighted)	Nonresponding facility percent distribution (weighted)	Weighted response rate	Standard error
All facilities	587	100.0	100.0	100.0	83.7	2.6
Facility type						
Hospital based	189	49.9	51.2	43.1	85.9	3.8
Freestanding	398	50.1	48.8	56.9	81.5	3.3
Geographic region						
Northeast	90	11.7	12.5	8.2	88.7	4.5
Midwest	126	24.1	23.7	25.9	82.5	6.8
South	222	40.4	41.8	33.2	86.6	3.6
West	149	23.7	22.0	32.8	77.5	5.2
Metropolitan status[1]						
Metropolitan statistical area	521	73.1	70.1	88.6	80.3	2.9
Nonmetropolitan statistical area	66	26.9	29.9	11.4	93.1	3.7
Growth area[2]						
Below 7.8% growth	209	43.3	46.1	29.3	89.0	3.5
Above 7.8% growth	378	56.7	53.9	70.7	80.0	3.4
Poverty status of area[2]						
Below 13.1% in poverty	337	51.9	52.1	51.3	83.9	3.1
Above 13.1% in poverty	250	48.1	47.9	48.7	83.5	4.2
Primary care shortage area[2]						
Nonshortage area	99	22.5	24.3	13.7	90.1	5.0
Shortage area	488	77.5	75.7	86.3	81.8	3.1

[1]Distribution between respondents and nonrespondents is significantly different ($p < 0.05$).
[2]Based on the Area Resource File value for the county in which the facility is located. Growth is based on the population difference between 2006 and 1996. Poverty is based on the percentage of population below the poverty level. Shortage area includes full or partial shortage area for primary care physicians.

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 2. Number, percent distribution, and rate of ambulatory surgery visits and all-listed procedures, by facility characteristics and sex: United States, 2006

Characteristic	Both sexes		Male		Female	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
			Number in thousands			
Total visits	34,738	1,829	14,707	781	20,032	1,072
Facility type						
Hospital based	19,869	880	8,491	395	11,379	518
Freestanding	14,869	1,603	6,216	674	8,653	939
Region						
Northeast	5,298	645	2,248	273	3,051	385
Midwest	8,047	610	3,378	272	4,669	355
South	15,931	1,540	6,749	656	9,182	897
West	5,462	427	2,331	179	3,130	266
Metropolitan status						
Metropolitan statistical area	29,715	1,943	12,566	825	17,149	1,138
Nonmetropolitan statistical area	5,024	937	2,140	407	2,883	537
			Percent distribution			
Total visits	100.0	...	100.0	...	100.0	...
Facility type						
Hospital based	57.2	2.9	57.7	2.9	56.8	2.9
Freestanding	42.8	2.9	42.3	2.9	43.2	2.9
Region						
Northeast	15.3	1.7	15.3	1.7	15.2	1.8
Midwest	23.2	1.8	23.0	1.8	23.3	1.8
South	45.9	2.7	45.9	2.8	45.8	2.8
West	15.7	1.3	15.9	1.3	15.6	1.4
Metropolitan status						
Metropolitan statistical area	85.5	2.7	85.4	2.8	85.6	2.7
Nonmetropolitan statistical area	14.5	2.7	14.6	2.8	14.4	2.7
			Rate per 1,000 population[1]			
Total visits	116.5	6.1	100.4	5.3	132.0	7.1
Facility type						
Hospital based	66.6	3.0	58.0	2.7	75.0	3.4
Freestanding	49.9	5.4	42.4	4.6	57.0	6.2
Region						
Northeast	96.9	11.8	84.6	10.3	108.5	13.7
Midwest	121.7	9.2	103.8	8.3	139.0	10.6
South	147.0	14.2	127.3	12.4	165.7	16.2
West	79.2	6.2	67.8	5.2	90.5	7.7
Metropolitan status						
Metropolitan statistical area	119.3	7.8	102.7	6.7	135.5	9.0
Nonmetropolitan statistical area	99.6	18.6	85.3	16.2	113.8	21.2

See footnotes at end of table.

Table 2. Number, percent distribution, and rate of ambulatory surgery visits and all-listed procedures, by facility characteristics and sex: United States, 2006—Con.

Characteristic	Both sexes		Male		Female	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
			Number in thousands			
Total procedures	53,329	2,654	22,681	1,138	30,648	1,575
Facility type						
Hospital based	30,761	1,276	13,286	593	17,475	751
Freestanding	22,568	2,328	9,395	971	13,173	1,385
Region						
Northeast	8,018	898	3,486	392	4,532	530
Midwest	12,575	904	5,321	412	7,254	532
South	24,023	2,224	10,143	939	13,879	1,316
West	8,713	690	3,730	299	4,983	430
Metropolitan status						
Metropolitan statistical area	45,691	2,853	19,399	1,213	26,292	1,686
Nonmetropolitan statistical area	7,638	1,387	3,282	613	4,356	791
			Percent distribution			
Total procedures	100.0	...	100.0	...	100.0	...
Facility type						
Hospital based	57.7	2.7	58.6	2.7	57.0	2.8
Freestanding	42.3	2.7	41.4	2.7	43.0	2.8
Region						
Northeast	15.0	1.6	15.4	1.6	14.8	1.6
Midwest	23.6	1.7	23.5	1.8	23.7	1.8
South	45.0	2.6	44.7	2.6	45.3	2.7
West	16.3	1.3	16.4	1.4	16.3	1.4
Metropolitan status						
Metropolitan statistical area	85.7	2.6	85.5	2.7	85.8	2.6
Nonmetropolitan statistical area	14.3	2.6	14.5	2.7	14.2	2.6
			Rate per 1,000 population[1]			
Total procedures	178.8	8.9	154.8	7.8	202.0	10.4
Facility type						
Hospital based	101.3	4.3	89.4	4.0	112.7	4.9
Freestanding	77.5	7.8	65.4	6.6	89.3	9.1
Region						
Northeast	146.6	16.4	131.3	14.7	161.1	18.8
Midwest	190.2	13.7	163.5	12.7	215.9	15.8
South	221.6	20.5	191.3	17.7	250.5	23.8
West	126.3	10.0	108.4	8.7	144.0	12.4
Metropolitan status						
Metropolitan statistical area	183.5	11.5	158.5	9.9	207.7	13.3
Nonmetropolitan statistical area	151.5	27.5	130.8	24.4	172.0	31.2

. . . Category not applicable.

[1]Rates were calculated using U.S. Census Bureau 2000-based postcensal estimates of the civilian population as of July 1, 2006.

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 3. Number of ambulatory surgery visits by disposition and principal expected source of payment: United States, 2006

Characteristic	Estimate	Standard error	Percent distribution	Standard error
		Number in thousands		
All visits	34,738	1,829	100	. . .
Disposition of patient				
Routine[1]	32,356	1,792	93.1	0.9
Observation status	401	66	1.2	0.2
Inpatient admission	287	43	0.8	0.1
Surgery cancelled	79	19	0.2	0.1
Not stated	944	174	2.7	0.5
Other	*	*	*	*
Principal expected source of payment				
Private insurance	18,070	1,045	53.0	1.2
Medicare	10,996	660	32.2	0.9
Medicaid	2,204	189	6.5	0.5
Workers compensation	627	101	1.8	0.3
Other government insurance	309	63	0.9	0.2
Self pay	1,131	185	3.3	0.5
Other	783	170	2.3	0.5

. . . Category not applicable.
* Figure does not meet standards of reliability or precision.
[1]Patients with routine disposition were those who were discharged to their normal place of residence, i.e., home, nursing home, or prison.
SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 4. Distribution of times for surgical visits by ambulatory surgery facility type: United States, 2006

Calculated time in minutes	Mean	Standard error	25th percentile	Median	75th percentile
			Total		
Total[1]	124.5	3.6	65	100	153
Operating room[2]	53.7	1.4	25	40	65
Surgical[3]	30.3	0.8	11	20	36
Postoperative room[4]	66.9	2.0	32	51	81
			Hospital based		
Total[1]	146.6	5.3	84	120	177
Operating room[2]	61.7	1.6	33	50	75
Surgical[3]	34.2	0.9	13	24	43
Postoperative room[4]	79.0	3.2	25	39	60
			Freestanding		
Total[1]	97.7	3.8	53	76	120
Operating room[2]	43.2	2.0	20	30	50
Surgical[3]	25.1	1.4	9	15	27
Postoperative room[4]	53.1	2.3	29	43	66

[1]Total time was calculated by subtracting the time when the patient entered the operating room from the time the patient left postoperative care.
[2]Operating room time was calculated by subtracting the time when the patient entered the operating room from the time the patient left the operating room.
[3]Surgical time was calculated by subtracting the time the surgery began from the time the surgery ended. Surgical time typically extends from when the first incision is made until the wound is closed.
[4]Postoperative room time was calculated by subtracting the time when the patient entered postoperative care from the time the patient left postoperative care.
SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 5. Average surgical duration by selected diagnoses and ambulatory surgery facility type: United States, 2006

Selected diagnoses and ICD–9–CM codes	Average total time (in minutes)[1]	Standard error	Average surgical time (in minutes)[2]	Standard error
		Total		
Cataract .366	70.2	2.7	18.1	0.7
Benign neoplasm of the colon .211.3	90.3	4.1	21.8	0.7
Diverticula of the intestine .562	79.5	4.2	16.9	0.7
Intervertebral disc disorders .722	82.9	7.2	21.1	3.0
Hemorrhoids .455	86.7	4.0	18.2	0.9
Gastritis and duodenitis .535	91.0	6.5	14.2	1.3
Chronic diseases of tonsils and adenoids .474	155.2	7.9	22.5	1.0
Otitis media and Eustachian tube disorders .381–382	65.7	5.1	12.3	1.0
Carpal tunnel syndrome .354.0	96.0	3.6	18.2	0.9
Inguinal hernia .550	169.0	6.4	49.4	1.6
		Hospital based		
Cataract .366	88.4	3.7	22.7	1.5
Benign neoplasm of the colon .211.3	111.5	7.5	24.6	1.4
Diverticula of the intestine .562	102.7	5.0	19.0	1.7
Intervertebral disc disorders .722	107.4	14.8	29.9	5.4
Hemorrhoids .455	112.0	6.6	20.7	1.3
Gastritis and duodenitis .535	111.4	7.8	17.9	1.7
Chronic diseases of tonsils and adenoids .474	161.6	11.0	23.4	1.5
Otitis media and Eustachian tube disorders .381–382	75.0	4.9	13.5	1.4
Carpal tunnel syndrome .354.0	111.2	5.6	19.1	1.1
Inguinal hernia .550	177.2	7.2	52.0	1.8
		Freestanding		
Cataract .366	57.3	2.4	14.9	0.5
Benign neoplasm of the colon .211.3	77.9	3.0	20.0	0.7
Diverticula of the intestine .562	68.3	4.0	15.9	0.7
Intervertebral disc disorders .722	61.4	5.3	12.8	2.2
Hemorrhoids .455	75.1	4.0	16.9	1.3
Gastritis and duodenitis .535	68.9	6.6	10.0	1.0
Chronic diseases of tonsils and adenoids .474	148.9	10.2	20.6	0.9
Otitis media and Eustachian tube disorders .381–382	56.8	5.8	10.2	0.6
Carpal tunnel syndrome .354.0	83.8	3.2	17.1	1.3
Inguinal hernia .550	145.8	7.7	40.1	2.3

[1]Total time was calculated by subtracting the time when the patient entered the operating room from the time the patient left postoperative care.

[2]Surgical time was calculated by subtracting the time the surgery began from the time the surgery ended. Surgical time typically extends from when the first incision is made until the wound is closed.

NOTE: Procedure categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM).

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 6. Number of ambulatory surgery procedures, by procedure category, sex, and age: United States, 2006

Procedure category and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Number in thousands							
All procedures	53,329	22,681	30,648	3,266	12,780	20,167	9,182	7,934
Operations on the nervous system .01–05	3,198	1,272	1,926	*	888	1,385	427	484
Injection of agent into spinal canal .03.91–03.92	1,991	844	1,147	*	533	835	286	336
Release of carpal tunnel .04.43	577	179	398	*	143	279	73	81
Operations on the eye .08–16	7,085	2,803	4,283	103	266	1,651	2,289	2,775
Operations on eyelids .08	386	137	249	*29	39	156	75	87
Extraction of lens .13.1–13.6	3,058	1,154	1,904	*	38	610	1,070	1,335
Insertion of prosthetic lens (pseudophakos) .13.7	2,582	987	1,595	*	33	524	923	1,098
Operations on the ear .18–20	1,114	568	545	858	118	59	*38	41
Myringotomy with insertion of tube .20.01	715	382	333	667	*32	*	*	*
Operations on the nose, mouth, and pharynx .21–29	2,864	1,441	1,423	1,050	937	617	162	97
Incision, excision, and destruction of nose .21.1,21.3–21.4,21.6	293	142	151	*	144	77	*34	*18
Turbinectomy .21.6	196	100	96	*	110	54	*	*
Repair and plastic operations on the nose .21.8	308	160	147	*	153	100	*27	*
Operations on nasal sinuses .22	606	328	278	*	222	276	*	*
Tonsillectomy with or without adenoidectomy .28.2–28.3	737	314	423	530	186	*	*	–
Adenoidectomy without tonsillectomy .28.6	140	83	57	132	*	*	–	–
Operations on the respiratory system .30–34	445	225	220	*34	70	176	88	*77
Bronchoscopy with or without biopsy .33.21–33.24,33.27	173	71	102	*	*	*67	*43	*
Operations on the cardiovascular system .35–39,00.50–00.51,00.53–00.55,00.61–00.66	1,376	712	664	*	165	605	284	312
Cardiac catheterization .37.21–37.23	492	280	212	*	*41	238	123	88
Operations on the digestive system .42–54	14,414	6,500	7,914	*	2,824	6,448	2,925	1,956
Dilation of esophagus .42.92	341	140	201	*	*37	152	83	66
Endoscopy of small intestine with or without biopsy .45.11–45.14,45.16	3,467	1,423	2,044	*	770	1,390	648	550
Endoscopy of large intestine with or without biopsy .45.21–45.25	5,741	2,438	3,304	*	779	2,921	1,233	778
Endoscopic polypectomy of large intestine .45.42	1,399	788	611	*	69	701	424	207
Laparoscopic cholecystectomy .51.23	503	87	416	*	229	193	*	*
Hernia repair .53.0–53.1,53.2–53.9	920	724	196	73	298	331	133	84
Repair of inguinal hernia .53.0–53.1	526	482	*45	39	139	186	88	74
Operations on the urinary system .55–59	1,776	932	844	*	375	624	369	356
Cystoscopy with or without biopsy .57.31–57.33	751	406	345	*	147	271	157	169
Operations on the male genital organs .60–64	631	631	...	166	146	143	109	67
Operations on the female genital organs .65–71	2,497	...	2,497	*	1,633	689	109	*60
Hysteroscopy .68.12	313	...	313	–	159	121	*	*
Dilation and currettage of uterus .69.0	611	...	611	–	334	227	*29	*
Operations on the musculoskeletal system .76–84,00.70–00.73,00.80–00.84	7,944	3,856	4,088	295	2,602	3,696	871	479
Partial excision of bone .76.2–76.3,77.6–77.8	449	231	218	*	121	228	57	*31
Reduction of fracture .76.7,79.0–79.3	495	310	185	102	213	115	*35	*29
Injection of therapeutic substance into joint or ligament .76.96,81.92	218	87	131	*	45	112	32	*26
Removal of implanted devices from bone .76.97,78.6	212	108	104	27	85	58	*	*
Excision and repair of bunion and other toe deformities .77.5	461	68	394	*	115	226	83	*30
Arthroscopy of knee .80.26	956	502	455	*	358	448	103	*32
Excision of semilunar cartilage of knee .80.6	690	384	307	*	204	352	90	*42
Replacement or other repair of knee .81.42–81.47,81.54–81.55,00.80–00.84	463	260	203	*	216	190	*35	*
Operations on muscle, tendon, fascia, and bursa .82–83	1,465	642	823	55	403	755	165	88

See footnotes at end of table.

Table 6. Number of ambulatory surgery procedures, by procedure category, sex, and age: United States, 2006—Con.

Procedure category and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Number in thousands							
Operations on the integumentary system .85–86	3,581	1,045	2,535	166	1,223	1,415	435	341
Biopsy of breast .85.11–85.12	261	*	250	*	79	130	*28	*
Local excision of lesion of breast (lumpectomy) .85.21	329	*	317	*	110	133	*52	*
Excision or destruction of lesion or tissue of skin and subcutaneous tissue .86.2–86.4	1,092	542	550	100	332	395	139	127
Miscellaneous diagnostic and therapeutic procedures and new technologies[1] .87–99,00	6,060	2,617	3,442	242	1,456	2,517	999	846
Arteriography and angiocardiography using contrast material .88.4–88.5	1,054	561	492	–	*74	471	297	213
Diagnostic ultrasound .88.7,00.21–00.25,00.28,00.29	322	159	162	*	53	147	70	50
Injection or infusion of therapeutic or prophylactic substance .99.1–99.2	1,462	529	933	35	429	599	202	196
Operations on the endocrine system, operations on the hemic and lymphatic system, and obstetrical procedures .06–07,40–41,72–75	344	78	266	*	77	140	*78	*41

* Figure does not meet standards of reliability or precision.

. . . Category not applicable.

– Quantity zero.

[1]Chapter 00 codes included in this category: 00.01–00.03, 00.09, 00.10–00.18, 00.21–00.25, 00.28–00.29, 00.31–00.35, 00.39, 00.40–00.43, 00.45–00.48, 00.52, 00.74–00.76, and 00.91–00.93.

NOTES: Procedure categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). The standard error (SE) of an estimate can be obtained by multiplying the estimate by the corresponding relative standard error (RSE). The RSE can be obtained by dividing the SE of the rate by the rate in Table 7.

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 7. Rate and standard error for the rate of ambulatory surgery procedures, by procedure category, sex, and age: United States, 2006

Procedure category and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Rate per 10,000 population[1]							
All procedures	1,788.3	1,548.1	2,020.2	537.5	1,019.2	2,695.9	4,854.0	4,325.3
Operations on the nervous system .01–05	107.2	86.9	126.9	*	70.8	185.2	225.7	263.8
Injection of agent into spinal canal .03.91–03.92	66.8	57.6	75.6	*	42.5	111.6	151.3	183.4
Release of carpal tunnel .04.43	19.3	12.2	26.2	*	11.4	37.3	38.7	44.2
Operations on the eye .08–16	237.6	191.3	282.3	17.0	21.2	220.8	1,210.0	1,513.0
Operations on eyelids .08	12.9	9.4	16.4	*4.7	3.1	20.9	39.6	47.5
Extraction of lens .13.1–13.6	102.5	78.8	125.5	*	3.0	81.6	565.7	727.6
Insertion of prosthetic lens (pseudophakos) .13.7	86.6	67.4	105.2	*	2.6	70.1	488.2	598.7
Operations on the ear .18–20	37.3	38.8	35.9	141.2	9.4	7.9	*20.2	22.3
Myringotomy with insertion of tube .20.01	24.0	26.1	21.9	109.7	*2.6	*	*	*
Operations on the nose, mouth, and pharynx .21–29	96.0	98.3	93.8	172.9	74.7	82.5	85.8	53.1
Incision, excision, and destruction of nose .21.1,21.3–21.4,21.6	9.8	9.7	9.9	*	11.5	10.3	*18.1	*9.6
Turbinectomy .21.6	6.6	6.8	6.4	*	8.8	7.2	*	*
Repair and plastic operations on the nose .21.8	10.3	11.0	9.7	*	12.2	13.3	*14.4	*
Operations on nasal sinuses .22	20.3	22.4	18.3	*	17.7	36.9	*	*
Tonsillectomy with or without adenoidectomy .28.2–28.3	24.7	21.4	27.9	87.2	14.9	*	*	–
Adenoidectomy without tonsillectomy .28.6	4.7	5.6	3.8	21.8	*	*	–	–
Operations on the respiratory system .30–34	14.9	15.4	14.5	*5.6	5.6	23.6	46.3	*42.1
Bronchoscopy with or without biopsy .33.21–33.24,33.27	5.8	4.8	6.8	*	*	*9.0	*22.7	*
Operations on the cardiovascular system .35–39,00.50–00.51,00.53–00.55,00.61–00.66	46.1	48.6	43.8	*	13.2	80.9	150.0	169.9
Cardiac catheterization .37.21–37.23	16.5	19.1	14.0	*	*3.2	31.9	65.0	48.0
Operations on the digestive system .42–54	483.3	443.7	521.7	*	225.2	861.9	1,546.3	1,066.2
Dilation of esophagus .42.92	11.4	9.6	13.2	*	*3.0	20.4	43.7	35.8
Endoscopy of small intestine with or without biopsy .45.11–45.14,45.16	116.3	97.1	134.7	*	61.4	185.9	342.6	299.6
Endoscopy of large intestine with or without biopsy .45.21–45.25	192.5	166.4	217.8	*	62.1	390.4	651.6	424.3
Endoscopic polypectomy of large intestine .45.42	46.9	53.8	40.3	*	5.5	93.7	223.9	112.6
Laparoscopic cholecystectomy .51.23	16.9	5.9	27.4	*	18.2	25.9	*	*
Hernia repair .53.0–53.1,53.2–53.9	30.9	49.4	12.9	11.9	23.8	44.3	70.6	46.0
Repair of inguinal hernia .53.0–53.1	17.7	32.9	*2.9	6.5	11.1	24.9	46.6	40.2
Operations on the urinary system .55–59	59.6	63.6	55.7	*	29.9	83.5	195.3	194.1
Cystoscopy with or without biopsy .57.31–57.33	25.2	27.7	22.7	*	11.7	36.2	83.1	92.2
Operations on the male genital organs .60–64	21.2	43.1	. . .	27.4	11.6	19.2	57.4	36.7
Operations on the female genital organs .65–71	83.7	. . .	164.6	*	130.2	92.1	57.4	*32.7
Hysteroscopy .68.12	10.5	. . .	20.7	–	12.7	16.2	*	*
Dilation and currettage of uterus .69.0	20.5	. . .	40.2	–	26.7	30.3	*15.4	*
Operations on the musculoskeletal system .76–84,00.70–00.73,00.80–00.84	266.4	263.2	269.5	48.6	207.5	494.1	460.5	261.3
Partial excision of bone .76.2–76.3,77.6–77.8	15.1	15.8	14.4	*	9.6	30.5	29.9	*17.0
Reduction of fracture .76.7,79.0–79.3	16.6	21.2	12.2	16.8	17.0	15.4	*18.5	*16.0
Injection of therapeutic substance into joint or ligament .76.96,81.92	7.3	5.9	8.6	*	3.6	14.9	16.9	*14.2
Removal of implanted devices from bone .76.97,78.6	7.1	7.3	6.9	4.4	6.8	7.7	*	*
Excision and repair of bunion and other toe deformities .77.5	15.5	4.6	26.0	*	9.1	30.3	44.1	*16.5
Arthroscopy of knee .80.26	32.1	34.2	30.0	*	28.5	59.9	54.3	*17.7
Excision of semilunar cartilage of knee .80.6	23.1	26.2	20.2	*	16.3	47.1	47.8	*22.8
Replacement or other repair of knee .81.42–81.47,81.54–81.55,00.80–00.84	15.5	17.7	13.4	*	17.2	25.4	*18.6	*
Operations on muscle, tendon, fascia, and bursa .82–83	49.1	43.8	54.2	9.0	32.1	100.9	87.3	47.8

See footnotes at end of table.

Table 7. Rate and standard error for the rate of ambulatory surgery procedures, by procedure category, sex, and age: United States, 2006—Con.

Procedure category and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
				Rate per 10,000 population[1]				
Operations on the integumentary system .85–86	120.1	71.3	167.1	27.3	97.5	189.2	229.9	186.1
Biopsy of breast .85.11–85.12	8.8	*	16.5	*	6.3	17.4	*14.7	*
Local excision of lesion of breast (lumpectomy) .85.21	11.0	*	20.9	*	8.8	17.8	*27.4	*
Excision or destruction of lesion or tissue of skin and subcutaneous tissue .86.2–86.4	36.6	37.0	36.3	16.4	26.5	52.8	73.4	69.2
Miscellaneous diagnostic and therapeutic procedures and new technologies[2] .87–99,00	203.2	178.6	226.9	39.8	116.1	336.4	528.1	461.4
Arteriography and angiocardiography using contrast material .88.4–88.5	35.3	38.3	32.5	–	*5.9	62.9	156.8	116.0
Diagnostic ultrasound .88.7,00.21–00.25,00.28,00.29	10.8	10.9	10.7	*	4.2	19.7	36.8	27.5
Injection or infusion of therapeutic or prophylactic substance .99.1–99.2	49.0	36.1	61.5	5.7	34.2	80.1	107.0	107.0
Operations on the endocrine system, operations on the hemic and lymphatic system, and obstetrical procedures .06–07,40–41,72–75	11.5	5.3	17.5	*	6.1	18.7	*41.2	*22.5
				Standard error				
All procedures	89.00	77.65	103.83	72.44	57.38	148.54	286.03	231.38
Operations on the nervous system .01–05	11.32	10.57	12.94	*	9.57	19.50	27.43	37.71
Injection of agent into spinal canal .03.91–03.92	8.97	8.72	10.01	*	7.31	15.38	23.29	29.95
Release of carpal tunnel .04.43	2.07	1.55	2.99	*	1.95	5.05	6.50	9.35
Operations on the eye .08–16	21.50	16.25	27.63	3.06	3.11	21.09	142.35	134.99
Operations on eyelids .08	1.36	1.33	1.95	*1.30	0.58	3.23	6.31	8.37
Extraction of lens .13.1–13.6	10.02	7.09	13.29	*	0.54	9.41	67.74	67.42
Insertion of prosthetic lens (pseudophakos) .13.7	9.02	6.28	12.08	*	0.49	8.58	63.85	57.88
Operations on the ear .18–20	6.87	6.09	8.04	30.27	1.87	1.43	*5.08	6.62
Myringotomy with insertion of tube .20.01	5.20	5.28	5.41	25.32	*0.73	*	*	*
Operations on the nose, mouth, and pharynx .21–29	10.76	10.54	12.78	25.76	8.67	12.86	16.80	10.80
Incision, excision, and destruction of nose .21.1,21.3–21.4,21.6	1.28	1.34	1.83	*	2.14	1.63	*4.72	*2.33
Turbinectomy .21.6	0.95	1.14	1.23	*	1.45	1.35	*	*
Repair and plastic operations on the nose .21.8	1.17	1.58	1.24	*	1.66	2.12	*3.82	*
Operations on nasal sinuses .22	3.27	3.64	4.08	*	3.36	9.02	*	*
Tonsillectomy with or without adenoidectomy .28.2–28.3	4.15	3.52	5.17	16.93	2.15	*	*	–
Adenoidectomy without tonsillectomy .28.6	0.99	1.41	0.86	4.79	*	*	–	–
Operations on the respiratory system .30–34	1.98	2.17	2.48	*1.45	1.31	4.51	9.96	*8.10
Bronchoscopy with or without biopsy .33.21–33.24,33.27	0.97	0.78	1.63	*	*	*2.32	*6.07	*
Operations on the cardiovascular system .35–39,00.50–00.51,00.53–00.55,00.61–00.66	5.69	6.51	5.44	*	2.05	11.89	23.17	24.91
Cardiac catheterization .37.21–37.23	2.51	3.07	2.24	*	*0.84	5.78	12.17	11.18
Operations on the digestive system .42–54	41.17	39.15	44.18	*	20.69	77.38	158.44	94.26
Dilation of esophagus .42.92	1.63	1.55	2.14	*	*0.80	3.45	9.02	7.33
Endoscopy of small intestine with or without biopsy .45.11–45.14,45.16	10.46	9.45	12.04	*	7.33	18.77	32.51	29.46
Endoscopy of large intestine with or without biopsy .45.21–45.25	21.68	19.32	24.41	*	10.15	43.49	87.41	46.99
Endoscopic polypectomy of large intestine .45.42	5.76	6.72	5.30	*	1.25	11.00	36.55	14.02
Laparoscopic cholecystectomy .51.23	1.51	0.84	2.79	*	2.25	2.98	*	*
Hernia repair .53.0–53.1,53.2–53.9	2.42	4.22	1.29	2.58	2.20	4.99	10.61	7.07
Repair of inguinal hernia .53.0–53.1	1.48	2.87	*0.56	1.17	1.39	2.93	8.53	6.97
Operations on the urinary system .55–59	4.82	5.39	5.38	*	3.99	9.10	24.40	20.98
Cystoscopy with or without biopsy .57.31–57.33	2.95	3.40	3.05	*	2.29	4.82	12.46	12.97
Operations on the male genital organs .60–64	1.87	3.81	. . .	5.07	1.35	3.06	8.85	6.77
Operations on the female genital organs .65–71	7.20	. . .	14.15	*	11.67	9.85	11.27	*8.52
Hysteroscopy .68.12	1.60	. . .	3.14	–	2.37	2.54	*	*
Dilation and currettage of uterus .69.0	2.17	. . .	4.27	–	3.07	4.00	*3.48	*

See footnotes at end of table.

Table 7. Rate and standard error for the rate of ambulatory surgery procedures, by procedure category, sex, and age: United States, 2006—Con.

Procedure category and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Standard error							
Operations on the musculoskeletal system .76–84,00.70–00.73,00.80–00.84	19.47	21.20	20.32	5.85	19.10	38.44	48.77	24.82
Partial excision of bone .76.2–76.3,77.6–77.8	1.45	1.92	1.59	*	1.33	3.98	5.48	*3.78
Reduction of fracture .76.7,79.0–79.3	1.68	2.44	1.37	2.21	2.28	2.67	*4.88	*3.33
Injection of therapeutic substance into joint or ligament .76.96,81.92	0.87	1.00	1.16	*	0.78	2.26	3.20	*3.27
Removal of implanted devices from bone .76.97,78.6	0.94	1.29	1.01	1.20	1.27	1.17	*	*
Excision and repair of bunion and other toe deformities .77.5	1.79	0.84	3.30	*	1.69	4.23	8.82	*4.01
Arthroscopy of knee .80.26	3.72	4.43	3.69	*	3.98	7.18	9.35	*4.45
Excision of semilunar cartilage of knee .80.6	1.99	2.86	1.80	*	1.88	4.51	6.94	*4.92
Replacement or other repair of knee .81.42–81.47,81.54–81.55,00.80–00.84	1.97	2.81	1.64	*	2.86	3.28	*3.95	*
Operations on muscle, tendon, fascia, and bursa .82–83	5.22	3.37	8.29	1.75	4.43	12.84	13.25	7.76
Operations on the integumentary system .85–86	8.53	6.42	13.24	3.92	9.50	14.66	20.62	19.98
Biopsy of breast .85.11–85.12	1.26	*	2.43	*	1.23	2.93	*3.56	*
Local excision of lesion of breast (lumpectomy) .85.21	1.17	*	2.29	*	1.45	2.22	*6.37	*
Excision or destruction of lesion or tissue of skin and subcutaneous tissue .86.2–86.4	3.20	3.92	3.33	2.57	3.24	5.25	13.11	10.15
Miscellaneous diagnostic and therapeutic procedures and new technologies[2] .87–99,00	16.60	15.67	19.36	5.56	14.75	30.74	48.83	47.14
Arteriography and angiocardiography using contrast material .88.4–88.5	5.40	6.50	4.91	–	*1.61	10.60	27.50	25.38
Diagnostic ultrasound .88.7,00.21–00.25,00.28,00.29	1.76	1.79	2.12	*	0.95	3.86	8.70	6.49
Injection or infusion of therapeutic or prophylactic substance .99.1–99.2	7.20	4.86	10.46	1.09	7.30	13.78	16.48	13.21
Operations on the endocrine system, operations on the hemic and lymphatic system, and obstetrical procedures .06–07,40–41,72–75	1.16	0.77	1.98	*	1.07	2.53	*7.97	*5.08

* Figure does not meet standards of reliability or precision.

– Quantity zero.

. . . Category not applicable.

[1]Rates were calculated using U.S. Census Bureau 2000-based postcensal estimates of the civilian population as of July 1, 2006.

[2]Chapter 00 codes included in this category: 00.01–00.03, 00.09, 00.10–00.18, 00.21–00.25, 00.28–00.29, 00.31–00.35, 00.39, 00.40–00.43, 00.45–00.48, 00.52, 00.74–00.76, 00.91–00.93.

NOTES: Procedure categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). The relative standard error (RSE) can be obtained by dividing the standard error (SE) of the rate by the rate. The SE of a number in Table 6 can be obtained by multiplying the RSE by the estimate.

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 8. Number of ambulatory surgery visits by first-listed diagnosis, sex, and age: United States, 2006

Category of first-listed diagnosis and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Number in thousands							
All conditions	34,738	14,707	20,032	2,471	8,351	12,948	5,887	5,081
Infectious and parasitic diseases .001–139	145	64	81	*	*	*42	*	*
Neoplasms .140–239	3,285	1,626	1,659	69	381	1,474	772	589
Malignant neoplasms .140–208,230–234	1,173	534	639	*	117	446	285	314
Malignant neoplasm of skin .172–173,176.0,198.2	303	164	139	*	34	87	59	123
Malignant neoplasm of breast .174–175,198.81	235	*	234	–	*35	121	*52	*
Benign neoplasms .210–229	2,000	1,039	961	53	241	985	468	253
Benign neoplasm of colon .211.3	1,389	785	604	–	90	730	380	189
Lipoma .214	126	61	64	*	*23	76	*	*
Endocrine, nutritional and metabolic diseases, and immunity disorders .240–279	266	74	192	*	91	103	*34	*
Diseases of the nervous system and sense organs .320–389	5,308	2,114	3,194	729	412	1,243	1,317	1,607
Carpal tunnel syndrome .354.0	552	171	381	–	138	263	66	86
Cataract .366	3,009	1,135	1,874	*	34	592	1,066	1,313
Disorders of the eyelid .373–374	174	71	103	*	*12	58	45	48
Otitis media and Eustachian tube disorders .381–382	623	324	299	577	*	*	*	*
Diseases of the circulatory system .390–459	1,736	832	904	*	256	860	353	264
Heart disease .391–392.0,393–398,402,404,410–416,420–429	540	318	222	*	*41	241	131	128
Hemorrhoids .455	715	287	427	*	151	411	108	*45
Diseases of the respiratory system .460–519	1,294	591	703	572	396	207	81	*38
Deviated nasal septum .470	134	77	57	*	75	42	*	*
Chronic sinusitis .473	141	82	59	*	52	56	*	*
Chronic disease of tonsils and adenoids .474	680	273	407	496	172	*	–	–
Diseases of the digestive system .520–579	6,808	3,081	3,727	326	1,597	2,688	1,242	955
Diseases of teeth and supporting structures .520–525	221	114	107	171	*	*	*	*
Diseases of esophagus .530	1,132	531	601	*	255	447	224	177
Gastritis and duodenitis .535	703	228	475	*	170	257	146	118
Hernia .550–553	1,141	764	377	64	335	418	174	149
Inguinal hernia .550	515	470	*45	33	131	189	91	71
Noninfectious enteritis and colitis .555–558	228	102	126	*	81	87	*34	*
Diverticula of intestine .562	1,135	513	622	*	*59	522	306	248
Cholelithiasis .574	376	*64	312	*	178	130	*	*
Diseases of the genitourinary system .580–629	2,932	847	2,085	115	1,143	1,050	358	267
Calculus of kidney and ureter .592	381	178	204	*	144	165	*40	*31
Benign mammary dysplasias .610	94	–	94	–	*35	*45	*	*
Lump or mass in breast .611.72	198	*	191	*	83	85	*	*
Disorders of menstruation and other abnormal vaginal bleeding .626,627.0–627.1	481	. . .	481	–	250	201	*	*
Complications of pregnancy, childbirth, and the puerperium .630–677	322	. . .	322	–	315	*	–	–
Abortion and ectopic and molar pregnancy .630–639	260	. . .	260	–	253	*	–	–
Diseases of the skin and subcutaneous tissue .680–709	631	292	339	56	224	233	*	49
Sebaceous cyst .706.2	134	69	65	*	*44	53	*	*
Diseases of the musculoskeletal system and connective tissue .710–739	4,523	1,875	2,648	67	1,336	2,035	599	486
Arthropathies and related disorders .710–719	809	378	431	*	276	378	89	52
Internal derangement of knee .717	321	177	144	*	116	150	*33	*
Intervertebral disc disorders .722	861	404	456	–	312	389	93	67
Lumbago .724.2	156	64	91	–	35	57	31	33
Rheumatism, excluding back .725–729	968	382	586	*26	287	484	114	57
Acquired deformities of toe .735	287	58	229	*	74	121	61	*28

See footnotes at end of table.

Table 8. Number of ambulatory surgery visits by first-listed diagnosis, sex, and age: United States, 2006—Con.

Category of first-listed diagnosis and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
Congenital anomalies .740–759	479	184	*	132	126	*	*	*
Symptoms, signs, and ill-defined conditions .780–799	1,390	548	842	*	403	520	185	147
Abdominal pain .789.0	167	51	116	*	53	71	*	*
Injury and poisoning .800–999	2,230	1,255	976	169	777	848	270	166
Fractures .800–829	513	321	192	102	237	107	*32	*35
Current tear of medial cartilage or meniscus of knee .836.0	424	253	171	*	120	231	53	*20
Supplementary classifications .V01–V85	3,134	1,245	1,890	74	778	1,406	503	373
Visit for sterilization .V25.2	292	50	242	*	263	*	–	–
Diseases of the blood and blood-forming organs, mental disorders, and certain conditions originating in the perinatal period .280–289,290–319,760–779	255	80	174	*	*47	88	*47	*62
Anemias .280–285	189	*58	131	*	*	*61	*40	*62

* Figure does not meet standards of reliability or precision.

– Quantity zero.

. . . Category not applicable.

NOTES: Diagnostic categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). The standard error (SE) of an estimate can be obtained by multiplying the estimate by the corresponding relative standard error (RSE). The RSE can be obtained by dividing the SE of the rate by the rate in Table 9.

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Table 9. Rate and standard error for the rate of ambulatory surgery visits by first-listed diagnosis, sex, and age: United States, 2006

Category of first-listed diagnosis and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Rate per 10,000 population[1]							
All conditions	1,164.9	1,003.8	1,320.4	406.7	666.0	1,731.0	3,111.9	2,769.8
Infectious and parasitic diseases .001–139	4.9	4.4	5.4	*	*	*5.6	*	*
Neoplasms .140–239	110.2	111.0	109.4	11.4	30.4	197.0	408.2	320.9
Malignant neoplasms .140–208,230–234	39.3	36.4	42.1	*	9.3	59.6	150.9	171.1
Malignant neoplasm of skin .172–173,176.0,198.2	10.2	11.2	9.2	*	2.7	11.6	31.2	67.0
Malignant neoplasm of breast .174–175,198.81	7.9	*	15.4	–	*2.8	16.1	*27.4	*
Benign neoplasms .210–229	67.1	70.9	63.3	8.7	19.2	131.7	247.3	137.7
Benign neoplasm of colon .211.3	46.6	53.6	39.8	–	7.1	97.6	200.9	103.1
Lipoma .214	4.2	4.2	4.2	*	*1.8	10.2	*	*
Endocrine, nutritional and metabolic diseases, and immunity disorders .240–279	8.9	5.1	12.7	*	7.3	13.8	*18.2	*
Diseases of the nervous system and sense organs .320–389	178.0	144.3	210.5	120.1	32.8	166.1	696.1	876.3
Carpal tunnel syndrome .354.0	18.5	11.7	25.1	–	11.0	35.1	35.1	46.6
Cataract .366	100.9	77.5	123.5	*	2.7	79.2	563.7	715.6
Disorders of the eyelid .373–374	5.8	4.8	6.8	*	*0.9	7.7	24.0	26.0
Otitis media and Eustachian tube disorders .381–382	20.9	22.1	19.7	95.0	*	*	*	*
Diseases of the circulatory system .390–459	58.2	56.8	59.6	*	20.4	115.0	186.8	144.1
Heart disease .391–392.0,393–398,402,404,410–416,420–429	18.1	21.7	14.7	*	*3.2	32.2	69.2	69.7
Hemorrhoids .455	24.0	19.6	28.2	*	12.0	54.9	57.1	*24.3
Diseases of the respiratory system .460–519	43.4	40.3	46.3	94.2	31.5	27.7	42.6	*20.9
Deviated nasal septum .470	4.5	5.3	3.8	*	6.0	5.6	*	*
Chronic sinusitis .473	4.7	5.6	3.9	*	4.1	7.5	*	*
Chronic disease of tonsils and adenoids .474	22.8	18.6	26.8	81.7	13.7	*	–	–
Diseases of the digestive system .520–579	228.3	210.3	245.7	53.6	127.4	359.3	656.7	520.6
Diseases of teeth and supporting structures .520–525	7.4	7.8	7.1	28.1	*	*	*	*
Diseases of esophagus .530	37.9	36.2	39.6	*	20.3	59.8	118.2	96.5
Gastritis and duodenitis .535	23.6	15.5	31.3	*	13.6	34.3	77.0	64.4
Hernia .550–553	38.3	52.1	24.9	10.6	26.7	55.8	92.2	81.4
Inguinal hernia .550	17.3	32.1	*3.0	5.4	10.5	25.3	48.0	38.9
Noninfectious enteritis and colitis .555–558	7.6	6.9	8.3	*	6.4	11.7	*18.2	*
Diverticula of intestine .562	38.1	35.0	41.0	*	*4.7	69.8	161.7	135.0
Cholelithiasis .574	12.6	*4.4	20.6	*	14.2	17.4	*	*
Diseases of the genitourinary system .580–629	98.3	57.8	137.4	18.9	91.1	140.4	189.1	145.5
Calculus of kidney and ureter .592	12.8	12.1	13.4	*	11.5	22.0	*21.2	*16.8
Benign mammary dysplasias .610	3.2	–	6.2	–	*2.8	*6.0	*	*
Lump or mass in breast .611.72	6.6	*	12.6	*	6.6	11.4	*	*
Disorders of menstruation and other abnormal vaginal bleeding .626,627.0–627.1	16.1	. . .	31.7	–	20.0	26.9	*	*
Complications of pregnancy, childbirth, and the puerperium .630–677	10.8	. . .	21.2	–	25.1	*	–	–
Abortion and ectopic and molar pregnancy .630–639	8.7	. . .	17.1	–	20.2	*	–	–
Diseases of the skin and subcutaneous tissue .680–709	21.2	19.9	22.3	9.3	17.9	31.2	*	27.0
Sebaceous cyst .706.2	4.5	4.7	4.3	*	*3.5	7.1	*	*
Diseases of the musculoskeletal system and connective tissue .710–739	151.7	128.0	174.6	11.0	106.5	272.1	316.9	264.7
Arthropathies and related disorders .710–719	27.1	25.8	28.4	*	22.0	50.6	46.9	28.3
Internal derangement of knee .717	10.8	12.1	9.5	*	9.2	20.0	*17.2	*
Intervertebral disc disorders .722	28.9	27.6	30.1	–	24.9	52.0	49.1	36.4
Lumbago .724.2	5.2	4.4	6.0	–	2.8	7.6	16.6	17.8
Rheumatism, excluding back .725–729	32.5	26.1	38.6	*4.2	22.9	64.7	60.5	31.1
Acquired deformities of toe .735	9.6	3.9	15.1	*	5.9	16.2	32.2	*15.5

See footnotes at end of table.

Table 9. Rate and standard error for the rate of ambulatory surgery visits by first-listed diagnosis, sex, and age: United States, 2006—Con.

Category of first-listed diagnosis and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
				Rate per 10,000 population[1]				
Congenital anomalies .740–759	16.1	12.6	*	21.7	10.0	*	*	*
Symptoms, signs, and ill-defined conditions .780–799	46.6	37.4	55.5	*	32.2	69.5	97.7	80.3
Abdominal pain .789.0	5.6	3.5	7.7	*	4.2	9.4	*	*
Injury and poisoning .800–999	74.8	85.6	64.3	27.9	62.0	113.4	142.6	90.4
Fractures .800–829	17.2	21.9	12.7	16.8	18.9	14.3	*17.0	*19.1
Current tear of medial cartilage or meniscus of knee .836.0	14.2	17.3	11.3	*	9.5	30.9	28.0	*10.7
Supplementary classifications .V01–V85	105.1	84.9	124.6	12.2	62.1	187.9	265.9	203.4
Visit for sterilization .V25.2	9.8	3.4	16.0	*	20.9	*	–	–
Diseases of the blood and blood-forming organs, mental disorders, and certain conditions originating in the perinatal period .280–289,290–319,760–779	8.5	5.5	11.5	*	*3.8	11.8	*25.1	*33.8
Anemias .280–285	6.3	*4.0	8.6	*	*	*8.2	*21.1	*33.8
				Standard error				
All conditions	61.32	53.33	70.69	54.26	35.76	100.68	195.86	156.70
Infectious and parasitic diseases .001–139	0.90	0.85	1.24	*	*	*1.37	*	*
Neoplasms .140–239	7.96	8.89	7.90	1.94	2.75	16.81	39.52	25.97
Malignant neoplasms .140–208,230–234	2.76	3.20	3.01	*	1.22	5.11	15.04	18.58
Malignant neoplasm of skin .172–173,176.0,198.2	1.26	1.60	1.21	*	0.61	1.92	5.43	13.56
Malignant neoplasm of breast .174–175,198.81	0.77	*	1.52	–	*0.76	2.17	*5.07	*
Benign neoplasms .210–229	6.27	7.19	6.04	1.55	2.18	13.86	31.43	14.94
Benign neoplasm of colon .211.3	5.42	6.13	5.18	–	1.68	12.00	28.25	12.22
Lipoma .214	0.61	0.84	0.84	*	*0.46	1.93	*	*
Endocrine, nutritional and metabolic diseases, and immunity disorders .240–279	1.10	0.84	1.76	*	1.38	2.07	*4.00	*
Diseases of the nervous system and sense organs .320–389	13.69	10.58	17.50	22.75	3.62	13.98	75.05	75.91
Carpal tunnel syndrome .354.0	2.02	1.51	2.92	–	1.95	4.87	6.23	9.54
Cataract .366	9.90	6.98	13.19	*	0.50	9.24	67.68	66.28
Disorders of the eyelid .373–374	0.65	0.76	0.88	*	*0.25	1.34	4.50	4.36
Otitis media and Eustachian tube disorders .381–382	4.19	3.94	4.65	20.45	*	*	*	*
Diseases of the circulatory system .390–459	5.11	6.22	5.23	*	2.71	11.07	22.02	19.84
Heart disease .391–392.0,393–398,402,404,410–416,420–429	2.68	3.57	2.37	*	*0.86	5.61	12.87	13.80
Hemorrhoids .455	3.16	3.20	3.61	*	2.39	7.12	9.11	*5.26
Diseases of the respiratory system .460–519	5.73	5.15	6.92	20.07	3.55	4.41	7.87	*5.32
Deviated nasal septum .470	0.66	0.92	0.84	*	1.17	1.37	*	*
Chronic sinusitis .473	0.71	1.00	0.84	*	0.85	1.66	*	*
Chronic disease of tonsils and adenoids .474	4.48	3.48	5.71	18.27	2.03	*	–	–
Diseases of the digestive system .520–579	18.04	16.10	20.74	8.11	11.77	31.61	64.45	47.47
Diseases of teeth and supporting structures .520–525	1.21	1.38	1.35	4.99	*	*	*	*
Diseases of esophagus .530	4.31	4.28	4.86	*	2.81	7.88	17.63	12.02
Gastritis and duodenitis .535	3.12	2.19	4.38	*	2.43	4.92	13.40	11.48
Hernia .550–553	3.38	4.71	2.88	2.33	2.90	5.97	11.16	11.74
Inguinal hernia .550	1.58	3.09	*0.56	1.13	1.33	3.49	8.56	6.92
Noninfectious enteritis and colitis .555–558	1.42	1.38	2.11	*	1.68	2.28	*4.54	*
Diverticula of intestine .562	5.25	6.01	5.21	*	*1.03	12.67	22.33	19.19
Cholelithiasis .574	1.20	*0.71	2.22	*	1.98	2.42	*	*
Diseases of the genitourinary system .580–629	5.71	4.23	8.89	3.46	5.70	10.17	20.18	18.20
Calculus of kidney and ureter .592	1.32	1.54	1.60	*	1.95	2.73	*4.20	*4.63
Benign mammary dysplasias .610	0.61	–	1.21	–	*0.69	*1.48	*	*
Lump or mass in breast .611.72	1.07	*	2.04	*	1.22	2.57	*	*
Disorders of menstruation and other abnormal vaginal bleeding .626,627.0–627.1	1.90	. . .	3.73	–	2.59	3.25	*	*

See footnotes at end of table.

Table 9. Rate and standard error for the rate of ambulatory surgery visits by first-listed diagnosis, sex, and age: United States, 2006—Con.

Category of first-listed diagnosis and ICD–9–CM code	Total	Sex		Age				
		Male	Female	Under 15 years	15–44 years	45–64 years	65–74 years	75 years and over
	Standard error							
Complications of pregnancy, childbirth, and the puerperium .630–677	1.35	. . .	2.65	–	3.17	*	–	–
Abortion and ectopic and molar pregnancy .630–639	1.27	. . .	2.50	–	2.99	*	–	–
Diseases of the skin and subcutaneous tissue .680–709	3.02	3.02	4.06	2.04	2.41	7.03	*	5.30
Sebaceous cyst .706.2	0.69	1.11	0.77	*	*0.77	1.44	*	*
Diseases of the musculoskeletal system and connective tissue .710–739	11.91	11.38	13.53	1.64	10.18	21.94	28.02	32.52
Arthropathies and related disorders .710–719	2.96	3.44	3.01	*	3.58	5.37	6.84	4.84
Internal derangement of knee .717	1.79	2.69	1.36	*	2.22	3.04	*4.09	*
Intervertebral disc disorders .722	4.49	4.23	5.10	–	5.40	7.26	9.32	6.28
Lumbago .724.2	0.93	0.95	1.18	–	0.80	1.51	4.55	4.40
Rheumatism, excluding back .725–729	2.26	2.23	3.08	*0.97	2.12	5.56	7.55	5.40
Acquired deformities of toe .735	1.35	0.81	2.21	*	1.21	2.78	8.32	*3.65
Congenital anomalies .740–759	4.79	2.66	*	3.51	2.75	*	*	*
Symptoms, signs, and ill-defined conditions .780–799	7.79	6.81	9.04	*	4.91	12.20	15.95	11.22
Abdominal pain .789.0	0.95	0.71	1.49	*	0.89	2.16	*	*
Injury and poisoning .800–999	5.15	6.22	5.27	3.51	5.05	8.65	20.49	11.84
Fractures .800–829	1.49	2.23	1.31	2.23	2.20	2.51	*4.74	*4.17
Current tear of medial cartilage or meniscus of knee .836.0	1.58	2.46	1.28	*	1.54	3.80	5.29	*2.77
Supplementary classifications .V01–V85	8.88	8.70	10.44	2.06	5.93	19.34	31.05	24.27
Visit for sterilization .V25.2	1.15	0.52	2.20	*	2.43	*	–	–
Diseases of the blood and blood-forming organs, mental disorders, and certain conditions originating in the perinatal period .280–289,290–319,760–779	1.19	1.12	1.71	*	*0.74	2.78	*6.55	*7.27
Anemias .280–285	1.01	*0.93	1.42	*	*	*2.09	*5.94	*7.27

* Figure does not meet standards of reliability or precision.

– Quantity zero.

. . . Category not applicable.

[1]Rates were calculated using U.S. Census Bureau 2000-based postcensal estimates of the civilian population as of July 1, 2006.

NOTES: Diagnostic categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). The relative standard error (RSE) can be obtained by dividing the standard error (SE) of the rate by the rate. The SE of a number in Table 8 can be obtained by multiplying the RSE by the estimate.

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Technical Notes

Form NSAS-5 (1-2000)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

NATIONAL SURVEY OF AMBULATORY SURGERY

MEDICAL ABSTRACT

Form Approved OMB No. 0920-0334, Approval Expires 11/30/2000

Notice – All information which would permit identification of an individual or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose. Public reporting burden of this collection of information is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or an other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road, MS D-74, Atlanta, GA 30333; ATTN: PRA (0920-0334)

A. PATIENT INFORMATION

1. Facility number
2. NSAS number and list used
3. Date of surgery — Month, Day, Year (2 0 0)
4. Residence ZIP Code

B. PATIENT CHARACTERISTICS

5. Date of birth — Month, Day, Year
6. Age (Complete only if date of birth not given) — Units: 1 Years, 2 Months, 3 Days
7. Sex (Mark (X) one): 1 Male, 2 Female, 3 Not stated
8. Ethnicity (Mark (X) one): 1 Hispanic or Latino, 2 Not Hispanic or Latino, 3 Not Stated
9. Race (Mark (X) all that apply): 1 White, 2 Black or African American, 3 American Indian or Alaska Native, 4 Asian, 5 Native Hawaiian or Other Pacific Islander, 6 Other – Specify, 7 Not Stated
10. Status/Disposition of Patient (Mark (X) the appropriate box): 1 Routine discharge to customary residence, 2 Discharge to observation status, 3 Discharge to post-surgical recovery care facility, 4 Admitted to hospital as inpatient, 5 Surgery canceled or terminated, 6 Other – Specify, 7 Status/Disposition not stated

C. PAYMENT INFORMATION

11. Expected source of payment

	Principal	Other sources
GOVERNMENT SOURCES		
Medicare	☐	☐
If available, also note whether –		
Fee-for-service	☐	
HMO	☐	
PPO	☐	
Medicaid	☐	☐
If available, also note whether –		
Fee-for-service	☐	
HMO	☐	
PPO	☐	
TRICARE	☐	☐
Worker's compensation	☐	☐
Other government *If so, please specify*	☐	☐
PRIVATE INSURANCE		
Private or commercial	☐	☐
If available, also note whether –		
Fee-for-service	☐	
HMO	☐	
PPO	☐	
OTHER SOURCES		
Self pay	☐	☐
Not covered by insurance	☐	
Had no health insurance	☐	
Charity care/Write off	☐	☐
No charge	☐	☐
Other *Please specify*	☐	☐
No source of payment indicated	☐	

12. Total charges $ .00 ☐ Not available

D. SURGICAL VISIT INFORMATION

13. Time — Not available

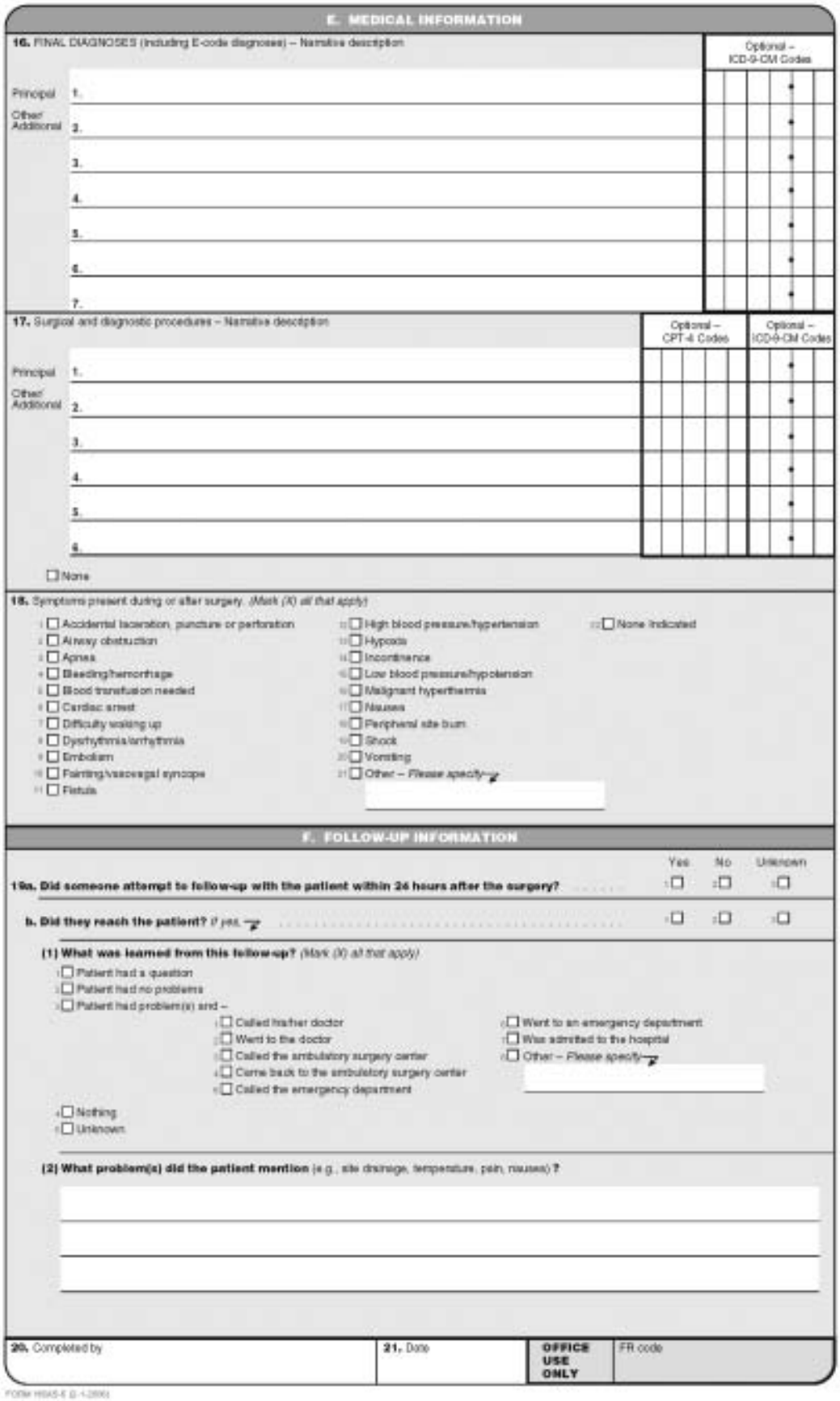
a. Time in to operating room	a.m. p.m.	☐
b. Time surgery began	a.m. p.m.	☐
c. Time surgery ended	a.m. p.m.	☐
d. Time out of operating room	a.m. p.m.	☐
e. Time in to postoperative care	a.m. p.m.	☐
f. Time out of postoperative care	a.m. p.m.	☐

14. Type of anesthesia (Mark (X) all that apply)

a. Topical/local ☐
b. IV sedation ☐
c. MAC (Monitored Anesthesia Care) ☐
d. Regional
(1) Epidural ☐
(2) Spinal ☐
(3) Retrobulbar block ☐
(4) Peribulbar block ☐
(5) Block ☐
e. General ☐
f. Other – Specify ☐
g. None specified ☐

15. Anesthesia administered by – (Mark (X) all that apply): 1 Anesthesiologist, 2 CRNA (Certified Registered Nurse Anesthetist), 3 Surgeon/Other physician, 4 Not stated/Not specified

Please continue on the reverse side



E. MEDICAL INFORMATION

16. FINAL DIAGNOSES (Including E-code diagnoses) – Narrative description — Optional – ICD-9-CM Codes

Principal 1.
Other/Additional 2.
3.
4.
5.
6.
7.

17. Surgical and diagnostic procedures – Narrative description — Optional – CPT-4 Codes — Optional – ICD-9-CM Codes

Principal 1.
Other/Additional 2.
3.
4.
5.
6.

☐ None

18. Symptoms present during or after surgery. *(Mark (X) all that apply)*

1 ☐ Accidental laceration, puncture or perforation
2 ☐ Airway obstruction
3 ☐ Apnea
4 ☐ Bleeding/hemorrhage
5 ☐ Blood transfusion needed
6 ☐ Cardiac arrest
7 ☐ Difficulty waking up
8 ☐ Dysrhythmia/arrhythmia
9 ☐ Embolism
10 ☐ Fainting/vasovagal syncope
11 ☐ Fistula
12 ☐ High blood pressure/hypertension
13 ☐ Hypoxia
14 ☐ Incontinence
15 ☐ Low blood pressure/hypotension
16 ☐ Malignant hyperthermia
17 ☐ Nausea
18 ☐ Peripheral site burn
19 ☐ Shock
20 ☐ Vomiting
21 ☐ Other – *Please specify*
22 ☐ None Indicated

F. FOLLOW-UP INFORMATION

	Yes	No	Unknown
19a. Did someone attempt to follow-up with the patient within 24 hours after the surgery?	1 ☐	2 ☐	3 ☐
b. Did they reach the patient? *If yes,* →	1 ☐	2 ☐	3 ☐

(1) What was learned from this follow-up? *(Mark (X) all that apply)*

1 ☐ Patient had a question
2 ☐ Patient had no problems
3 ☐ Patient had problem(s) and –
- 1 ☐ Called his/her doctor
- 2 ☐ Went to the doctor
- 3 ☐ Called the ambulatory surgery center
- 4 ☐ Came back to the ambulatory surgery center
- 5 ☐ Called the emergency department
- 6 ☐ Went to an emergency department
- 7 ☐ Was admitted to the hospital
- 8 ☐ Other – *Please specify*

4 ☐ Nothing
5 ☐ Unknown

(2) What problem(s) did the patient mention (e.g., site drainage, temperature, pain, nausea)**?**

20. Completed by	21. Date	OFFICE USE ONLY	FR code

FORM HSAS-E (2-1-2006)

Acknowledgments

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Ambulatory Surgery Data From Hospitals and Ambulatory Surgery Centers: United States, 2010

by Margaret J. Hall, Ph.D., Alexander Schwartzman, Jin Zhang, and Xiang Liu, Division of Health Care Statistics

Abstract

Objectives—This report presents national estimates of surgical and nonsurgical ambulatory procedures performed in hospitals and ambulatory surgery centers (ASCs) in the United States during 2010. Patient characteristics, including age, sex, expected payment source, duration of surgery, and discharge disposition are presented, as well as the number and types of procedures performed in these settings.

Methods—Estimates in this report are based on ambulatory surgery data collected in the 2010 National Hospital Ambulatory Medical Care Survey (NHAMCS). NHAMCS has collected outpatient department and emergency department data since 1992 and began gathering ambulatory surgery data from both hospitals and ASCs in 2010. Sample data were weighted to produce annual national estimates.

Results—In 2010, 48.3 million surgical and nonsurgical procedures were performed during 28.6 million ambulatory surgery visits to hospitals and ASCs combined. For both males and females, 39% of procedures were performed on those aged 45–64. For females, about 24% of procedures were performed on those aged 15–44 compared with 18% for males, whereas the percentage of procedures performed on those under 15 was lower for females than for males (4% compared with 9%). About 19% of procedures were performed on those aged 65–74, while about 14% were performed on those aged 75 and over. Private insurance was listed as the principal expected source of payment for 51% of ambulatory surgery visits, Medicare for 31% of visits, and Medicaid for 8% of visits. The most frequently performed procedures included endoscopy of large intestine (4.0 million), endoscopy of small intestine (2.2 million), extraction of lens (2.9 million), insertion of prosthetic lens (2.6 million), and injection of agent into spinal canal (2.9 million). Only 2% of visits with a discharge status were admitted to the hospital as an inpatient.

Keywords: outpatient surgery • procedures • ICD–9–CM • National Hospital Ambulatory Medical Care Survey (NHAMCS)

Introduction

This report presents nationally representative estimates of ambulatory surgery performed in hospitals and ambulatory surgery centers (ASCs) gathered by the 2010 National Hospital Ambulatory Medical Care Survey (NHAMCS). Ambulatory surgery, also called outpatient surgery, refers to surgical and nonsurgical procedures that are nonemergency, scheduled in advance, and generally do not result in an overnight hospital stay.

Ambulatory surgery has increased in the United States since the early 1980s (1,2). Two factors that contributed to this increase were medical and technological advancements, including improvements in anesthesia and in analgesics for the relief of pain, and the development and expansion of minimally invasive and noninvasive procedures (such as laser surgery, laparoscopy, and endoscopy) (3–6). Before these advances, almost all surgery was performed in inpatient settings. Any outpatient surgery was likely to have been minor, performed in physicians' offices, and paid for by Medicare and insurers as part of the physician's office visit reimbursement.

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The above advances and concerns about rising health care costs led to changes in the Medicare program in the early 1980s that encouraged growth in ambulatory surgery. Medicare expanded coverage to include surgery performed in ASCs (both hospital-based and freestanding). In addition, a prospective payment system for hospitals based on diagnosis-related groups was adopted, and that created strong financial incentives for hospitals to shift some surgery out of the hospital (1–5). Ambulatory surgery proved to be popular among both physicians and patients (3,4,7,8), and the number of Medicare-certified ASCs increased steadily, from 239 in 1983 to 5,316 in 2010 (9,10).

This report covers ambulatory surgery performed in hospitals and ASCs that are independent of hospitals. Ambulatory surgery procedures performed in physicians' offices and independent screening or diagnostic centers were not included in this report.

Methods

Data source and sampling design

Data for this analysis are from the ambulatory surgery component of the 2010 NHAMCS, a nationally representative survey of hospitals and ASCs conducted by the National Center for Health Statistics (NCHS). This survey has provided data on ambulatory medical care services provided in hospital emergency and outpatient departments since 1992. From 2010 through 2012, NHAMCS gathered data on ambulatory surgery procedures in both hospitals and ASCs. In 2013, data collection in ASCs was suspended so a new sampling frame could be developed. Previously, during 1994–1996 and in 2006, the National Survey of Ambulatory Surgery (NSAS) gathered data from hospital-based ASCs (HBASCs) and from facilities independent of hospitals [then called freestanding ASCs (FSASCs)] (2). The terms HBASC and FSASC are no longer in use because Medicare, and other insurers following Medicare's lead, changed the name and nature of the reimbursement categories for these services. Ambulatory surgery performed in hospitals is now called hospital outpatient department surgery. Facilities independent of hospitals that specialize in ambulatory surgery are now known as ASCs.

Independent samples of hospitals and ASCs were drawn for the NHAMCS ambulatory surgery component. The NHAMCS hospital sample (11) was selected using a multistage probability design, first sampling geographic units and then hospitals. Locations within the hospital where the services of interest were provided, in this case ambulatory surgery, were sampled next. Lastly, patient visits within these locations were sampled.

The hospitals that qualify for inclusion in this survey (the universe) include noninstitutional hospitals (excluding federal, military, and Department of Veterans Affairs hospitals) located in the 50 states and the District of Columbia. Only short-stay hospitals (hospitals with an average length of stay for all patients of fewer than 30 days), those with a general specialty (medical or surgical), and children's general were included in the survey. These hospitals must also have six or more beds staffed for patient use. The 2010 NHAMCS hospital sample frame was constructed from the products of SDI Health's "Healthcare Market Index," which was updated July 15, 2006, and its "Hospital Market Profiling Solution, Second Quarter, 2006" (12). These products were formerly known as the SMG Hospital Market Database.

In 2010, the sample consisted of 488 hospitals, of which 74 were out-of-scope (ineligible) because they went out of business or otherwise failed to meet the criteria for the NHAMCS universe. Of the 414 in-scope (eligible) hospitals, 275 had eligible ambulatory surgery locations. Of these, 227 participated, yielding an unweighted hospital ambulatory surgery response rate of 82.6% and a weighted response rate of 90.9%. All of the 321 ambulatory surgery locations within the 227 participating hospitals were selected for sampling, and 281 of these fully or adequately responded [at least one-half of the number of expected patient record forms (PRFs) were completed]. The resulting hospital ambulatory surgery location sample response rate was 87.5% unweighted, and 86.9% weighted. The overall hospital response rate was 72.2% unweighted and 79.0% weighted. In all, 18,469 PRFs for ambulatory surgery visits were submitted by hospitals.

The ASCs that qualified for inclusion in the 2010 NHAMCS (the universe) only included facilities in the 2006 NSAS sample. This sample was drawn in 2005 from a universe consisting of facilities listed in the 2005 Verispan (later called SDI Health and then IMS Health) Freestanding Outpatient Surgery Center Database (13) or the Centers for Medicare & Medicaid Services' (CMS) Medicare Provider of Services file (14). Using both of these sources resulted in a list of facilities that were regulated or licensed by the states and those certified by CMS for Medicare participation. More details about the 2006 NSAS sample have been published elsewhere (2). Selection of the 2010 ASC sample began with the NSAS 2006 stratified list sample of 472 FSASCs, which had strata defined by four geographic regions and 17 facility specialty groups. Seventy-four facilities were out-of-scope, leaving 398 facilities from which to select the 2010 NHAMCS ASC sample. To the extent possible, the ASC sample was selected from the NHAMCS geographic sampling units. The 17 specialty group strata used in the 2006 NSAS sample were collapsed into 5 strata (ophthalmic, gastrointestinal, multispecialty, general, and other).

All of the in-scope 2006 NSAS sample facilities located within the NHAMCS geographic sampling units were selected, yielding 216 facilities. To achieve the desired 246 facilities, a stratified list sample of 30 facilities was drawn from the remaining in-scope 2006 NSAS sample facilities that were located outside of the NHAMCS geographic sampling units. Strata were defined by the four regions and the five collapsed surgery specialty groups.

There were 149 in-scope (eligible) ASCs and, of this number, 109 responded to the survey for an unweighted response rate of 73.2% and a weighted response rate of 70.2%. In all, 8,492 PRFs were submitted for ASCs.

The overall response rate for hospitals combined with ASCs was 72.2% unweighted and 79.0% weighted.

The combined number of PRFs from both of these settings was 26,961.

Facilities were selected using a multistage probability design, with facilities having varying selection probabilities. Patient visits to ASCs and to locations in the hospital where ambulatory surgery was provided were selected using systematic random sampling procedures.

Within each sampled hospital, a sample of ambulatory surgery visits was selected from all of the ambulatory surgery locations identified by hospital staff. These locations included main or general operating rooms; dedicated ambulatory surgery units; cardiac catheterization laboratories; and rooms for endoscopy, laparoscopy, laser procedures, and pain block. Locations within hospitals dedicated exclusively to abortion, dentistry, podiatry, family planning, birthing, or small procedures were excluded, but these procedures were included if performed at in-scope locations. In ASCs with in-scope specialties, all visits were sampled. Facilities specializing in abortion, dentistry, podiatry, family planning, birthing, or small procedures were excluded, but these procedures were included if performed at in-scope ASCs.

To minimize response burden for hospitals and ASCs, the samples were divided into 16 nationally representative panels, and those panels were randomly ordered for rotation over reporting periods of 4 weeks each. Within the reporting periods, patient visits were systematically selected. The visit lists could be sign-in sheets or appointment lists. The total targeted number of ambulatory surgery visit forms to be completed in each hospital and in each ASC was 100. In facilities or hospitals with volumes higher than these desired figures, visits were sampled by a systematic procedure that selects every *n*th visit after a random start. Visit sampling rates were determined from the expected number of patients to be seen during the reporting period and the desired number of completed PRFs.

Data collection

Medical record abstraction was performed by facility staff or U.S. Census Bureau personnel acting on behalf of NCHS. A PRF for each sampled visit was completed. A visit is defined as a direct personal exchange between a physician or a staff member operating under a physician's direction, for the purpose of seeking ambulatory surgery. Visits solely for administrative purposes and visits in which no medical care was provided are out-of-scope.

The PRF contains items relating to the personal characteristics of the patients, such as age, sex, race and ethnicity, and administrative items, such as the date of the procedure, expected source(s) of payment, and discharge disposition. Medical information collected includes provider of anesthesia and type of anesthesia, length of time in both the operating room and in surgery, symptoms present during or after the procedure, and up to five diagnoses and seven procedures, which were coded according to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM) (15). Information on up to 12 new or continuing prescription and over-the-counter drugs ordered, supplied, or administered during the visit or at discharge was also collected, and these drugs were coded using Multum Lexicon (16), a proprietary drug classification system used by NCHS.

Limitations of NHAMCS Ambulatory Surgery Data

Limited resources did not permit updating the ASC frame for the 2010 NHAMCS, so the NSAS 2006 sample, based on ASCs in existence in 2005, was used. Based on annual data on the number of Medicare-certified ASCs from CMS, the increase in the number of these facilities was taken into account in the calculation of NHAMCS ASC survey weights. The visit total related to the increase in the number of ASCs was also accounted for in the weights, but any possible change in the number of visits per ASC was not accounted for because no data were available on the number of visits to ASCs over time. Final weighting is described in more detail elsewhere (11).

Based on the assumption that the characteristics of ambulatory surgery visits probably do not vary with facility age, the sample should enable the measurement of 2010 characteristics (if not numbers) of ambulatory visits. To the extent that the ASCs that existed in 2005 were different from those in existence in 2010, these differences would not have been fully captured by the 2010 NHAMCS (17).

Due to limited resources, the sample sizes for hospitals and for ASCs for the NHAMCS ambulatory surgery component were only about one-half of what they were for the 2006 NSAS, so the most recent estimates have larger standard errors. This makes it more difficult for differences to achieve statistical significance.

Until 2008, hospital ambulatory surgery was included under Medicare's HBASC payment category. Beginning in 2008, Medicare discontinued its use of this category and instead began paying for hospital ambulatory surgery as part of hospital outpatient department services. Hospitals also dropped the HBASC designation and, in some hospitals, this change led to a greater dispersion of ambulatory surgery procedures throughout the hospitals, including to various parts of the outpatient departments and locations within medical clinics.

Some hospitals had difficulty identifying all of the locations in the hospital where in-scope procedures were performed, especially in the first year of NHAMCS ambulatory surgery data collection (2009). This same year, after the problems became apparent, U.S. Census Bureau and NCHS staff provided additional information to field staff about how to identify locations in the hospital that were in-scope and out-of-scope for the ambulatory surgery component of NHAMCS. More formal training material on this point was provided in a 2010 training CD that was sent to all field staff. These efforts are believed to have corrected this problem. However, due to these issues, it is likely that some in-scope procedures were undercounted in 2009 and 2010.

A number of changes occurred in the health care system during 2008–2010 that could have affected the amount

of ambulatory surgery care that was provided in settings covered by this report and the amount provided in out-of-scope settings (e.g., physicians' offices). More information about the difficulties of gathering and comparing data on ambulatory surgery from these two time periods and surveys is available (18).

Results

Ambulatory surgery procedure and visit overview

- In 2010, 28.6 million ambulatory surgery visits to hospitals and ASCs occurred (Table 1). During these visits, an estimated 48.3 million surgical and nonsurgical procedures were performed (Table 2).
- An estimated 25.7 million (53%) ambulatory surgery procedures were performed in hospitals and 22.5 million (47%) were performed in ASCs (Table A).
- Private insurance was the expected payment source for 51% of the visits for ambulatory surgery, Medicare payment was expected for 31%, and Medicaid for 8%. Only 4% were self-pay (Figure 1).
- Ninety-five percent of the visits with a specified discharge disposition had a routine discharge, generally to the patient's home. Patients were admitted to the hospital as inpatients during only 2% of these visits (Table B).

Ambulatory surgery procedures, by sex and age

- For both males and females, 39% of procedures were performed on those aged 45–64 (Figure 2).
- For females, about 24% of procedures were performed on those aged 15–44 compared with 18% for males, whereas the percentage of procedures performed on those under 15 was lower for females than for males (4% compared with 9%).
- About 19% of procedures were performed on those aged 65–74, with about 14% performed on those aged 75 and over.

Table A. Ambulatory surgery procedures and visits to hospitals and ambulatory surgery centers: United States, 2010

Ambulatory surgery utilization	Estimate	Standard error
Procedures (millions)	48.3	4.3
in hospitals	25.7	2.6
in ASCs	22.5	3.3
Visits (millions)	28.6	2.4
in hospitals	15.7	1.6
in ASCs	12.9	1.8

NOTE: ASC is ambulatory surgery center.

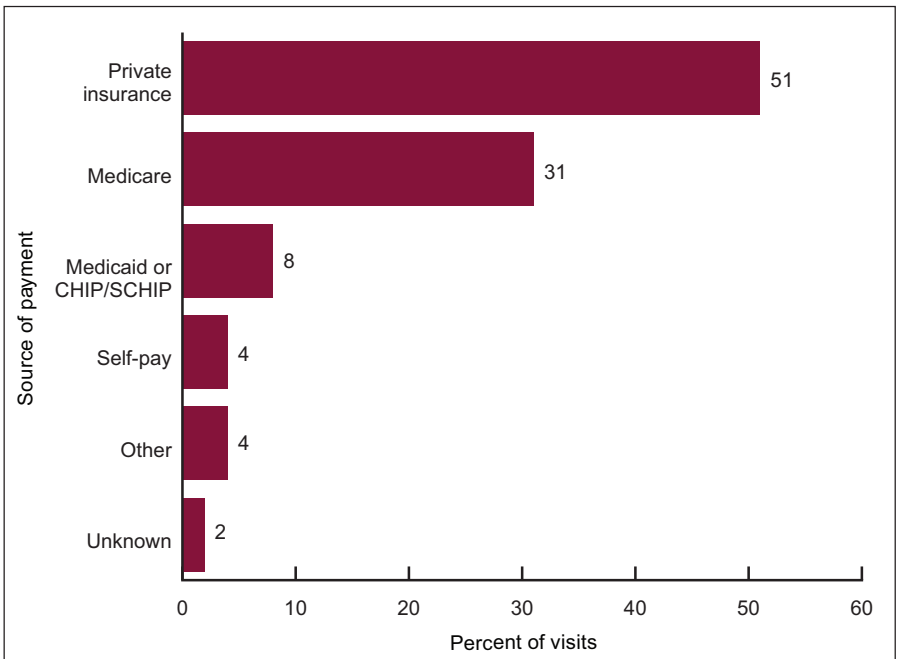
SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Table B. Percent distribution of ambulatory surgery visits in hospitals and ambulatory surgery centers, by discharge disposition: United States, 2010

Discharge disposition	Percent of visits
Routine discharge[1]	95
Observation status[2]	2
Admission to hospital as inpatient	2
Other[3]	1
Total[4]	100

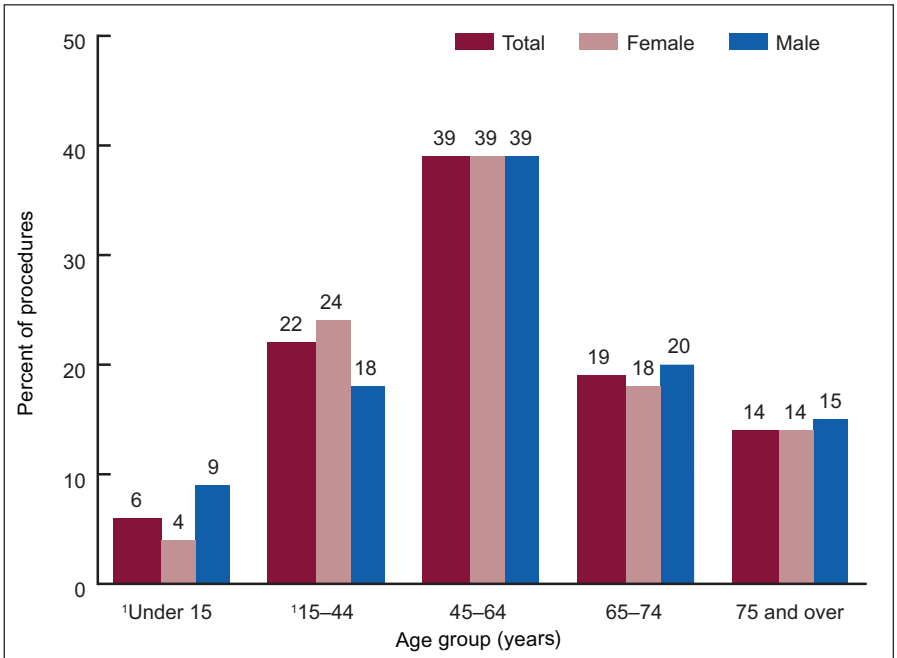
[1]Discharge to customary residence, generally home.
[2]Discharge for further observation without being admitted to a hospital.
[3]Includes discharge to postsurgical or recovery care facility, referral to emergency department, surgery terminated, and other options.
[4]Excludes 1.2 million of the 28.6 million total visits with an unknown discharge disposition.

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.



NOTE: CHIP is Children's Health Insurance Program and SCHIP is State Children's Health Insurance Program.
SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Figure 1. Percent distribution of ambulatory surgery visits in hospitals and ambulatory surgery centers, by principal expected source of payment: United States, 2010



[1]Differences between females and males in these age groups are statistically significant.
NOTES: Numbers may not add to totals because of rounding. See Table 2 in this report (NHSR 102, "Ambulatory Surgery Data From Hospitals and Ambulatory Surgery Centers: United States, 2010") for standard errors.
SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Figure 2. Percent distribution of ambulatory surgery procedures in hospitals and ambulatory surgery centers, by age and sex: United States, 2010

Types of procedures

Seventy percent of the 48.3 million ambulatory surgery procedures were included in the following clinical categories: operations on the digestive system (10 million or 21%), operations on the eye (7.9 million or 16%), operations on the musculoskeletal system (7.1 million or 15%), operations on the integumentary system (4.3 million or 9%), and operations on the nervous system (4.2 million or 9%) (Table 3). These procedure categories made up 72% of procedures performed on females and 67% of those performed on males. Within the above-mentioned categories, data on procedures performed more than 1 million times are presented below.

Under operations on the digestive system, endoscopy of large intestine—which included colonoscopies—was performed 4.0 million times, and endoscopy of small intestine was performed 2.2 million times. Endoscopic polypectomy of large intestine was performed an estimated 1.1 million times.

Eye operations included extraction of lens, performed 2.9 million times; insertion of lens, performed 2.6 million times for cataracts; and operations on eyelids, performed 1.0 million times.

Musculoskeletal procedures included operations on muscle, tendon, fascia, and bursa (1.3 million).

Operations on the integumentary system included excision or destruction of lesion or tissue of skin and subcutaneous tissue (1.2 million).

Operations on the nervous system included injection of agent into spinal canal (2.9 million), including injections for pain relief.

Duration of surgery

The average time in the operating room for ambulatory surgery was almost 1 hour (57 minutes). On average, about one-half of this time (33 minutes) was spent in surgery. Postoperative care averaged 70 minutes. Time spent in the operating room, surgery, and receiving postoperative care were all significantly longer for ambulatory surgery performed in hospitals compared with ASCs (Table C).

The average surgical times for selected ambulatory surgery procedures are shown in Table D. Endoscopies averaged 14 minutes, while endoscopic polypectomy of the large intestine averaged 21 minutes. For cataract surgery, extraction or insertion of lens (often done together) averaged 10 minutes, and operations on the eyelids averaged 23 minutes. Arthroscopy of the knee averaged 32 minutes.

Discussion

Keeping in mind the limitations that should be taken into account when comparing 2006 NSAS data and 2010 NHAMCS ambulatory surgery data, the 53.3 million ambulatory surgery procedures estimated using 2006 NSAS data were compared with the 48.3 million ambulatory surgery procedures estimated using 2010 NHAMCS data. The difference between these two figures was not statistically significant. A significant decrease of 18% (from 34.7 to 28.6 million) was seen in the number of ambulatory surgery visits during this same time period. It had been expected based upon the limited data that were available and on projections from past trends, that there would have been an increase in the numbers of both ambulatory surgery visits and procedures (9,10,19).

One reason for these findings could be an undercount in NHAMCS in 2010. Another reason that ambulatory surgery visit estimates could have decreased and ambulatory surgery procedures remained steady, could be the deep economic recession that began in 2007. By 2010, when NHAMCS began gathering ambulatory surgery data in both hospitals and ASCs, the economy had not fully recovered. The rate of unemployment and the number of people who did not have health insurance were higher in 2010 compared with 2006, and both of these factors could have affected patients' use of ambulatory surgery (20,21). Even for those who continued to have health insurance, increased out-of-pocket costs (higher deductibles and coinsurance payments) may have contributed to a decrease in the number of visits for ambulatory surgery (22).

An examination of various data sources, including Medicare, the American Hospital Association, and NHAMCS, was undertaken to evaluate if other national

Table C. Distribution of times for surgical visits, by ambulatory surgery facility type: United States, 2010

Calculated time of ambulatory surgical visit	Hospital		Ambulatory surgery center		All facilities	
	Average time (minutes)	Standard error	Average time (minutes)	Standard error	Average time (minutes)	Standard error
Operating room[1]	63	1.9	50	3.7	57	2.2
Surgical[2]	37	1.5	29	3.2	33	1.7
Postoperative care[3]	89	2.9	51	3.8	70	2.6

[1]Calculated by subtracting the time when the patient entered the operating room from the time the patient left the operating room.
[2]Calculated by subtracting the time the surgery began from the time the surgery ended. Surgical time typically extends from when the first incision is made until the wound is closed.
[3]Calculated by subtracting the time when the patient entered postoperative care from the time the patient left postoperative care.

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

data sources reached similar conclusions about trends in ambulatory surgery during 2006–2010 (19). This analysis revealed that the only nationally representative data during this time period were from the 2006 NSAS and the 2010 NHAMCS ambulatory surgery component. Medicare data on the number of certified ASCs over time existed, but only limited Medicare ambulatory surgery utilization and expenditure data were available, and almost all of it was from ASCs only and did not include data on ambulatory surgery in hospitals. Even so, Medicare utilization and expenditure data could not have been used to generalize to the entire population because Medicare only covers those aged 65 and over and people with disabilities. Close to 70% of ambulatory surgery procedures were paid for by sources other than Medicare.

Ambulatory Surgery Data

The 2010 NHAMCS ambulatory surgery data used for this report have been released in a public-use file available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NHAMCS. The data base documentation for this file is available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHAMCS.

Among the options being explored for future data collection are the use of both claims data and electronic health record data.

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Table D. Average surgical duration for selected procedures: United States, 2010

Selected procedure[1]	ICD–9–CM codes	Average surgical time (minutes)[2]	Standard error
Endoscopy (including colonoscopy)	45.11–45.14, 45.16, 45.21–45.25	14	0.87
Endoscopic polypectomy of large intestine	45.42	21	0.97
Extraction or insertion of lens (cataracts)	13.1–13.7	10	1.20
Operations on eyelids	08	23	3.56
Arthroscopy of knee	80.26	32	2.69

[1]Times were counted only for patients who had each of these selected procedures and no others during their ambulatory surgery visit.
[2]Calculated by subtracting the time surgery began from the time surgery ended. Surgical time typically extends from when the first incision is made until the wound is closed.

NOTE: Procedure categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM).

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

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Table 1. Number and percent distribution of ambulatory surgery visits, by age and sex: United States, 2010

Age group (years)	Both sexes		Female		Male	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
	Number (thousands)					
Total	28,588	2424	16,481	1,365	12,108	1,084
Under 15	1,812	302	712	122	1,100	184
15–44	6,426	619	4,201	411	2,225	223
45–64	10,911	1,010	6,256	555	4,659	474
65–74	5,301	446	2,951	242	2,350	213
75 and over	4,139	360	2,365	205	1,774	167
	Percent distribution					
Total	100	...	100	...	100	...
Under 15	6	0.86	4	0.62	9	1.21
15–44	23	0.94	26	1.06	18	0.91
45–64	38	0.89	38	0.84	39	1.16
65–74	19	0.67	18	0.69	19	0.84
75 and over	14	0.69	14	0.72	15	0.83

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Table 2. Number and percent distribution of ambulatory surgery procedures, by age and sex: United States, 2010

Age group (years)	Both sexes		Female		Male	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
			Number (thousands)			
Total	48,263	4,253	27,595	2,373	20,669	1,932
Under 15	2,916	500	1,118	199	1,798	310
15–44	10,478	1,014	6,708	631	3,770	418
45–64	18,783	1,876	10,789	1,060	7,994	857
65–74	9,153	802	5,053	423	4,100	403
75 and over	6,933	619	3,926	356	3,007	285
			Percent distribution			
Total	100	...	100	...	100	...
Under 15	6	0.82	4	0.57	9	1.20
15–44	22	0.89	24	0.92	18	1.10
45–64	39	1.02	39	1.05	39	1.23
65–74	19	0.79	18	0.78	20	1.00
75 and over	14	0.80	14	0.84	15	0.89

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Table 3. Number of ambulatory surgery procedures in hospitals and ambulatory surgery centers, by procedure category, sex, and age: United States, 2010

Procedure category and ICD–9–CM code	Total	Sex		Age group (years)				
		Female	Male	Under 15	15–44	45–64	65–74	75 and over
	Number (thousands)							
All procedures	48,263	27,595	20,669	2,916	10,478	18,783	9,153	6,933
Operations on the nervous system (01–05,17.61)	4,226	2,385	1,841	*	1,002	1,981	631	590
Injection of agent into spinal canal (03.91–03.92)	2,918	1,588	1,330	*	712	1,313	437	453
Release of carpal tunnel (04.43)	444	266	178	–	66	240	80	*58
Operations on the eye (08–16)	7,880	4,622	3,258	93	321	2,122	2,697	2,646
Operations on eyelids (08)	1,021	651	371	*	*	482	276	*
Extraction of lens (13.1–13.6)	2,861	1,705	1,156	*	*	584	1,081	1,173
Insertion of prosthetic lens (pseudophakos) (13.7)	2,553	1,526	1,027	*	*	511	951	1,043
Operations on the ear (18–20)	1,054	442	612	847	72	58	*	*
Myringotomy with insertion of tube (20.01)	754	323	431	699	*	*	*	*
Operations on the nose, mouth, and pharynx (21–29)	2,407	1,117	1,290	903	689	575	166	*75
Incision, excision and destruction of nose and lesion of nose (21.1,21.3–21.4,21.6)	302	152	*	*	126	*	*	*
Turbinectomy (21.6)	190	78	112	*	106	*40	*	*
Repair and plastic operations on the nose (21.8)	393	179	214	*	175	135	*	*
Operations on nasal sinuses (22)	433	192	241	*	164	*	*	*
Tonsillectomy with or without adenoidectomy (28.2–28.3)	399	205	193	289	102	*	*	*
Adenoidectomy without tonsillectomy (28.6)	72	*32	*40	69	*	*	–	–
Operations on the respiratory system (30–34)	282	141	141	*	*40	86	81	*37
Bronchoscopy with or without biopsy (33.21–33.24,33.27,33.71–33.73,33.78–33.79)	106	*55	51	*	*	*30	*	*
Operations on the cardiovascular system (35–39,00.40–00.49,00.50–00.55,00.57,00.61–00.66,17.51–17.52,17.71)	1,072	519	553	*	88	369	356	245
Cardiac catheterization (37.21–37.23)	339	136	203	*	*	126	113	*
Operations on the digestive system (42–54,17.1–17.3,17.63)	10,045	5,418	4,627	*	1,826	4,759	2,044	1,198
Dilation of esophagus (42.92)	172	106	66	*	*	72	36	*38
Endoscopy of small intestine with or without biopsy (45.11–45.14,45.16)	2,172	1,312	861	*	468	936	387	325
Endoscopy of large intestine with or without biopsy (45.21–45.25)	3,987	2,202	1,785	*	474	2,132	916	431
Endoscopic polypectomy of large intestine (45.42)	1,060	485	575	*	*	520	354	158
Laparoscopic cholecystectomy (51.23)	436	325	111	*	196	162	*	*
Hernia repair (53.0–53.9,17.1–17.2)	777	196	581	*	178	355	83	88
Repair of inguinal hernia (53.0–53.1,17.1–17.2)	449	*52	*	*	82	198	54	66
Operations on the urinary system (55–59)	1,349	590	759	*67	311	456	294	220
Cystoscopy with or without biopsy (57.31–57.33)	479	219	260	*	128	155	104	82
Operations on the male genital organs (60–64)	525	–	525	*	98	131	89	*54
Operations on the female genital organs (65–71)	1,766	1,766	–	*	1,093	527	91	*
Hysteroscopy (68.12)	198	198	–	*	83	83	*	*
Dilation and curettage of uterus (69.0)	328	328	–	–	172	116	*	*

See footnotes at end of table.

Table 3. Number of ambulatory surgery procedures in hospitals and ambulatory surgery centers, by procedure category, sex, and age: United States, 2010—Con.

Procedure category and ICD–9–CM code	Total	Sex		Age group (years)				
		Female	Male	Under 15	15–44	45–64	65–74	75 and over
	Number (thousands)							
Operations on the musculoskeletal system (76–84,00.70–00.77,00.80–00.87)	7,076	3,802	3,275	173	2,114	3,456	885	448
Partial excision of bone (76.2–76.3,77.6–77.8)	241	132	109	*	49	141	*29	*
Reduction of fracture (76.7,79.0–79.3)	380	153	227	*52	160	111	*	*
Injection of therapeutic substance into joint or ligament (76.96,81.92)	267	183	84	*	*	127	*48	*
Removal of implanted devices from bone (76.97,78.6)	195	111	83	*	64	87	*	*
Excision and repair of bunion and other toe deformities (77.5)	379	327	*52	*	120	165	*55	*
Arthroscopy of knee (80.26)	692	332	359	*	254	333	80	*
Excision of semilunar cartilage of knee (80.6)	759	374	385	*	196	435	105	*
Replacement or other repair of knee (81.42–81.47,81.54–81.55,00.80–00.84)	571	285	286	*	201	*	*	*
Operations on muscle, tendon, fascia and bursa (82–83)	1,274	636	637	*	319	635	196	88
Operations on the integumentary system (85–86)	4,340	3,405	935	131	1,497	1,767	566	380
Biopsy of breast (85.11–85.12)	*	*	*	–	*	86	*	*
Local excision of lesion of breast (lumpectomy) (85.21)	268	*	*	*	64	151	*40	*
Excision or destruction of lesion or tissue of skin and subcutaneous tissue (86.2–86.4)	1,219	734	485	*	323	449	182	171
Miscellaneous diagnostic and therapeutic procedures and new technologies (87–99,00.01–00.03,00.09–00.19,00.21–00.25,00.28–00.29,00.31–00.35,00.39, 00.56, 00.58–00.59, 00.67–00.69,17.62,17.69,17.70,38.24,38.25,00.91–00.94,17.4)	5,892	3,102	2,790	228	1,225	2,358	1,158	923
Operations on the endocrine system, on the hemic and lymphatic system, and obstetrical procedures (06–07,40–41,72–75)	348	285	63	*	104	135	*62	32

* Figure does not meet standards of reliability or precision. An asterisk with a number indicates that the estimate is based on a relatively small number of cases, and while reliable, should be used with caution.
– Quantity zero.

NOTE: Procedure categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM).

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Table 4. Standard errors of ambulatory surgery procedures in hospitals and ambulatory surgery centers, by procedure category, sex, and age: United States, 2010

Procedure category and ICD–9–CM code	Total	Sex		Age group (years)				
		Female	Male	Under 15	15–44	45–64	65–74	75 and over
	Standard error							
All procedures	4,040	2,250	1,844	492	972	1,806	765	591
Operations on the nervous system (01–05,17.61)	703	398	316	*	240	377	90	92
Injection of agent into spinal canal (03.91–03.92)	557	305	265	*	208	297	74	82
Release of carpal tunnel (04.43)	102	61	45	–	14	61	24	*16
Operations on the eye (08–16)	1,005	569	454	21	80	318	322	392
Operations on eyelids (08)	203	130	100	*	*	106	69	*
Extraction of lens (13.1–13.6)	370	217	159	*	*	77	133	179
Insertion of prosthetic lens (pseudophakos) (13.7)	356	213	147	*	*	76	124	163
Operations on the ear (18–20)	188	107	94	184	12	16	*	*
Myringotomy with insertion of tube (20.01)	161	91	83	152	*	*	*	*
Operations on the nose, mouth, and pharynx (21–29)	312	155	173	194	88	101	35	*17
Incision, excision and destruction of nose and lesion of nose (21.1,21.3–21.4,21.6)	68	*	25	*	22	*	*	*
Turbinectomy (21.6)	31	18	20	*	19	*11	*	*
Repair and plastic operations on the nose (21.8)	78	*	32	*	35	29	*	*
Operations on nasal sinuses (22)	92	48	59	*	35	*	*	*
Tonsillectomy with or without adenoidectomy (28.2–28.3)	65	36	38	53	16	*	*	*
Adenoidectomy without tonsillectomy (28.6)	15	*8	*10	14	*	*	–	*
Operations on the respiratory system (30–34)	38	22	24	*	*11	17	17	*9
Bronchoscopy with or without biopsy (33.21–33.24,33.27,33.71–33.73,33.78–33.79)	18	*12	11	*	*	*8	*	*
Operations on the cardiovascular system (35–39,00.40–00.49,00.50–00.55,00.57,00.61–00.66,17.51–17.52,17.71)	197	98	109	*	18	62	105	53
Cardiac catheterization (37.21–37.23)	88	37	54	*	*	27	*	*
Operations on the digestive system (42–54,17.1–17.3,17.63)	1,148	608	555	*	196	599	278	144
Dilation of esophagus (42.92)	32	23	14	*	*	15	*9	*11
Endoscopy of small intestine with or without biopsy (45.11–45.14,45.16)	290	171	128	*	69	144	60	47
Endoscopy of large intestine with or without biopsy (45.21–45.25)	560	292	280	*	82	319	132	83
Endoscopic polypectomy of large intestine (45.42)	195	93	108	*	*	106	77	35
Laparoscopic cholecystectomy (51.23)	64	48	20	*	27	31	*	*
Hernia repair (53.0–53.9,17.1–17.2)	113	31	89	*	30	63	14	18
Repair of inguinal hernia (53.0–53.1,17.1–17.2)	72	*	61	*	19	37	11	16
Operations on the urinary system (55–59)	184	79	114	*20	61	67	49	33
Cystoscopy with or without biopsy (57.31–57.33)	75	38	44	*	31	25	21	15
Operations on the male genital organs (60–64)	106	–	106	*	16	*	*	*15
Operations on the female genital organs (65–71)	223	223	–	*	145	81	19	*
Hysteroscopy (68.12)	33	33	–	*	17	17	*	*
Dilation and curettage of uterus (69.0)	42	42	–	–	23	21	*	*

See footnotes at end of table.

Table 4. Standard errors of ambulatory surgery procedures in hospitals and ambulatory surgery centers, by procedure category, sex, and age: United States, 2010—Con.

Procedure category and ICD–9–CM code	Total	Sex		Age group (years)				
		Female	Male	Under 15	15–44	45–64	65–74	75 and over
	Standard error							
Operations on the musculoskeletal system (76–84,00.70–00.77,00.80–00.87)	1,156	667	501	36	305	685	144	77
Partial excision of bone (76.2–76.3,77.6–77.8)	35	27	18	*	9	26	*7	*
Reduction of fracture (76.7,79.0–79.3)	50	19	36	*10	24	16	*	*
Injection of therapeutic substance into joint or ligament (76.96,81.92)	58	43	20	*	*	32	*14	*
Removal of implanted devices from bone (76.97,78.6)	37	27	15	*	16	22	*	*
Excision and repair of bunion and other toe deformities (77.5)	72	69	*13	*	28	41	*15	*
Arthroscopy of knee (80.26)	168	80	91	*	47	100	22	*
Excision of semilunar cartilage of knee (80.6)	177	79	103	*	39	124	26	*
Replacement or other repair of knee (81.42–81.47,81.54–81.55,00.80–00.84)	141	80	66	*	36	*	*	*
Operations on muscle, tendon, fascia and bursa (82–83)	201	113	96	*	62	102	44	19
Operations on the integumentary system (85–86)	496	423	111	32	217	254	65	51
Biopsy of breast (85.11–85.12)	*	*	*	–	*	21	*	*
Local excision of lesion of breast (lumpectomy) (85.21)	39	39	*	*	15	26	*10	*
Excision or destruction of lesion or tissue of skin and subcutaneous tissue (86.2–86.4)	129	103	56	*	58	66	37	48
Miscellaneous diagnostic and therapeutic procedures and new technologies (87–99,00.01–00.03,00.09–00.19,00.21–00.25, 00.28–00.29,00.31–00.35,00.39,00.56, 00.58–00.59, 00.67–00.69,17.62,17.69,17.70,38.24,38.25,00.91–00.94,17.4)	750	376	385	50	186	327	183	123
Operations on the endocrine system, on the hemic and lymphatic system, and obstetrical procedures (06–07,40–41,72–75)	50	45	14	*	21	25	*13	*9

* Figure does not meet standards of reliability or precision. An asterisk with a number indicates that the estimate is based on a relatively small number of cases, and while reliable, should be used with caution.
– Quantity zero.

NOTE: Procedure categories and code numbers are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM).

SOURCE: NCHS, National Hospital Ambulatory Medical Care Survey, 2010.

Technical Notes

Data processing and medical coding were performed by SRA International, Inc., Durham, N.C. Editing and estimation were completed by the National Center for Health Statistics.

Estimation

Because of the complex multistage design of the National Hospital Ambulatory Medical Care Survey (NHAMCS), the survey data must be inflated or weighted to produce national estimates. The estimation procedure produces essentially unbiased national estimates and has three basic components: (a) inflation by reciprocals of the probabilities of sample selection, (b) adjustment for nonresponse, and (c) population weighting ratio adjustments. These three components of the final weight are described in more detail elsewhere (11).

Because NHAMCS ambulatory surgery data are collected from a sample of visits, persons with multiple visits during the year may be sampled more than once. Therefore, estimates are of the number of visits to, or procedures performed in, hospital ambulatory surgery locations and ASCs, and not the number of persons served by these facilities.

Standard errors

The standard error is primarily a measure of sampling variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. Estimates of the sampling variability for this report were calculated using Taylor approximations in SUDAAN, which take into account the complex sample design of NHAMCS. A description of the software and the approach it uses has been published elsewhere (23). The standard errors of estimates presented in the tables of this report are included, either as part of the table or, in the case of Table 3, in a separate table (Table 4).

Data analyses were performed using the statistical packages SAS, version 9.3 (SAS Institute, Cary, N.C.) and SAS-callable SUDAAN, version 10.0 (RTI International, Research Triangle Park, N.C.).

Testing of significance and rounding

Differences in the estimates were evaluated using a two-tailed *t* test ($p < 0.05$). Terms such as "higher than" and "less than" indicate that differences are statistically significant. Terms such as "similar" or "no difference" indicate that no statistically significant difference exists between the estimates being compared. A lack of comment on the difference between any two estimates does not mean that the difference was tested and found not to be significant.

Estimates of counts in the tables have been rounded to the nearest thousand. Therefore, estimates within tables do not always add to the totals. Rates and percentages were calculated from unrounded figures and may not precisely agree with rates and percentages calculated from rounded data.

Nonsampling errors

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include reporting and processing errors as well as biases due to nonresponse and incomplete response. The magnitude of the nonsampling errors cannot be computed. However, efforts were made to keep these errors to a minimum by building procedures into the operation of the survey. To eliminate ambiguities and encourage uniform reporting, attention was given to the phrasing of items, terms, and definitions.

Quality control procedures and consistency and edit checks reduced errors in data coding and processing. A 5% quality control sample of survey records was independently keyed and coded. Item nonresponse rates were generally low, but levels of nonresponse did vary among different variables. The data shown in this report are based upon items with low nonresponse.

Use of tables

The estimates presented in this report are based on a sample, and therefore may differ from the number that would be obtained if a complete census had been taken. The estimates shown in this report include surgical procedures, such as tonsillectomy; diagnostic procedures, such as ultrasound; and other therapeutic procedures, such as injection or infusion of cancer chemotherapeutic substance.

In 2010, up to seven procedures were coded for each visit. All listed procedures include all occurrences of the procedure coded regardless of the order on the medical record.

The procedure data in this report are presented by chapter of the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). In the Results section, selected chapters with large numbers of procedures are discussed along with specific categories of procedures performed 1 million or more times. The latter categories are included to give some examples of what was included under the chapters.

Table 3 presents data using ICD–9–CM codes for chapters of procedures as well as selected procedures within these chapters. The procedures selected for inclusion in Table 3 were those with relatively large frequencies, or because there was a clinical, epidemiological, or health services interest in them.

Data from the 2010 NHAMCS showed that an estimated 479,000 ambulatory surgery visits ended with an admission to the hospital as an inpatient. The visits made by these patients were included in this report [as they were in the 2006 National Survey of Ambulatory Surgery (NSAS) Report] (2), and the ambulatory surgery procedures they received were included in the estimates for all listed procedures.

Estimates were not presented in this report if they were based on fewer than 30 cases in the sample data or if the relative standard error (RSE) was greater than 30%. In these cases, only an asterisk (*) appears in the tables. The RSE of an estimate is obtained by dividing the standard error by the estimate itself. The result is then expressed as a percentage of the estimate. Estimates based on 30 to 59 cases include an asterisk because, while their RSE is less than 30%, these estimates are based on a relatively small number of cases and should be used with caution.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road, Room 4551, MS P08
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ASCA Ambulatory Surgery Center Association

Ambulatory Surgery Centers

A Positive Trend in Health Care

Ambulatory surgery centers (ASCs) are health care facilities that offer patients the convenience of having surgeries and procedures performed safely outside the hospital setting. Since their inception more than four decades ago, ASCs have demonstrated an exceptional ability to improve quality and customer service while simultaneously reducing costs. At a time when most developments in health care services and technology typically come with a higher price tag, ASCs stand out as an exception to the rule.

A TRANSFORMATIVE MODEL FOR SURGICAL SERVICES

As our nation struggles with how to improve a troubled and costly health care system, the experience of ASCs is a great example of a successful transformation in health care delivery.

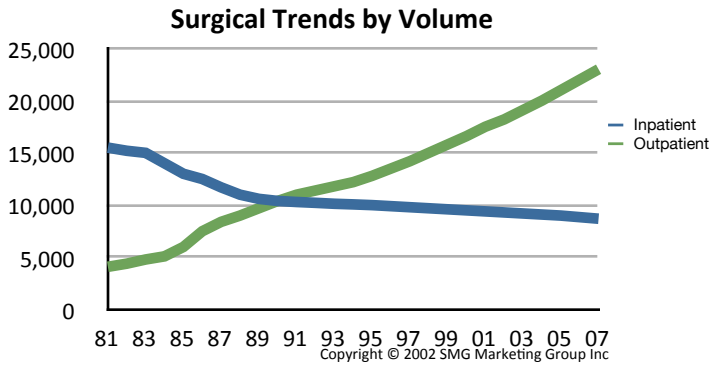
Forty years ago, virtually all surgery was performed in hospitals. Waits of weeks or months for an appointment were not uncommon, and patients typically spent several days in the hospital and several weeks out of work in recovery. In many countries, surgery is still performed this way, but not in the US.

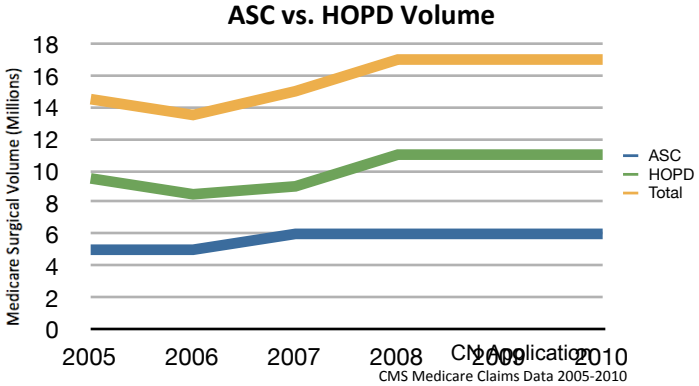
Physicians have taken the lead in the development of ASCs. The first facility was opened in Phoenix, Arizona, in 1970 by two physicians who saw an opportunity to establish a high-quality, cost-effective alternative to inpatient hospital care for surgical services. Faced with frustrations like scheduling delays, limited operating room availability, slow operating room turnover times, and challenges in obtaining new equipment due to hospital budgets and policies, physicians were looking for a better way—and developed it in ASCs.

Today, physicians continue to provide the impetus for the development of new ASCs. By operating in ASCs instead of hospitals, physicians gain increased control over their surgical practices.[1] In the ASC setting, physicians are able to schedule procedures more conveniently, assemble teams of specially trained and highly skilled staff, ensure that the equipment and supplies being used are best suited to their techniques, and design facilities tailored to their specialties and to the specific needs of their patients. Simply stated, physicians are striving for, and have found in ASCs, professional autonomy over their work environment and over the quality of care that has not been available to them in hospitals. These benefits explain why physicians who do not have ownership interest in an ASC (and therefore do not benefit financially from performing procedures in an ASC) choose to work in ASCs in such high numbers.

Given the history of their involvement in making ASCs a reality, it is not surprising that physicians continue to have at least some ownership in virtually all (90%) ASCs. But what is more interesting to note is how many ASCs are jointly owned by local hospitals that now increasingly recognize and embrace the value of the ASC model. According to the most recent data available, hospitals have ownership interest in 21% of all ASCs and 3% are owned entirely by hospitals.[2]

ASCs also add considerable value to the US economy, with a 2009 total nationwide economic impact of $90 billion, including more than $5.8 billion in tax payments. Additionally, ASCs employ the equivalent of approximately 117,700 full-time workers.[3]





ASCs PROVIDE CARE AT SIGNIFICANT COST SAVINGS

Not only are ASCs focused on ensuring that patients have the best surgical experience possible, they also provide cost-effective care that save the government, third party payors and patients money. On average, the Medicare program and its beneficiaries share in more than $2.6 billion in savings each year because the program pays significantly less for procedures performed in ASCs when compared to the rates paid to hospitals for the same procedures. Accordingly, patient co-pays are also significantly lower when care is received in an ASC.

If just half of the eligible surgical procedures moved from hospital outpatient departments to ASCs, Medicare would save an additional $2.4 billion a year or $24 billion over the next 10 years. Likewise, Medicaid and other insurers benefit from lower prices for services performed in the ASC setting.

Currently, Medicare pays ASCs 58% of the amount paid to hospital outpatient departments for performing the same services For example, Medicare pays hospitals $1,670 for performing an outpatient cataract surgery while paying ASCs only $964 for performing the same surgery.

This huge payment disparity is a fairly recent phenomenon. In 2003, Medicare paid hospitals only 16% more, on average, than it paid ASCs. Today, Medicare pays hospitals 72% more than ASCs for outpatient surgery. There is no health or fiscal policy basis for providing ASCs with drastically lower payments than hospital outpatient departments.

In addition, patients typically pay less coinsurance for procedures performed in the ASC than for comparable procedures in the hospital setting. For example, a Medicare beneficiary could pay as much as $496 in coinsurance for a cataract extraction procedure performed in a hospital outpatient department, whereas that same beneficiary's copayment in the ASC would be only $195.

Without the emergence of ASCs as an option for care, health care expenditures would have been tens of billions of dollars higher over the past four decades. Private insurance companies tend to save similarly, which means employers also incur lower health care costs when employees utilize ASC services. For this reason, both employers and insurers have recently been exploring ways to incentivize the movement of patients and procedures to the ASC setting.

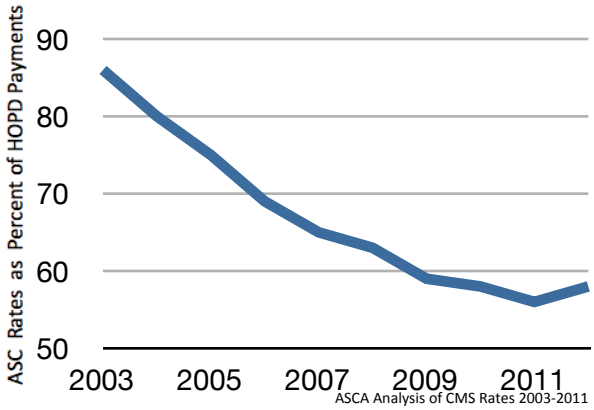
The long-term growth in the number of patients treated in ASCs, and resulting cost savings, is threatened by the widening disparity in reimbursement that ASCs and hospitals receive for the same procedures. In fact, the growing payment differential is creating a market dynamic whereby ASCs are being purchased by hospitals and converted into hospital outpatient departments. Even if an ASC is not physically located next to a hospital, once it is part of a hospital, it can terminate its ASC license and become a unit of the hospital, entitling the hospital to bill for Medicare services provided in the former ASC at the 72% higher hospital outpatient rates.

Cost Comparison:
ASC v. Hospital Outpatient Department

	Patient Cost		Medicare Cost	
	ASC Co-pay	HOPD Co-pay	Total Procedure Cost ASC	Total Procedure Cost HOPD
Cataract	$193	$490	$964	$1,670
Upper GI Endoscopy	$68	$139	$341	$591
Colonoscopy	$76	$186	$378	$655

ASCA Analysis of CMS Rates Effective 1 Jan. 2012

The Gap Between ASC and HOPD Payments Has Widened Significantly

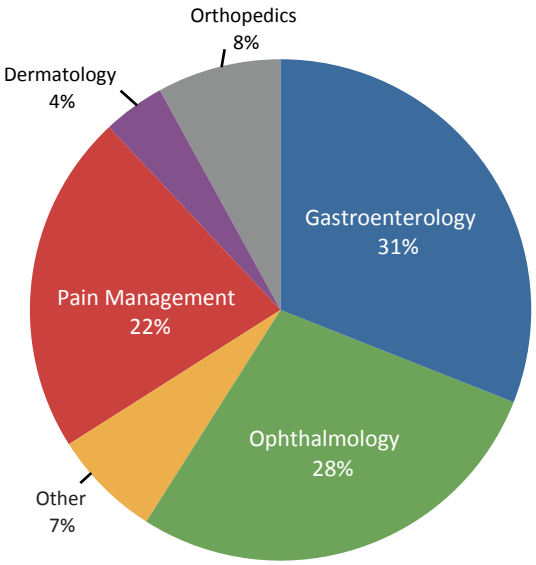


ASCA Analysis of CMS Rates 2003-2011

THE ASC INDUSTRY SUPPORTS DISCLOSURE OF PRICING INFORMATION

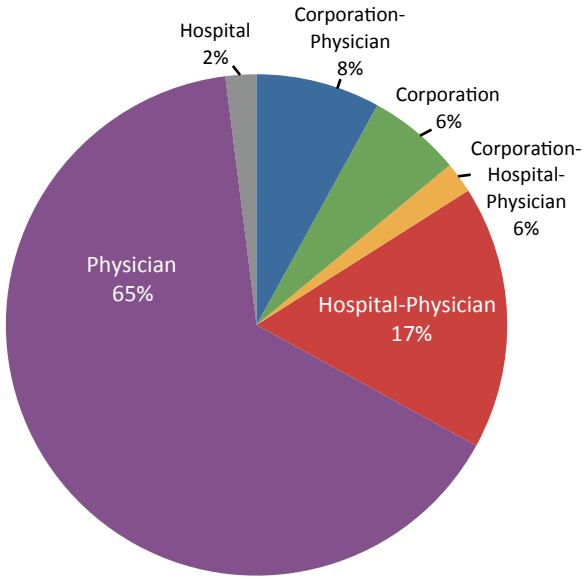
Typically, ASCs make pricing information available to their patients in advance of surgery. The industry is eager to make price transparency a reality, not only for Medicare beneficiaries, but for all patients. To offer maximum benefit to the consumer, these disclosures should outline the total price of the planned surgical procedure and the specific portion for which the patient would be responsible. This will empower health care consumers as they evaluate and compare costs for the same service amongst various health care providers.

Medicare Case Volume by Specialty



ASCA Analysis of CMS Claims Data 2010

ASC Ownership



ASCA's 2011 ASC Employee Salary & Benefits Survey

ASCs = Efficient Quality Care + Convenience + Patient Satisfaction

The ASC health care delivery model enhances patient care by allowing physicians to:

- Focus exclusively on a small number of processes in a single setting, rather than having to rely on a hospital setting that has large-scale demands for space, resources and the attention of management
- Intensify quality control processes since ASCs are focused on a smaller space and a small number of operating rooms, and
- Allow patients to bring concerns directly to the physician operator who has direct knowledge about each patient's case rather than deal with hospital administrators who almost never have detailed knowledge about individual patients or their experiences

Physician ownership also helps reduce frustrating wait-times for patients and allows for maximum specialization and patient–doctor interaction. Unlike large-scale institutions, ASCs

- Provide responsive, non-bureaucratic environments tailored to each individual patient's needs
- Exercise better control over scheduling, so virtually no procedures are delayed or rescheduled due to the kinds of institutional demands that often occur in hospitals (unforeseen emergency room demands)
- Allow physicians to personally guide innovative strategies for governance, leadership and most importantly, quality initiatives

As a result, patients say they have a 92% satisfaction rate with both the care and service they receive from ASCs .[4] Safe and high quality service, ease of scheduling, greater personal attention and lower costs are among the main reasons cited for the growing popularity of ASCs.

ASCs ARE HIGHLY REGULATED TO ENSURE QUALITY AND SAFETY

ASCs are highly regulated by federal and state entities. The safety and quality of care offered in ASCs is evaluated by independent observers through three processes: state licensure, Medicare certification and voluntary accreditation.

Forty three states and the District of Columbia, currently require ASCs to be licensed in order to operate. The remaining seven states have some form of regulatory requirements for ASCs such as Medicare certification or accreditation by an independent accrediting organization. Each state determines the specific requirements ASCs must meet for licensure and most require rigorous initial and ongoing inspection and reporting.

<

All ASCs serving Medicare beneficiaries must be certified by the Medicare program. In order to be certified, an ASC must comply with standards developed by the federal government for the specific purpose of ensuring the safety of the patient and the quality of the facility, physicians, staff, services and management of the ASC.The ASC must demonstrate compliance with these Medicare standards initially and on an ongoing basis.

In addition to state and federal inspections, many ASCs choose to go through voluntary accreditation by an independent accrediting organization. Accrediting organizations for ASCs include The Joint Commission, the Accreditation Association for Ambulatory Health Care (AAAHC), the American Association for the Accreditation of Ambulatory Surgery Facilities (AAAASF) and the American Osteopathic Association (AOA). ASCs must meet specific standards during on-site inspections by these organizations in order to be accredited. All accrediting organizations also require an ASC to engage in external benchmarking, which allows the facility to compare its performance to the performance of other ASCs.

In addition to requiring certification in order to participate in the Medicare program, federal regulations also limit the scope of surgical procedures reimbursed in ASCs. Even though ASCs and hospital outpatient departments are clinically identical, the Center for Medicare & Medicaid Services (CMS) applies different standards to the two settings.

ASCs: A COMMITMENT TO QUALITY

Quality care has been a hallmark of the ASC health care delivery model since its earliest days. One example of the ASC community's commitment to quality care is the ASC Quality Collaboration, an independent initiative that was established voluntarily by the ASC community to promote quality and safety in ASCs.

The ASC Quality Collaboration is committed to developing meaningful quality measures for the ASC setting. Six of those measures have already been endorsed by the National Quality Forum (NQF). The NQF is a non-profit organization dedicated to improving the quality of health care in America, and the entity the Medicare program consults when seeking appropriate measurements of quality care. More than 20% of all ASCs are already voluntarily reporting the results of the ASC quality measures that NQF has endorsed.

Since 2006, the ASC industry has urged the CMS to establish a uniform quality reporting system to allow all ASCs to publicly demonstrate their performance on quality measures. Starting on October 1, 2012, a new quality reporting system for ASCs will begin and will encompass five of the measures that ASCs are currently reporting voluntarily.

Reporting Measures

Measure	Data Collection Begins
Patient Burn	Oct 1, 2012
Patient Fall	Oct 1, 2012
Wrong Site, Side, Patient, Procedure	Oct 1, 2012
Hospital Admission	Oct 1, 2012
Prophylactic IV Antibiotic Timing	Oct 1, 2012
Safe Surgery Check List Use	Jan 1, 2012
Volume of Certain Procedures	Jan 1, 2012
Influenza Vaccination Coverage for Health Care Workers	Jan 1, 2013

76 Federal Regulation 74492 - 74517

Specific Federal Requirements Governing ASCs

In order to participate in the Medicare program, ASCs are required to meet certain conditions set by the federal government to ensure that the facility is operated in a manner that assures the safety of patients and the quality of services.

ASCs are required to maintain complete, comprehensive and accurate medical records. The content of these records must include a medical history and physical examination relevant to the reason for the surgery and the type of anesthesia planned. In addition, a physician must examine the patient immediately before surgery to evaluate the risk of anesthesia and the procedure to be performed. Prior to discharge each patient must be evaluated by a physician for proper anesthesia recovery.

CMS requires ASCs to take steps to ensure that patients do not acquire infections during their care at these facilities. ASCs must establish a program for identifying and preventing infections, maintaining a sanitary environment and reporting outcomes to appropriate authorities. The program must be one of active surveillance and include specific procedures for prevention, early detection, control and investigation of infectious and communicable diseases in accordance with the recommendations of the Centers for Disease Control and Prevention. Thanks to these ongoing efforts, ASCs have very low infection rates.[5]

A registered nurse trained in the use of emergency equipment and in cardiopulmonary resuscitation must be available whenever a patient is in the ASC. To further protect patient safety, ASCs are also required to have an effective means of transferring patients to a hospital for additional care in the event of an emergency. Written guidelines outlining arrangements for ambulance services and transfer of medical information are mandatory. An ASC must have a written transfer agreement with a local hospital, or all physicians performing surgery in the ASC must have admitting privileges at the designated hospital. Although these safeguards are in place, hospital admissions as a result of complications following ambulatory surgery are rare.[5]

Continuous quality improvement is an important means of ensuring that patients are receiving the best care possible. An ASC, with the active participation of its medical staff, is required to conduct an ongoing, comprehensive assessment of the quality of care provided.

The excellent outcomes associated with ambulatory surgery reflect the commitment that the ASC industry has made to quality and safety. One of the many reasons that ASCs continue to be so successful with patients, physicians and insurers is their keen focus on ensuring the quality of the services provided.

Medicare Health and Safety Requirements

Required Standards	ASCs	HOPDs
Compliance with State licensure law	☑	☑
Governing body and management	☑	☑
Surgical services	☑	☑
Quality assessment and performance improvement	☑	☑
Environment	☑	☑
Medical staff	☑	☑
Nursing services	☑	☑
Medical records	☑	☑
Pharmaceutical services	☑	☑
Laboratory and radiologic services	☑	☑
Patient rights	☑	☑
Infection control	☑	☑
Patient admission, assessment and discharge	☑	☑

Source: 42 CFR 416 & 482

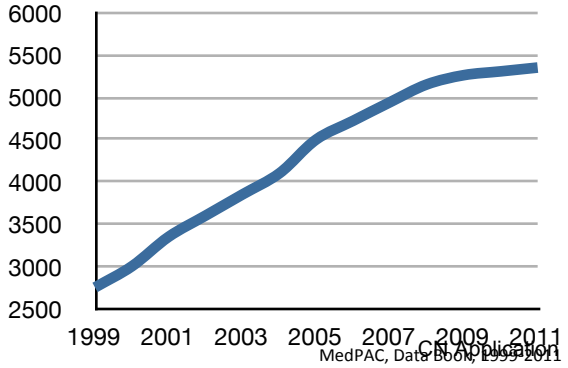
CONTINUED DEMAND FOR ASC FACILITIES

Technological advancement has allowed a growing range of procedures to be performed safely on an outpatient basis (unfortunately, however, Medicare has been slow to recognize these advances and assure that its beneficiaries have access to them). Faster acting and more effective anesthetics and less invasive techniques, such as arthroscopy, have driven this outpatient migration. Procedures that only a few years ago required major incisions, long-acting anesthetics and extended convalescence can now be performed through closed techniques utilizing short-acting anesthetics, and with minimal recovery time. As medical innovation continues to advance, more and more procedures will be able to be performed safely in the outpatient setting.

Over the years, the number of ASCs has grown in response to demand from the key participants in surgical care—patients, physicians and insurers. While this demand has been made possible by technology, it has been driven by patient satisfaction, efficient physician practice, high levels of quality and the cost savings that have benefited all.

However, in a troubling trend, the growth of ASCs has slowed in recent years. If the supply of ASCs does not keep pace with the demand for outpatient surgery that patients require, that care will be provided in the less convenient and more costly hospital outpatient department. [12]

Number of Medicare Certified ASCs



MedPAC, Data Book, 1999-2011

ASCs CONTINUE TO LEAD INNOVATION IN OUTPATIENT SURGICAL CARE

As a leader in the evolution of surgical care that has led to the establishment of affordable and safe outpatient surgery, the ASC industry has shown itself to be ahead of the curve in identifying promising avenues for improving the delivery of health care.

With a solid track record of performance in patient satisfaction, safety, quality and cost management, the ASC industry is already embracing the changes that will allow it to continue to play a leading role in raising the standards of performance in the delivery of outpatient surgical services.

As always, the ASC industry welcomes any opportunity to clarify the services it offers, the regulations and standards governing its operations, and the ways in which it ensures safe, high-quality care for patients.

POLICY CONSIDERATIONS

Given the continued fiscal challenges posed by administering health care programs, policy makers and regulators should continue to focus on fostering innovative methods of health care delivery that offer safe, high-quality care so progressive changes in the nation's health care system can be implemented.

Support should be reserved for those policies that foster competition and promote the utilization of sites of service providing more affordable care, while always maintaining high quality and stringent safety standards. In light of the many benefits ASCs have brought to the nation's health care system, policymakers should develop and implement payment and coverage policies that increase access to, and utilization of, ASCs.

END NOTES

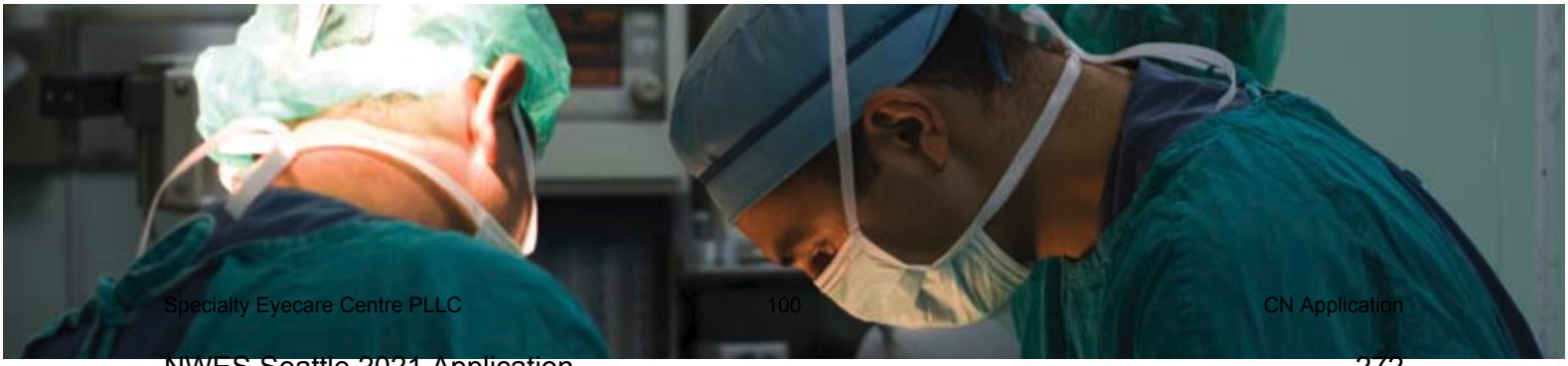
1 "Ambulatory Surgery Centers." Encyclopedia of Surgery. Ed. Anthony J. Senagore. Thomson Gale, 2004.

2 2004 ASC Salary and Benefits Survey, Federated Ambulatory Surgery Association, 2004.

3 Oxford Outcomes ASC Impact Analysis, 2010.

4 Press-Ganey Associates, "Outpatient Pulse Report," 2008.

5 ASCA Outcomes Monitoring Project, 3rd Quarter 2011.



Editorial

Rising Cataract Surgery Rates: Demand and Supply

Jay C. Erie, MD - *Rochester, Minnesota*

Cataract surgery is the most frequently performed surgical procedure in many developed countries, providing significant, long-term, and cost-effective improvements in the quality of life for patients of all ages.[1,2] Advances in cataract surgery techniques and technologies over the last decades have led to improved patient safety and better surgical outcomes, resulting in significant changes in the frequency with which cataract surgery is performed.

Longitudinal, population-based data on cataract surgery rates in the United States are limited. In this issue, Klein et al[3] provide timely, informative, population-based data on the changing incidence of cataract surgery in Beaver Dam, Wisconsin, during the 20-year period when cataract surgery shifted from planned extracapsular cataract extraction to small-incision phacoemulsification. Klein et al report that the age- and sex-adjusted incidence of cataract surgery increased 6.5-fold between 1988-90 and 2008-10 (1.8% vs. 11.7%) in Beaver Dam residents aged 43 to 86 years. The greatest increases were seen in the most recent 5-year interval (between 2003-05 and 2008-10) in persons older than 65 years of age and in persons with a visual acuity better than 20/40 or without a clinically significant cataract as determined at an examination 5 years before cataract surgery.

The strengths of this study include its population basis, 2 decades of cataract surgery incidence, a standardized assessment of cataract status and visual acuity, avoidance of inclusion and recall bias, and adjustment for multiple potential risk factors. Its limitations include a small cohort size (4926 residents), a lack of geographic and racial diversity (99% white), and the interpretation of preoperative cataract status and visual acuity based on measurements performed up to 5 years before cataract surgery.

The World Health Organization has set a cataract surgery rate of 3000 per million people per year as the minimum necessary to eliminate cataract blindness.[4] This rate is greatly exceeded in many developed countries (7000−11 000 per million persons),[5–7] and surgery rates are steadily increasing. Increasing cataract surgery rates have been explained, in part, by an aging demographic structure, reduced thresholds of visual impairment as an indication for surgery, increased frequency of second eye surgery, and increasing expectations by patients for better vision.

What can we learn from the Beaver Dam Eye Study? First, the rising cataract surgery rates observed in Beaver Dam also were seen during the same time period in other areas of the United States and in many developed countries, albeit of a significantly lesser magnitude. Across the Mississippi river and 220 miles to the west of Beaver Dam, population-based data from Olmsted County, Minnesota (population 144 248 in 2010), showed a lower, but steady 2.5-fold increase in the rate of incident cataract surgery over the same time period (4400 surgeries/million residents in 1990 and 10 000 in 2010).[7] Furthermore, Olmsted County modeling showed that cataract surgery increased at a greater rate than could be attributed to changing demographics alone. Nationally, using U.S. Medicare beneficiary data, the rate of cataract surgery in persons older than 65 years of age increased 2.4-fold between 1987[8] and 2004.[9] In Australia, cataract surgery rates increased 1.4-fold between 2000 and 2005.[5] Rising surgery rates in the U.S. senior population are not unique to ophthalmology. In orthopedic surgery, improved surgical techniques and implant technologies have led to a 1.6- to 2.7-fold increase in total knee and hip arthroplasties over a comparable time period.[10]

Although cataract surgery rates were on the rise in Beaver Dam, rates in Sweden had stabilized between 2002 and 2009 at 8000 to 9000 procedures per million persons.[6] How were our Nordic colleagues able to accomplish this while at the same time slowly decreasing the surgery backlog, increasing the rate of second eye surgery, and operating on eyes with better preoperative Snellen visual acuity? The reason is multifactorial, but includes a limit on the number of annual cataract surgeries placed by many of Sweden's 22 counties/regions and increased competition for eye care resources from other fields within ophthalmology, primarily in the management of age-related macular degeneration. In 2008, the county of Stockholm removed the limit on the annual number of cataract surgeries allowed. Of note, cataract surgery rates subsequently increased in that area (Lundström M, personal communication, 2013).

Second, a reduced threshold of visual impairment is increasingly being used as an indication for surgery by surgeons, patients, and payers. Better preoperative vision before surgery has been documented in Beaver Dam, Olmsted County,[7] Australia,[5] Denmark,[11] England,[12] and Sweden.[6] In Sweden, for example, the fraction of residents with a Snellen visual acuity of 20/40 or better in the eye planned for surgery has increased from 56% in 1992 to 78% in 2009.[6] Not surprisingly, lower visual thresholds for surgery are associated with increased surgery rates. In Australia, when the visual impairment threshold changed from less than 20/200 to less than 20/30, cataract surgery rates increased approximately 5-fold.[5] However, one needs to remember that Snellen acuity alone is a functionally incomplete measure of visual function, and other quantifiable factors such as contrast sensitivity and glare contribute to patient visual dissatisfaction.

It is important for readers to note that the comments by Klein et al[3] regarding preoperative visual acuity threshold and

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cataract status are based on measurements performed up to 5 years before cataract surgery. Although the authors think that it "seems unlikely" over a 5-year period "that a rapid change occurred in development of lens opacity and/or decreased vision related to cataract prior to surgery," previous data from the Age-Related Eye Disease Study Research Group[13] report the 5-year cumulative incidence of progression from a grade of no or mild lens opacity at baseline to a moderate cataract of any kind to be approximately 24% among participants aged 55 to 80 years. Rather than mistakenly infer that cataract surgery is being performed in eyes without a cataract, it is more likely that Beaver Dam ophthalmologists and their patients—similar to their colleagues and patients in Olmsted County and in other countries—have reduced their visual impairment threshold for cataract surgery.

Why are we observing an increasing demand for cataract surgery at lower visual impairment thresholds in nearly all age groups? Columnist Rich Karlgaard[14] recently cited George Gilder, author of *Wealth and Poverty,* who argued that in economics, increased demand is due to increased supply. "The key is not an increase in the *same* supply, but rather an increase in a new, inventive supply that exceeds people's expectations and takes them to new heights in their lives."[14] This statement, in my opinion, aptly describes cataract surgery over the last decades. Through improved technologies and techniques, today's ophthalmologists can safely and quickly remove a cloudy crystalline lens and fairly predictably decrease or eliminate postoperative spherical and astigmatic error. Our ability to provide a new, innovative cataract surgery "supply" has provided better outcomes, improved quality of life, and exceeded patient expectations, consequently, and quite naturally this has driven increased patient "demand" for our service.

To paraphrase Steve Jobs, "People don't know what they want until you show it to them."[15] For many patients, after first-eye cataract surgery, the previously minimally symptomatic 20/30 fellow eye now no longer seems adequate when compared with the new pseudophakic eye. The benefits of first-eye surgery seem to have changed our patients' perceptions of disability and visual functioning in the fellow eye. This is evidenced by the significant increase in second-eye surgery in most surveys, now accounting for approximately 40% of all cataract operations. This is for good reason. Bilateral cataract surgery is cost-effective, improves patient satisfaction, and has better outcomes than surgery in one eye only.[2,16,17] Disturbed motion perception, disturbed stereoacuity, and disturbances from anisometropia are reported disabilities that persist after unilateral cataract surgery or with a cataract in the fellow eye after first-eye surgery.[18] Perhaps because of the documented benefits of bilateral cataract surgery, in the last 7 years we have seen a doubling of the rate of second-eye surgery in Olmsted County residents within the first 3 months after first-eye surgery (60% vs. 28%), with 86% of residents now undergoing second-eye surgery within 2 years of first-eye surgery.[7]

Is more always better in cataract surgery? William Falk[19] writes that "if humans can, we will — whether or not we should." Human history amply demonstrates our tendency to race ahead of our ability to think through all of the consequences of our actions. This has been the case recently with the capabilities of drone technology and Internet metadata-analysis. The many documented benefits of cataract surgery have led to an ever-increasing demand for cataract surgery and, as a consequence, steadily higher surgery rates and an increasing need for more resources. Is this appropriate?

I believe it is. To do otherwise is to encourage mediocrity. Continued improvements in cataract surgery "supply" have naturally and appropriately stimulated patient "demand" for better vision. Predicting if or when cataract surgery rates will level off or decline is difficult. Placing limits on the annual number of cataract surgeries performed or shifting more cost to the patient will be contentious. Regardless, it is our responsibility as surgeons to continue to innovate, to improve safety and outcomes, and to reduce costs so that we enhance the value of cataract surgery for every patient we serve.

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OphthalmologyTimesArtificial intelligence

The future of cataract surgery

Changes lie ahead as pressure on surgeons increases

July 10, 2017
By Frank Goes, MD

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As the most common procedure performed by the ophthalmic surgeon, in 2014, 4.3 million cataract operations took place in the European Union Member States. It is estimated that more than 23 million procedures will be performed worldwide in 2016.[1,2]

Meanwhile, during the past 35 years, life expectancy has increased by 12 years in Western countries and by more than 25 years in most developing countries.[3,4] Since we know that the occurrence of cataract increases with age; that the prevalence of cataract is greater in developing countries; and that more than 70% of people aged older than 85 years are affected[5], the medical community faces the threat of insufficient numbers of ophthalmic surgeons.

In the United States, some 9,000 ophthalmic surgeons were performing 3.6 million cataract surgeries in 2015.[2] This means that in 5 years' time, 125,000 surgeons will be required to treat 50 million cataracts per year. In 10 years from now, the number of surgeons needed worldwide could soar to 250,000.

Faced with such numbers, robots and technicians will have to take over. Cataract surgery only recently became more automated, the femtosecond laser having taken over part of the job since 2013. Femtosecond laser-assisted cataract surgery will continue to grow in popularity and the recently introduced nanolaser photo-fragmentation takes over another significant part of the surgery. The insertion of a preloaded IOL by a technician or a robot might be a future development.

Beside robotics, technology will evolve to enable successful cataract procedures in both eyes during a single session, thus saving time. Immediately sequential bilateral cataract surgery will become the norm.

Techniques will also evolve so that treatment of both eyes on patients sitting in the upright position, as happens today in the dentist's chair, will be possible.

Further advancements could be that dilation of the pupil, an inconvenience that incapacitates patients for half a day, might no longer be necessary, and IOL power calculations might be made in the operating room on the day of surgery using ray-tracing techniques. Using three-dimensional technology, a preloaded IOL would be printed in the surgery room and personalised (unifocal-, bifocal- or accommodative) for each patient.

Also in the future, human intelligence is likely to find a way around the need to use an eye speculum for cataract surgery. Unmodified for more than 100 years since it was developed by Arruga and Barraquer, it is (probably) sometimes responsible for the only annoying sensation experienced by a patient during the procedure.

Finally, alternative potential strategies involving genetics are being explored for the prevention of cataracts that could lead to the end of cataract surgery.[6,7]

In summary, implementation of these steps could provide an answer to the overwhelming increase of cataracts requiring treatment worldwide. It will be interesting to review things again in 10 years' time!

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Increased use of ambulatory surgery centers for cataract surgery

Study shows major shift in ocular surgery from hospitals to surgery centers

National data shows a major shift in eye surgeries from hospitals to less expensive ambulatory surgery centers where care may be delivered faster and closer to home for some patients.

(Stock image) From cataract surgery to glaucoma procedures, more patients are having eye surgery at local surgery centers.

Over the past decade the proportion of cataract surgeries performed at surgery centers increased steadily, reaching 73 percent in 2014, compared to 43.6 percent in 2001.

University of Michigan Kellogg Eye Center (http://www.umkelloggeye.org) researchers revealed the increased use of surgery centers for cataract surgery, but say more research is needed to determine if there's a difference in safety between hospitals and surgery centers.

For the large study, published Nov. 22 in *JAMA Ophthalmology* (https://jamanetwork.com/journals/jamaophthalmology/article-abstract/2664081?utm_source=TWITTER&utm_medium=social_jn&utm_term=1149707952&utm_content=content_engagement%7carticle_engagement&utm_campaign=article_alert&linkId=44592660), researchers used claims data for 369,320 enrollees age 40 and older in a nationwide managed care network who had cataract surgery during the 13-year period.

“The increase in utilization occurred in many U.S. communities such that in some places nearly every cataract surgery took place in an ambulatory care center,” says senior author Joshua Stein (http://www.umkelloggeye.org/profile/1466/joshua-daniel-stein-md), M.D., a glaucoma specialist at Kellogg Eye Center and eye policy researcher at the U-M Institute of Healthcare Policy and Innovation.

Cataract surgery is extremely effective in restoring focusing power that can deteriorate with age. It carries little risk. But well-equipped hospitals are more prepared than a surgery center if medical complications happen.

Still the reasons for the increasing popularity of ambulatory surgery centers compared to hospital-based care include convenience, lower out-of-pocket costs for patients and decreased cost-per-case for insurers.

One analysis estimated that cataract surgeries performed at ambulatory surgery centers rather than hospitals saved Medicare $829 million in 2011.

Consumers save from the shift to surgery centers where average cataract co-pay in 2014 was $190 compared to $350 at a hospital outpatient department, authors write.

Patients were more likely to undergo cataract surgery at an ambulatory surgery center if they were younger age, had higher income, and lived in states without certificate-of-need laws. CON laws regulate the number of ambulatory care centers permitted to operate.

More affluent people were more likely to live in communities with more ambulatory care centers. This may have the indirect impact of limiting access to cataract surgery for less affluent patients.

“The increased use of ambulatory care centers raises questions about access and the effect on surgical outcomes, patient safety and patient satisfaction,” says Brian Stagg, M.D. (http://www.umkelloggeye.org/profile/4333/brian-craig-stagg-md), the study’s lead author and a clinical scholar at the U-M Institute for Healthcare Policy and Innovation.

The shift is happening beyond cataract surgery and includes cornea, glaucoma, retina and strabismus surgery.

The rate of increase in ambulatory surgery center use for cataract surgery of 2.34% a year was similar to the rate of increase for strabismus surgery and retina surgery.

The rate of increase for glaucoma surgery was faster than cataract surgery. The rate of increase for cornea surgery was slower than cataract surgery.

Physicians / Providers

News

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Major shift in performing cataract surgery at ambulatory surgery centers rather than hospitals.

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By Elizabeth L. Munnich and Stephen T. Parente

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Procedures Take Less Time At Ambulatory Surgery Centers, Keeping Costs Down And Ability To Meet Demand Up

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ABSTRACT During the past thirty years outpatient surgery has become an increasingly important part of medical care in the United States. The number of outpatient procedures has risen dramatically since 1981, and the majority of surgeries performed in the United States now take place in outpatient settings. Using data on procedure length, we show that ambulatory surgery centers (ASCs) provide a lower-cost alternative to hospitals as venues for outpatient surgeries. On average, procedures performed in ASCs take 31.8 fewer minutes than those performed in hospitals—a 25 percent difference relative to the mean procedure time. Given the rapid growth in the number of surgeries performed in ASCs in recent years, our findings suggest that ASCs provide an efficient way to meet future growth in demand for outpatient surgeries and can help fulfill the Affordable Care Act's goals of reducing costs while improving the quality of health care delivery.

Technological developments in medicine have dramatically changed the provision of surgical care in the United States during the past thirty years. Advances in anesthesia and the development of laparoscopic surgery in the 1980s and 1990s made it possible for patients to be discharged the same day as their surgery, whereas previously they would have had to spend several days in the hospital recovering.[1,2] The introduction of the Medicare inpatient prospective payment system in 1983 created additional incentives for hospitals to shift patient care from inpatient to outpatient departments.[3]

Between 1981 and 2005 the number of outpatient surgeries nationwide—performed either in hospital outpatient departments or in freestanding ambulatory surgery centers (ASCs)—grew almost tenfold, from 3.7 million to over 32.0 million. Outpatient procedures represented over 60 percent of all surgeries in the United States in 2011, up from 19 percent in 1981.[4]

The expansion of health insurance coverage under the Affordable Care Act (ACA) presents opportunities to explore new ways to accommodate the increased demand for outpatient services. In addition, the ACA's goals of reducing the cost and improving the quality of health care delivery makes it increasingly important to find alternatives to existing methods of care delivery that cost less and are in more flexible settings.

ASCs are such an alternative to hospital outpatient departments. The number of ASCs has grown quickly to meet the rising demand for outpatient surgery services since the 1980s.[5] Whereas outpatient departments provide a range of complex services, including inpatient and emergency services, ASCs provide outpatient surgery exclusively. Since most ASCs focus on a limited number of services, they may provide higher-quality care at a lower cost than hospitals that offer a broad range of services.[6] Similar to retail clinics that meet primary care needs, ASCs offer convenient, relatively low-cost access to health care services.[7]

This article addresses the possibilities for ASCs

to generate substantial cost savings in outpatient surgery by presenting new evidence on the cost advantages of these centers relative to hospital outpatient departments. This is particularly important in light of the anticipated growth in demand for outpatient surgeries, in part as a result of the ACA.

Background On Ambulatory Surgery Centers

The number of outpatient surgeries has grown considerably in the United States since the early 1980s. Outpatient surgery volume across both hospital-based and freestanding facilities grew by 64 percent between 1996 and 2006, according to the National Survey of Ambulatory Surgery.[8]

Physicians receive the same payment for an outpatient procedure, regardless of whether it occurred in an ASC or a hospital. However, payments to facilities differ between settings. In general, reimbursements for outpatient procedures in hospitals are higher than those for procedures in ASCs, to account for the fact that compared to ASCs, hospitals must meet additional regulatory requirements and treat patients whose medical conditions are more complex.[9] However, there is little evidence about the extent of cost advantages of ASCs, since these facilities have not historically reported cost or volume data. In spite of the limited availability of information about ASC costs, the Centers for Medicare and Medicaid Services has adjusted the relative facility payments over time to reflect speculative cost differentials across the two types of outpatient surgery facilities.[10]

Changes in reimbursement levels for outpatient procedures have likely contributed to fluctuations in the number of ASCs in recent years. In 2000 Medicare's traditional cost-based reimbursement system for outpatient care in hospitals was replaced with the outpatient prospective payment system, which reimburses hospitals on a predetermined basis for what the service provided is expected to cost.

Noting the dramatic growth in outpatient surgeries performed in ASCs relative to hospitals around the same time, the Centers for Medicare and Medicaid Services subsequently made efforts to reduce ASCs' payments. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 froze ASCs' payment updates, and between 2008 and 2012 Medicare phased in a new system for ASCs' payments based on the outpatient prospective payment system.[9,11] The rates were set so that for any outpatient procedure, payments to ASCs would be no more than 59 percent of payments made to hospitals, phased in fully by 2012. This policy change reduced incentives to treat patients in ASCs, which may have contributed to slower growth in this sector in recent years (Exhibit 1).

In spite of reduced incentives for treating patients outside of hospitals, growth in outpatient volume was greater in ASCs than in hospitals during the period 2007–11. For example, volume among Medicare beneficiaries grew by 23.7 percent in ASCs, compared to 4.3 percent in hospital outpatient departments (Exhibit 2). This suggests that physicians and patients still increasingly prefer outpatient surgery in ASCs to that in hospitals, because of either perceived advantages in cost and quality or resource constraints that inhibit hospitals' ability to meet the growing demand for outpatient surgeries.

ASCs have been praised for their potential to provide less expensive, faster services for low-risk procedures and more convenient locations for patients and physicians, compared to outpatient departments.[11–14] However, if hospitals are better equipped to treat high-risk patients, treating higher-risk patients in ASCs could have negative consequences for patient outcomes.

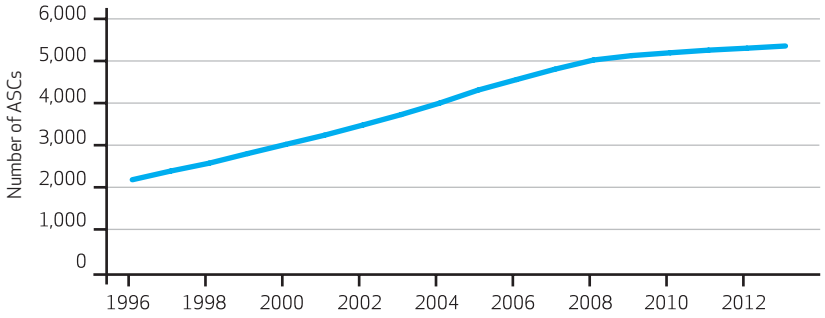
There is little evidence about the quality of care provided in ASCs or their ability to function as substitutes for hospitals in providing outpatient surgery. Comparisons of outcomes between these two types of outpatient facilities are complicated by the fact that ASCs tend to treat a healthier mix of patients than hospitals do. Thus, any differences in observed outcomes between the two settings could reflect differences in underlying patient health instead of differences in quality of care.

Elsewhere, we used variations in ASC use generated by changes in Medicare reimbursements to outpatient facilities to show that patients treated in ASCs fare better than those treated in hospitals.[15] In particular, we considered the likelihood that patients undergoing one of the five highest-volume outpatient procedures[16] visited an emergency department or were admitted to the hospital after surgery. These outcomes have been used in the medical literature as proxies for quality in outpatient surgical care.[17,18] These measures are also interesting from a policy perspective: As of October 2012, as part of the Ambulatory Surgical Center Quality Reporting Program,[19] ASCs are required to report transfers of patients directly from the ASC to a hospital and hospital admissions of ASC patients upon discharge from the facility.

Our findings indicate that the highest-risk Medicare patients were less likely than other high-risk Medicare patients to visit an emergency department or be admitted to a hospital following an outpatient surgery when they were treated in an ASC, even among similar patients

EXHIBIT 1

Number Of Medicare-Certified Ambulatory Surgery Centers (ASCs), 1996–2013



SOURCE Kay Tucker, director of communications, Ambulatory Surgery Center Association, October 29, 2013.

undergoing the same procedure who were treated by the same physician in an ASC and a hospital. These results indicate that ASCs provide high-quality care, even for the most vulnerable patients.

In this article we examine the question of whether or not ASCs are less costly than hospital outpatient departments. The answer to this question is not straightforward, since little is known about surgery cost and volume in ASCs. The often-cited cost differential between ASCs and outpatient departments is frequently attributed to differences in reimbursement rates for the two types of facilities, which reflect hospitals' greater complexity of patients and procedures. But for an average patient undergoing a high-volume procedure, are ASCs more efficient than hospital outpatient departments?

Study Data And Methods

Our analysis incorporated one important aspect of cost in the outpatient surgery setting: the time it takes to perform procedures in ASCs and hospital outpatient departments. For data on that time, we used the National Survey of Ambulatory Surgery. This survey of outpatient surgery in hospitals and freestanding surgery centers in the United States was conducted by the Centers for Disease Control and Prevention from 1994 to 1996 and in 2006.

The 2006 data include patients' diagnoses, demographic characteristics, and surgical procedures, as well as information about length of surgery and recovery for 52,000 visits at 437 facilities. There are four length-of-surgery measures: time in the operating room; time in surgery (a subset of time in the operating room); time in postoperative care; and total procedure time (time in the operating room, time in postoperative care, and transport time between the operating room and the recovery room).

Previous research has documented differences in surgery time between ASCs and hospital outpatient departments.[12,20] However, observed differences in procedure time may reflect underlying differences in patients' characteristics, instead of differences in efficiency between the two types of facilities. To address this concern, we estimated the relationship between outpatient setting and procedure time, controlling for a patient's primary procedure, number of procedures, and characteristics such as underlying health and demographics.[21]

EXHIBIT 2

Number Of Outpatient Surgery Visits, By Facility Type, 2007 And 2011

Type	2007	2011	Change (%)
Ambulatory surgery center	373,284	461,718	23.7
Freestanding	260,466	344,292	32.2
Hospital-based	112,818	117,426	4.1
Hospital outpatient department	1,173,309	1,224,218	4.3
All types	1,546,593	1,685,936	9.0

SOURCE Authors' analysis of a 5 percent sample of Medicare claims data. **NOTE** The numbers of outpatient department visits include only those that involved at least one surgical procedure.

Study Results

It is the nature of outpatient procedures that the patient spends most of his or her time in a surgical facility preparing for and recovering from surgery, not actually undergoing the surgery (Exhibit 3). This suggests that organization, staffing, and specialization may play a large role in the cost differences between ASCs and hospital outpatient departments.

Our estimates of the time savings for ASC treatment suggest that ASCs are substantially faster than hospitals at performing outpatient procedures, after procedure type and observed patient characteristics are controlled for (Exhibit 4). On average, patients who were treated in ASCs spent 31.8 fewer minutes undergoing procedures than patients who were treated in hospitals—a difference of 25 percent relative to the mean procedure time of 125 minutes (Exhibit 3). Thus, for an ASC and a hospital outpatient department that have the same number of staff and of operating and recovery rooms, the ASC can perform more procedures per day than the hospital can.

We estimated the cost savings for an outpatient procedure performed in an ASC using the results presented above and estimates of the cost of operating room time. Estimated charges for this time are $29–$80 per minute, not including fees for the surgeon and anesthesia provider.[22] Our

calculation suggests that even excluding physician payments and time savings outside of the operating room, ASCs could generate savings of $363–$1,000 per outpatient case.

These results support the claim that ASCs provide outpatient surgery at lower costs than hospitals. However, they provide little information about what is driving these cost differences.

Terrence Trentman and coauthors discuss several factors that affect patient flow and could result in differences in preoperative and recovery times for outpatient procedures between in ASCs and hospitals.[20] For example, compared to the situation in hospitals, in ASCs surgeons are more likely to be assigned to a single operating room for all cases, which reduces delays; the operating room is often closer to the preoperative and recovery rooms, because facilities are smaller; teams of staff have clearer and more consistent roles, with less personnel turnover; and staffing is not done by shifts—that is, staff members go home only after all cases are finished, which creates incentives to work quickly. In addition, hospitals may be more likely to have emergency add-on and bring-back cases for more complex cases that compete with outpatient procedures for operating room time.

These differences suggest that hospitals would have to adopt a substantially different and highly specialized organizational model to achieve the same efficiencies as ASCs.

Discussion

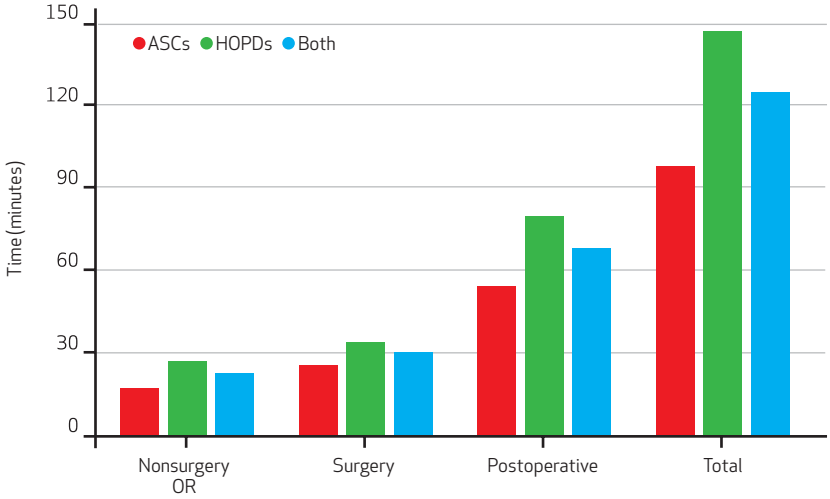
The findings presented here provide evidence that ASCs are a lower-cost alternative to hospitals for outpatient surgical procedures. The tremendous growth in the number of ASCs since the 1980s suggests that these facilities are quite flexible in meeting the growing demand for outpatient services. This is not surprising, given that ASCs have a smaller footprint than hospitals, which makes them less costly to build—particularly in urban environments, where available land may be scarce or difficult to acquire.

The Congressional Budget Office projects that as a result of the ACA, an additional twenty-five million people will have health insurance by 2016.[23] The question of whether the current supply of health care providers will be able to accommodate the anticipated surge in demand for services resulting from the ACA has received a considerable amount of attention.[24]

To get a sense of the magnitude of the anticipated growth in the outpatient surgery market following the ACA, we used a microsimulation model to project hospital outpatient surgical volume through 2021 (for details about the model, see the online Appendix).[25] Our estimates indicated that outpatient surgical volume in hospitals alone will increase by 8–16 percent annually between 2014 and 2021, compared to annual

EXHIBIT 3

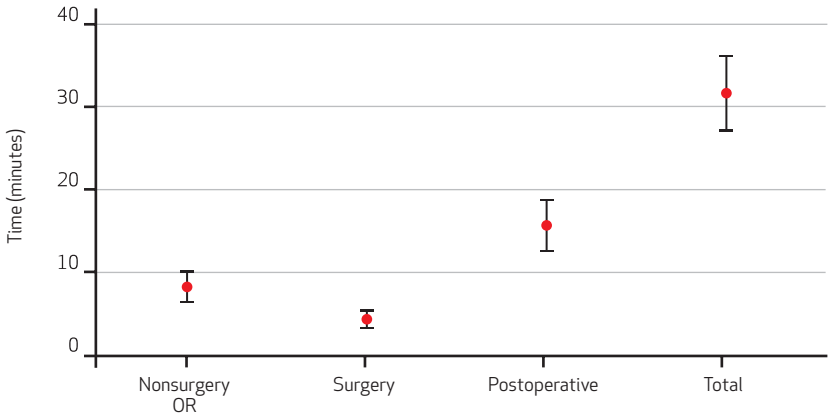
Average Outpatient Surgical Procedure Time, By Facility Type, 2006



SOURCE Authors' analysis of data from the 2006 National Survey of Ambulatory Surgery. **NOTES** Estimates were weighted using sample weights. ASC is ambulatory surgery center. HOPD is hospital outpatient department. "Both" is both types of facilities. OR is operating room. "Total" is total procedure time, from entering the operating room to leaving postoperative care, as described in the text.

EXHIBIT 4

Estimated Time Savings for Ambulatory Surgery Centers (ASCs) Relative to Hospital Outpatient Departments



SOURCE Authors' analysis of data from the 2006 National Survey of Ambulatory Surgery. **NOTES** Estimates and standard error bars represent results from separate ordinary least squares regressions of nonsurgical time in the operating room, surgery time, postoperative recovery time, and total time on an indicator for treatment in an ASC. (Total time is total procedure time, from entering the operating room to leaving postoperative care, as described in the text.) All regressions controlled for primary procedure, total number of procedures, patient's risk score, age, sex, disability status, type of insurance, and an indicator for whether the facility was located in a Metropolitan Statistical Area. The full specifications for these regressions are available in the online Appendix (see Note 25 in text). Data were balanced across surgery and postoperative time components; the final sample included 34,467 observations. Estimates were weighted using sample weights. Standard errors were clustered at the facility level. All estimates are significant ($p < 0.01$). OR is operating room.

growth rates of 1–3 percent in the previous ten years.

We did not have adequate data on surgical volume in ASCs to produce an equally precise estimate for the projected demand in this sector attributable to the ACA. However, our results indicate substantial growth even in hospital outpatient surgical volume, which has been growing at a much slower rate than ASC surgical volume. The trends in the growth in the number of ASCs before the passage of the ACA and our model for projected growth in the number of hospital outpatient department procedures suggest that it will be increasingly important to identify ways to accommodate growing demand for outpatient surgery. This is particularly important since hospitals will also likely face increased demand for other types of outpatient visits besides surgery after the ACA is implemented.

25 million

Procedures

The roughly 5,300 ASCs in the United States provide more than 25 million procedures each year.

The rapid growth in the number of procedures performed at ASCs in recent years is a good indication of the ability of the market to expand quickly when there are sufficient incentives for it to do so. The range of surgeries performed in ASCs has increased considerably since the 1980s. In 1981 Medicare covered 200 procedures that were provided in ASCs. Today about 3,600 different surgical procedures are covered under Medicare's ASC payment system.[9] Consequently, the volume of procedures performed in ASCs has increased dramatically, and the share of all outpatient surgeries performed in freestanding ASCs increased from 4 percent in 1981 to 38 percent in 2005.[26,27] The Ambulatory Surgery Center Association has estimated that roughly 5,300 ASCs provide more than twenty-five million procedures annually in the United States.[27]

Physicians who have an ownership stake in an ASC obtain greater profits from performing procedures in these facilities rather than in hospitals. Since physicians receive the same payment for their services regardless of whether procedures are performed in an ASC or a hospital, one implication of ASCs' lowering the cost of outpatient surgery without the price being adjusted accordingly—therefore leading to higher profit per procedure—is that it could create greater incentives for providers to recommend unnecessary procedures in physician-owned ASCs, a concept known as demand inducement. Another consequence of demand inducement is that physicians may respond to the increased number of patients with health insurance—as a result of the ACA—by performing surgeries that are not clinically indicated. Future research should examine the implications of reductions in the cost of outpatient surgery for demand inducement.

Conclusion

The ASC market faces challenges to meeting increased demand for outpatient surgery. As noted above, recent reimbursement changes have lowered payments to ASCs, which reduces the incentives to start or expand these facilities.

This gap in reimbursement is likely to continue to widen because Medicare's reimbursement rates for hospital procedures are updated annually according to projected changes in hospital prices, whereas ASC reimbursements are updated annually according to projected changes in the prices of all goods purchased by urban consumers, and medical spending is increasing at a much faster rate than other spending in the US economy. Furthermore, the disparity between medical and other consumer spending is expected to increase over time.

Critics of ASCs argue that these facilities "cherry pick" profitable patients and procedures, diverting important revenue streams from hospitals.[28–31] In combination with research on the quality of care in ASCs,[15] the findings in this article indicate that ASCs are a high-quality, lower-cost substitute for hospitals as venues for outpatient surgery. Increased use of ASCs may generate substantial cost savings, helping achieve the ACA's goals of reducing the cost and improving the quality of health care delivery. ■

These findings were previously presented at the National Bureau of Economic Research Hospital Organization and Productivity Conference, Harwich, Massachusetts, October 4–5, 2013.

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Exhibit 7

Report to the Legislature

2017 Charity Care in Washington Hospitals

January 2019

RCW 70.170

Hospital Charity Care and Financial Data
Health Systems Quality Assurance

Washington State Department of Health

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Secretary of Health

Contents

Executive Summary

The Department of Health is required per RCW 71.70.060 to annually update the public on the status of charity care performed by hospitals in Washington State. Hospitals in Washington cannot deny patients access to care based on an inability to pay. They are required to develop a charity care policy, and to submit financial data regarding charity care to the Department of Health (department). This report summarizes the charity care data received from Washington hospitals for the hospital fiscal years (FY) ending in 2017.

The department has noted an increase in hospitals reporting charity care data for the first time since 2013. Washington hospitals reported $772 million in charity care charges in FY 2017, which amounts to $263 million in actual expenses based on a cost-to-charge formula[1]. These charges reflect an increase of 28 percent from those reported in FY 2016, which was 5 percent more than FY 2015.

The amount of money spent on hospital charity care services in Washington varies widely with the highest reporting hospital, Harborview Medical Center, accounting for 10 percent of the statewide total charity care charges. The median amount per hospital was $1.48 million; however, the average was much higher at $7.87 million because several hospitals provided significant amounts of charity care.

For more information on charity care, including detailed reports by hospital, click here:

[1] Since the data in this report are based on billed charges, not the actual payment expected by the hospital, calculating the approximate cost of providing charity care can be estimated by applying a cost-to-charge ratio. Multiplying the dollars by the cost-to-charge ratio results in an approximate cost of what hospitals actually spent providing this service to patients. The statewide cost-to-charge ratio is 0.34. Based on the $772 million reported in charity care charges in FY 2017, the overall cost of providing charity care statewide was about $263 million.

Background on charity care in Washington

What is charity care?

Charity care is defined in chapter 70.170 RCW as "necessary hospital health care rendered to indigent persons, to the extent that the persons are unable to pay for the care or to pay deductibles or coinsurance amounts required by a third-party payer, as determined by the department."[2] A person is considered indigent under WAC 246-453-040 if family income is at or below 200 percent of the federal poverty guidelines. Washington law prohibits hospitals from denying patient access to care based on inability to pay or adopting admission policies that significantly reduce charity care.

Patients with family incomes below 100 percent of the federal poverty guidelines are entitled to hospital services at no cost. Hospitals must also provide discounted care to patients between 100 percent and 200 percent of the poverty guidelines using a sliding scale (WAC 246-453-040). These are minimum requirements. Hospitals may extend free or discounted care to patients earning more than these levels, and many do. The charity care policies for each hospital in Washington may be found here.

What are hospitals required to report and when?

Hospitals are required by law to submit charity care policies to the department for review at least 30 days before policies are adopted. Hospitals are also required to submit quarterly and year-end financial reports to the department using a uniform system of accounting. The department uses these financial reports to report charity care data and trends for the state each year. Fiscal years vary among hospitals in Washington, with hospital fiscal years ending on March 31, June 30, September 30, or December 31.

Hospitals are required to report total patient services revenue, also called billed charges, and the amount of patient services revenue that is written off as charity care. Hospitals are also required to report bad debt. Bad debt is different from charity care and is defined as uncollectible amounts, excluding contractual adjustments, arising from failure to pay by patients whose care has not been classified as charity care. All of these data are reported as part of the hospital's year-end financial report.

Hospitals report financial data to the department on an income statement. Below is an abbreviated example of an income statement to illustrate the relationships between the various revenue sources and expenses.

[2] Please note the definition of charity care changed effective October 1, 2018. The new definition reads: Charity care means medically necessary hospital health care rendered to indigent persons when third-party coverage, if any, has been exhausted, to the extent that the persons are unable to pay for the care or to pay deductibles or coinsurance amounts required by a third-party payer, as determined by the department.

	Hospital: Sample Community Hospital	Comment	Sample Hospital Revenue
=	TOTAL PATIENT SERVICES REVENUE	Inpatient and outpatient revenue equivalent to Total Billed Charges	615,000,000
-	Provision for Bad Debts	Unpaid charges billed to patients who are not eligible for charity care, deducted from total revenue	*15,000,000*
-	Contractual Adjustments	Reductions from billed charges negotiated by insurance companies, deducted from total revenue	*350,000,000*
-	Charity Care	Unpaid charges billed to patients eligible for charity care, deducted from total revenue	*25,000,000*
=	NET PATIENT SERVICE REVENUE	Actual patient revenue received	225,000,000
+	OTHER OPERATING REVENUE	Actual revenue received for office rental, cafeteria income, etc.	10,000,000
=	TOTAL OPERATING REVENUE	Actual patient revenue and other operating revenue	235,000,000
-	TOTAL OPERATING EXPENSES	Total expenses for operating the hospital	*220,000,000*
=	NET OPERATING REVENUE	Cash remaining after operation of patient services	15,000,000
+/-	NON-OPERATING REVENUE-NET OF EXPENSES	Nonpatient revenue (investments, partnership fees)	5,000,000
=	NET REVENUE BEFORE ITEMS LISTED BELOW	Operating plus nonoperating remainder	20,000,000
+/-	EXTRAORDINARY ITEM	One time cash revenue or cash expenses	0
=	NET REVENUE OR (EXPENSE)	Net cash remaining after all the transactions	20,000,000

How do hospitals report charity care and how is it calculated?

The amount of charity care reported by hospitals is based on patient services revenue, also known as billed charges. These charges are based on the hospital's charge master rate sheet, which sets the price for every treatment and supply category a hospital uses. Every patient's total bill is comprised of the sum of the charge master rates of the various services or supplies during the stay before any adjustments based on insurance status. All patients, regardless of insurance status, receive the same billed charges for the same services.

The billed charges reflect a markup that varies among hospitals and is significantly higher than the amount the hospital actually expects to be paid. Medicaid and Medicare pay a set rate for services regardless of billed charges, and private insurance companies negotiate with hospitals for large discounts off the master rate sheet.

Charity care is the amount of billed charges an indigent patient incurs for appropriate hospital-based medical services. Since these charges include the markup, the dollar amount of charity care reported by hospitals overestimates the true cost of providing charity care to indigent patients. To estimate the true cost of providing charity care, the department applies a cost-to-charge ratio.[3]

2017 Washington state charity care data

Statewide charity care charges for hospital fiscal year 2017

This report describes data collected from licensed Washington hospitals for their fiscal years (FY) ending in 2017. FY 2017 includes data for the 12 months prior to the end of each hospital's fiscal calendar, including data for months in 2016 if the fiscal year starts prior to January 1, 2017.

All charity care data for FY 2017 were due to the department by June 30, 2018. Although the department provides reminders and follow-up by phone and in writing to hospitals that are late in reporting data, some hospitals still have not provided data for their 2017 fiscal year. For 2017, 94 of 101 hospitals reported charity care information in year-end financial reports in time to be used in this report. Of the 7 hospitals that did not provide year-end reports, we have provided annual financial estimates for 4 hospitals based on their quarterly financial reports or audited financial statements[4]. For the other 3 hospitals, no charity care data are available because no FY 2017 financial reports were submitted to the department[5].

Overall, Washington hospitals reported $772 million of charity care charges written off in FY 2017. These charges amounted to 1.18 percent of total patient services revenue and 3.12 percent of adjusted patient services revenue. Adjusted patient services revenue is the amount of revenue for non-Medicare and non-Medicaid payers, which includes private insurance and self-pay. The proportion of patients covered by Medicare or Medicaid varies widely among hospitals. The use of adjusted patient services revenue allows for a comparison of hospital charity care as a percent of privately sponsored patient revenue.[6]

[3] The formula is total operating expenses (the actual cost of running the hospital and providing services) divided by total patient services revenue (billed charges).
[4] PeaceHealth Southwest Medical Center, Lake Chelan Community Hospital, PMH Medical Center, and Ferry County Memorial Hospital.
[5] Astria Sunnyside Community Hospital, Adventist Health Walla Walla General Hospital (closed in early 2017), and Othello Community Hospital.
[6] Adjusted patient services revenue subtracts Medicare and Medicaid specific patient services revenue from total patient services revenue to allow meaningful comparisons of charity care provided among hospitals. The federal Centers for Medicare and Medicaid Services (CMS) prohibits hospitals from billing patients for the difference between the billed charges and the Medicare or Medicaid payment levels set by CMS. Therefore, patients covered by Medicare or Medicaid can't be charity care patients. The proportion of patients covered by Medicare or Medicaid varies widely among hospitals.

From the years 2007 through 2017, statewide charity care charges increased by 15.6 percent over the 10-year period. Statewide hospital total patient services revenue, or billed charges, increased by 112 percent (Table 1). However, from 2013 to 2017, charity care decreased 46 percent while total patient services increased 35 percent. As a percent of total hospital patient services revenue, charity care charges dropped from 2.9 percent to 1.2 percent from 2013 to 2017 (Figure 1 and Table 1).

Figure 1. Statewide Hospital Charity Care in Washington as a Percent of Total Hospital Patient Service Revenue and as a Percent of Adjusted Patient Service Hospital Revenue, Fiscal Year 2007 - 2017.

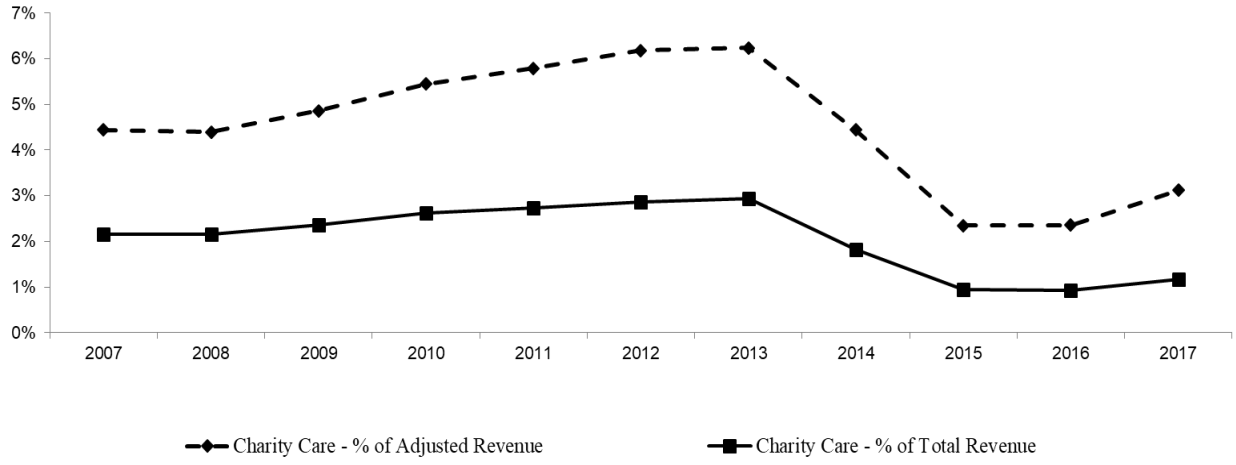


Figure 1 Notes: Adjusted patient service revenue is the total patient service hospital revenue minus Medicare and Medicaid patient service charges. Patient service revenue is the same as billed charges.

Table 1. Statewide Hospital Charity Care in Washington, Fiscal Year 2007-2017

	in Millions			Charity Care		
Year	Total Patient Services Revenue	Adjusted Patient Services Revenue	Total Charity Care (Billed Charges)	% of Total Revenue	% of Adjusted Revenue	Operating Margin %
2007	$27,502	$13,315	$592	2.2%	4.4%	5.5%
2008	$30,847	$15,187	$668	2.2%	4.4%	5.3%
2009	$34,884	$16,962	$824	2.4%	4.9%	6.1%
2010	$38,172	$18,378	$1,001	2.6%	5.4%	5.6%
2011	$41,182	$19,398	$1,123	2.7%	5.8%	3.4%
2012	$44,728	$20,775	$1,285	2.9%	6.2%	5.5%
2013	$48,482	$22,795	$1,422	2.9%	6.2%	5.0%
2014	$51,993	$21,288	$944	1.8%	4.4%	4.6%
2015	$57,703	$23,009	$540	0.9%	2.3%	5.6%
2016	$61,782	$24,102	$568	0.9%	2.4%	2.7%
2017	$65,506	$24,734	$772	1.2%	3.1%	2.1%

Table 1 Notes: Adjusted patient service revenue is the total hospital revenue minus Medicare and Medicaid charges. Operating margin is the total hospital patient service operating revenue (net of deductions) minus total patient service operating expenses expressed as a percent. Note: Patient service revenue is the same as billed charges.

The Affordable Care Act and its initial impact on charity care

The Patient Protection and Affordable Care Act (ACA) was signed into law on March 23, 2010, putting into place provisions for expanding healthcare coverage, controlling healthcare costs, and improving the healthcare delivery system in the United States. The law, aimed at cost-containment, preventive wellness, and quality improvement, has been phased in with significant changes that may have impacted charity care taking effect in 2013, 2014, and 2017.

Three provisions of the ACA most visible to Washington patients—the individual mandate, Medicaid expansion, and creation of health benefit exchanges—all became effective in 2013 and 2014. A report published by the Washington State Office of Financial Management (OFM) estimates that 5.5 percent of the state's population was uninsured in 2017, as compared to 5.8 percent in 2015 and 13.9 percent in 2012.[7] The growth of the insured population in Washington led to a 48 percent decline in the amount of hospital charges written off to charity care from 2013 to 2017. Uninsured data for 2017 from OFM and at least two studies have shown modest increases in the uninsured population in both Washington and the U.S. as a whole.[8,9] Should the number of uninsured patients increase, we can expect the utilization of charity care to increase.

Some of the elements of the ACA that took effect in 2017 were expiration of grandfathered non-ACA compliant insurance plans and elimination of some programs designed to help reduce risk insurers during the phase-in of the ACA. Each of those changes were expected to increase costs for employers and purchasers on the individual market.

A more significant part of the ACA that became effective in 2017 was full compliance with IRS section 501(r), which according to Becker's Hospital Review continues "the IRS focus on the activities and policies of tax-exempt hospitals and the implication that tax-exempt hospitals must be required to 'justify' their tax-exempt status, especially with regard to serving patients unable to pay for the costs of their medical care. Internal audit and compliance plans will need to include oversight of these new policies."[10] Section 501(r) also imposed limitations on how much those hospitals may charge for emergency and medically necessary care, and placed restrictions on their billing and collections practices. If a hospital fails to comply with this section, it may be fined or lose its non-profit status. Although many of the charity care requirements of section 501(r) are similar to existing Washington regulations, hospitals' efforts to comply with the new tax regulations may have increased the amount of charity care

[7] OFM, Research Brief No. 89, "After a three year decline, Washington's uninsured rate shows no change in 2017.", https://ofm.wa.gov/sites/default/files/public/dataresearch/researchbriefs/brief089.pdf, December 2018

[8] Sara R. Collins et al., "First Look at Health Insurance Coverage in 2018 Finds ACA Gains Beginning to Reverse: Findings from the Commonwealth Fund Affordable Care Act Tracking Survey, Feb.–Mar. 2018," *To the Point* (blog), Commonwealth Fund, May 1, 2018.

[9] Dan Witters, "Uninsured Rate Rises in 17 States in 2017," https://news.gallup.com/poll/233597/uninsured-rate-rises-states-2017.aspx, Gallup, May 9, 2018.

[10] Becker's Hospital Review "501r – What does it mean to you?

provided. IRS enforcement of that section led to revocation of at least one unidentified hospital's non-profit status in 2017.

Effective January 1, 2019, Congress removed the fiscal penalty in the individual mandate, one of the key provisions of the ACA driving increased insurance coverage. Disagreement exists about the full impact of this change, but some believe that repeal or significant roll-back of ACA could cause charity care to revert to pre-2014 levels.[11,12]

Distribution of charity care among Washington hospitals

Charity care varied widely among hospitals, ranging from $0 to $79 million. The median amount of charity care per hospital was $1.5 million; however, the average was much higher at $7.9 million as several hospitals provided significant charity care. The amount varied among hospitals in rural and urban areas and in different geographic areas of the state. These variations do not seem to be explained by population size. Some of the variation may be a function of the proportion of hospital revenue coming from Medicare and Medicaid.

Differences in charity care among hospitals may reflect demographic differences in service areas, hospital service availability, and charity care practices within the hospital. A high level of reported charity care, for example, may reflect greater need for charity care in the community. Likewise, a low level of charity care may reflect a relative absence of need for charity care in a hospital's service area.

Adjusting billed charges to determine actual cost of providing charity care

Because billed charges reflect mark-ups that vary between hospitals and are significantly higher than the expected payment, determining the actual cost of providing charity care to eligible patients is challenging. One way to estimate the cost of providing charity care is to use a cost-to-charge ratio[13]. The formula is total operating expenses (the actual cost of running the hospital and providing services) divided by total patient services revenue (billed charges).

As an example of how the cost-to-charge ratio works, if a hospital had billed charges of $1,000,000 and a cost-to-charge ratio of .345, the actual cost for that hospital to treat patients is $345,000. If that same hospital reported charity care billed charges of $100,000, the cost of

[11] The Pew Charitable Trusts, "Costs of Care for Uninsured Would Rise Steeply with Repeal of ACA," http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/01/06/costs-of-care-for-uninsured-would-rise-steeply-with-repeal-of-aca, January 6, 2017.
[12] Fritz Busch, Paul R. Hutchens, "The Individual Mandate Repeal: Will it Matter?" http://www.milliman.com/insight/2018/The-individual-mandate-repeal-Will-it-matter/ Milliman, March 1, 2018.
[13] http://medical-dictionary.thefreedictionary.com/hospital+cost-to-charge+ratio

treating those patients is $34,500. The higher the ratio, the closer the billed charges are to the actual cost of treating patients. This is only an estimate based on overall hospital performance.

Washington hospitals' cost-to-charge ratios range from .15 to 1.46. The statewide average was .47 with a majority of hospitals between .29 and .59. Below are some examples of cost-to-charge ratios for Washington hospitals, including a high, average, and low cost-to-charge ratio. Cost-to-charge ratios for all hospitals are listed in Appendix 2.

Hospital	Charity Care Charges	Cost-to-Charge Ratio	Estimated Actual Cost of Charity Care
UW Medicine/Harborview	79 Million	.414	33 Million
Kadlec Medical Center	27.2 Million	.337	9.2 Million
Quincy Valley Medical Center	162,270	.951	154,276

Contribution of all purchasers of care to hospital charity care

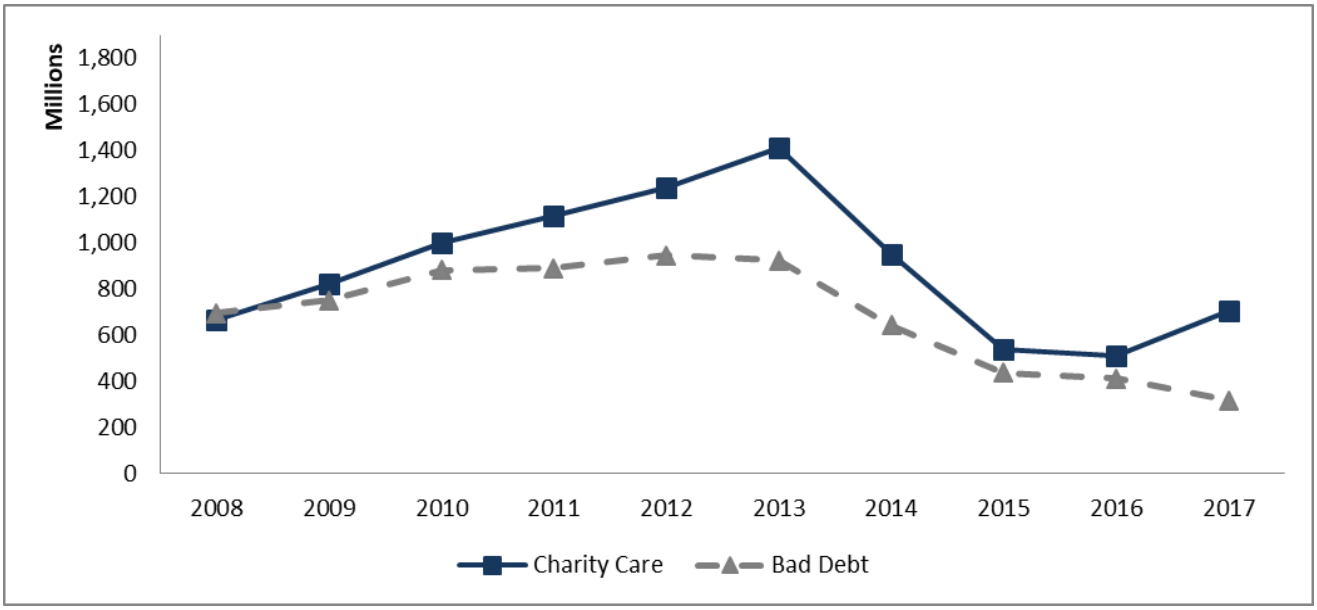
Charity care as a percent of adjusted (non-Medicare, non-Medicaid) revenue increased from 4.4 percent to 6.2 percent from FY 2007 through FY 2013, then declined to 4.4 percent in FY 2014, and declined to 2.3 percent in FY 2015, climbing again to 3.1% in 2017. Because charity care is unreimbursed, all payers – including insurance companies and patients who self-pay – contribute to covering the cost of charity care provided by the hospital. Throughout this time, fluctuations in the statewide operating margin, which is a measure of hospital profitability, do not appear to have adversely affected the amount of charity care provided in Washington (Table 1).

Uncompensated care in Washington

Uncompensated care includes both charity care and bad debt. Looking at uncompensated care gives us a bigger picture of the impact of the ACA and a way to compare Washington to other states.

In 2017, the amount of charity care increased for the first time since implementation of the ACA, bad debt continued to decline. Both charity care and bad debt had been increasing over the decade previous to implementation of the ACA. In recent years, charity care was rising faster than bad debt (Figure 2). Both had more than doubled between FY 2004 and FY 2013.

Figure 2. *Hospital Charity Care and Bad Debt Patient Service Charges in Washington, Fiscal Year 2008 - 2017*



How does Washington compare to the U.S. in uncompensated care?

No national charity care data are available to draw comparisons between Washington and the rest of the U.S. However, national data are available for uncompensated care, which includes both charity care and bad debt. The national uncompensated care number is built using a formula that includes a cost-to-charge ratio that translates the billed charges written off to uncompensated care into a "cost" or expense. The result is a proxy with which uncompensated care expenses are then compared to total operating costs, not total patient services revenue. The Washington uncompensated care number is built using the same formula.

Uncompensated care as a percent of hospital expenses is lower in Washington than it is in the U.S. as a whole (Figure 3). In both Washington and the U.S., uncompensated care remained relatively steady over most of the past 10 years, declining from 2013 onward. In the U.S., uncompensated care accounted for 4.2 percent of hospital expenses in FY 2016, the most recent year of data available. In Washington, uncompensated care accounted for 1.75 percent of hospital expenses in FY 2017. (Figure 3).

Figure 3. Hospital Uncompensated Care in Washington and the U.S. as a Percent of Hospital Expenses, Fiscal Years 2007 - 2017

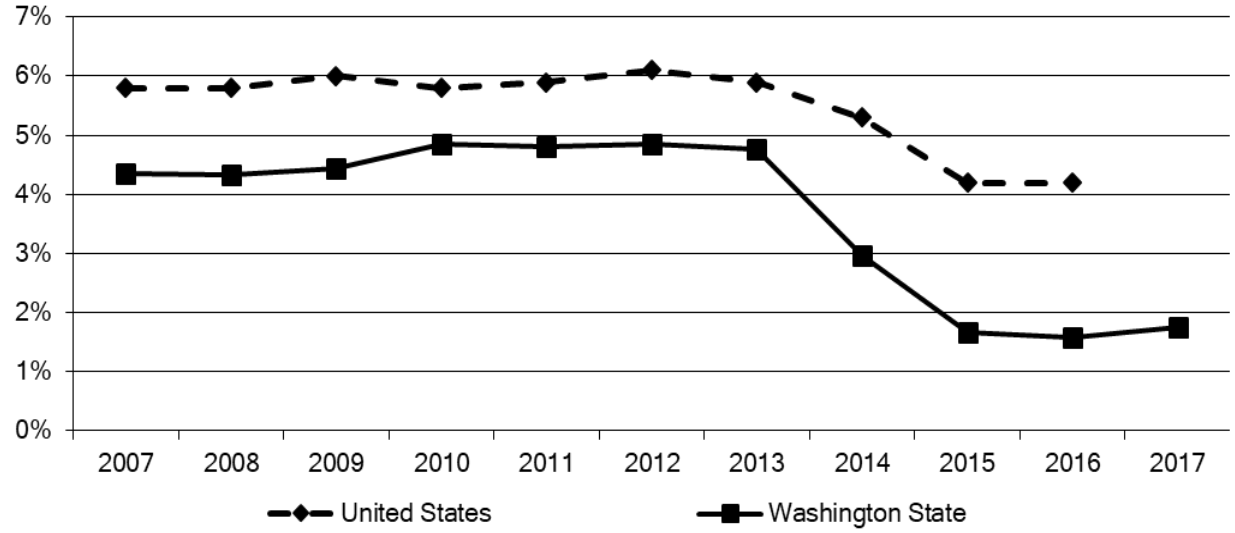


Figure 3 Notes: Uncompensated care includes bad debt and charity care. Uncompensated care as a percent of hospital expenses is calculated by multiplying uncompensated care by the ratio of total expenses to gross patient and other operating revenues. Uncompensated care data for 2017 are not yet available for the U.S. The U.S. data were derived from an American Hospital Association report[14].

Summary

Implementation of the ACA has changed the landscape of charity care in Washington. More patients have health coverage, either through Medicaid expansion or through purchase of private coverage. As a result, Washington saw the first decline in the amount of charity care reported by hospitals since the department began gathering these data in 1989. That decline, however, has ceased and charity care is increasing again, though it remains well below 2013 levels.

Effective January 1, 2019, Congress removed the fiscal penalty in the individual mandate, one of the key provisions of the ACA driving increased insurance coverage. Disagreement exists about the full impact of this change but some believe that repeal or significant roll-back of ACA could cause charity care to revert to pre-2014 levels.[15,16]

[14] https://www.aha.org/guidesreports/2018-05-22-trendwatch-chartbook-2018
[15] The Pew Charitable Trusts, "Costs of Care for Uninsured Would Rise Steeply with Repeal of ACA," http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/01/06/costs-of-care-for-uninsured-would-rise-steeply-with-repeal-of-aca, January 6, 2017.
[16] Fritz Busch, Paul R. Hutchens, "The Individual Mandate Repeal: Will it Matter?" http://www.milliman.com/insight/2018/The-individual-mandate-repeal-Will-it-matter/ Milliman, March 1, 2018.

About this report

The department has issued an annual report since 1990 as directed by chapter 70.170 of the Revised Code of Washington (RCW). Your feedback is important to us. Submit your comments by email at charitycare@doh.wa.gov to help us continue to improve the charity care report.

Appendix

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Calendar Year 2017

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	KING COUNTY (N=22)							
921	Cascade Behavioral Health	61,044,738	31,544,013	18,522,875	10,977,850	83,433	0.14%	0.76%
126	CHI/Highline Community Hospital	857,308,312	360,708,171	227,159,732	269,440,409	17,424,658	2.03%	6.47%
202	CHI/Regional Hospital	41,459,895	29,484,456	1,591,891	10,383,548	462,781	1.12%	4.46%
35	CHI/Saint Elizabeth Hospital	184,969,185	71,561,688	35,529,219	77,878,278	1,204,773	0.65%	1.55%
201	CHI/Saint Francis Community Hospital	1,102,738,034	423,628,107	257,395,702	421,714,225	17,863,126	1.62%	4.24%
164	EvergreenHealth/Kirkland	1,804,111,322	748,671,088	183,089,580	872,350,654	8,634,623	0.48%	0.99%
148	Kindred Hospital Seattle	124,123,496	60,645,126	3,155,581	60,322,789	-	0.00%	0.00%
183	MultiCare/Auburn Regional Medical Center	762,546,918	317,701,463	204,352,933	240,492,522	18,597,538	2.44%	7.73%
919	Navos	19,767,522	4,641,785	12,011,800	3,113,937	363,839	1.84%	11.68%
131	Overlake Hospital Medical Center	1,446,629,627	644,648,044	92,691,143	709,290,440	15,687,999	1.08%	2.21%
3	Providence/Swedish - Cherry Hill	1,747,686,562	895,163,997	223,435,802	629,086,763	19,349,851	1.11%	3.08%
1	Providence/Swedish - First Hill	4,173,195,774	1,541,983,081	646,770,257	1,984,442,436	31,461,621	0.75%	1.59%
210	Providence/Swedish - Issaquah	652,936,581	233,272,976	69,961,201	349,702,404	6,658,414	1.02%	1.90%
204	Seattle Cancer Care Alliance	927,980,845	309,453,758	96,002,503	522,524,584	6,691,297	0.72%	1.28%
14	Seattle Children's Hospital	2,332,540,244	32,441,581	1,008,623,685	1,291,474,978	23,248,291	1.00%	1.80%
195	Snoqualmie Valley Hospital	46,628,750	25,495,232	4,186,271	16,947,247	830,073	1.78%	4.90%
904	UHS/BHC Fairfax Hospital	142,289,257	23,964,500	54,961,200	63,363,557	232,082	0.16%	0.37%
29	UW Medicine/Harborview Medical Center	2,354,013,203	688,487,038	775,230,151	890,296,014	79,328,399	3.37%	8.91%
130	UW Medicine/Northwest Hospital	1,105,609,632	513,670,836	157,634,318	434,304,478	12,843,266	1.16%	2.96%
128	UW Medicine/University of Washington	2,664,941,290	901,986,004	460,681,517	1,302,273,769	28,801,450	1.08%	2.21%
155	UW Medicine/Valley Medical Center	1,831,406,708	665,948,534	414,493,040	750,965,134	21,407,021	1.17%	2.85%
10	Virginia Mason Medical Center	2,234,483,678	1,012,891,483	165,756,889	1,055,835,306	18,954,520	0.85%	1.80%
	KING COUNTY TOTALS	26,618,411,573	9,537,992,961	5,113,237,290	11,967,181,322	330,129,055	1.24%	2.76%
	PUGET SOUND REGION (Less King Co. N=23)							
106	Cascade Valley Hospital	137,589,546	46,596,672	38,790,525	52,202,349	(480,026)	-0.35%	-0.92%
142	CHI/Harrison Memorial Hospital	1,981,711,335	1,009,766,028	353,151,728	618,793,579	11,451,781	0.58%	1.85%
209	CHI/Saint Anthony Hospital	683,059,403	341,753,308	107,961,556	233,344,539	5,309,895	0.78%	2.28%
132	CHI/Saint Clare Hospital	812,320,098	353,722,043	237,920,613	220,677,442	13,866,428	1.71%	6.28%
32	CHI/Saint Joseph Medical Center - Tacoma	2,806,799,621	1,291,401,512	633,612,956	881,785,153	29,579,984	1.05%	3.35%
104	EvergreenHealth/Monroe	120,415,294	40,926,915	30,038,556	49,449,823	586,514	0.49%	1.19%
54	Forks Community Hospital	44,307,496	16,529,684	13,396,416	14,381,396	442,399	1.00%	3.08%
134	Island Hospital	230,567,912	91,497,996	13,345,435	125,724,481	628,277	0.27%	0.50%
85	Jefferson Healthcare	209,298,397	122,904,753	33,580,727	52,812,917	1,437,426	0.69%	2.72%
81	MultiCare/Good Samaritan Hospital	1,842,875,441	820,037,623	373,157,084	649,680,734	32,969,697	1.79%	5.07%
175	MultiCare/Mary Bridge Children's Health	749,940,476	275,060	446,942,056	302,723,360	6,996,694	0.93%	2.31%
176	MultiCare/Tacoma General - Allenmore	3,078,609,799	1,224,208,039	833,095,775	1,021,305,985	58,317,848	1.89%	5.71%
38	Olympic Medical Center	364,179,825	211,809,749	61,081,559	91,288,517	2,655,122	0.73%	2.91%
211	PeaceHealth/Peace Island Medical Center	23,045,826	11,254,327	3,365,837	8,425,662	215,166	0.93%	2.55%
145	PeaceHealth/Saint Joseph Hospital	1,328,572,335	682,922,521	255,347,307	390,302,507	12,711,920	0.96%	3.26%
206	PeaceHealth/United General Hospital	104,618,675	53,056,696	21,572,172	29,989,807	953,946	0.91%	3.18%
84	Providence/Regional Medical Center Everett	2,260,528,776	1,057,336,401	406,140,853	797,051,522	36,952,894	1.63%	4.64%
138	Providence/Swedish - Edmonds	854,167,639	383,951,024	155,044,237	315,172,378	15,094,108	1.77%	4.79%
207	Skagit Regional Health	1,082,660,868	546,706,970	223,843,425	312,110,473	4,621,544	0.43%	1.48%
924	Smokey Point Behavioral Hospital	15,707,350	3,057,400	597,550	12,052,400	17,000	0.11%	0.14%
922	UHS/BHC Fairfax Hospital - North	28,653,778	7,750,400	12,294,800	8,608,578	60,311	0.21%	0.70%
923	UHS/BHC Fairfax Hospital - Monroe	21,606,965	10,211,600	2,094,400	9,300,965	43,919	0.20%	0.47%
156	WhidbeyHealth	260,885,263	117,821,872	38,212,724	104,850,667	633,152	0.24%	0.60%
	PUGET SOUND REGION TOTALS	19,042,122,118	8,445,498,593	4,294,588,291	6,302,035,234	235,065,999	1.23%	3.73%

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Calendar Year 2017

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	SOUTHWEST WASHINGTON REGION (N=14)							
197	Capella/Capital Medical Center	530,577,937	210,680,748	7,513,706	312,383,483	1,046,493	0.20%	0.34%
63	Grays Harbor Community Hospital	395,032,177	182,158,641	103,775,941	109,097,595	854,433	0.22%	0.78%
8	Klickitat Valley Hospital	43,007,168	19,475,468	11,951,671	11,580,029	283,395	0.66%	2.45%
208	Legacy/Salmon Creek Hospital	884,050,619	379,803,394	207,770,708	296,476,517	20,853,978	2.36%	7.03%
152	Mason General Hospital	218,892,827	91,966,336	67,149,862	59,776,629	2,905,052	1.33%	4.86%
173	Morton General Hospital	41,536,569	22,724,591	10,128,307	8,683,671	221,214	0.53%	2.55%
79	Ocean Beach Hospital	48,069,214	13,449,393	4,828,633	29,791,188	480,851	1.00%	1.61%
26	PeaceHealth/Saint John Medical Center	717,656,940	354,769,874	192,012,970	170,874,096	5,831,845	0.81%	3.41%
170	PeaceHealth/Southwest Medical Center*	1,684,702,910	805,404,083	399,904,746	479,394,081	17,541,647	1.04%	3.66%
191	Providence/Centralia Hospital	667,791,284	342,017,292	154,338,572	171,435,420	12,956,821	1.94%	7.56%
159	Providence/Saint Peter Hospital	1,915,639,077	1,053,351,610	316,025,278	546,262,189	23,169,720	1.21%	4.24%
96	Skyline Hospital	28,354,951	13,333,309	1,037,225	13,984,417	139,435	0.49%	1.00%
186	Summit Pacific Medical Center	68,334,014	28,205,936	20,692,577	19,435,501	384,930	0.56%	1.98%
56	Willapa Harbor Hospital	30,877,991	15,392,456	6,625,439	8,860,096	381,802	1.24%	4.31%
	SOUTHWEST WASH REGION TOTALS	7,274,523,678	3,532,733,131	1,503,755,635	2,238,034,912	87,051,616	1.20%	3.89%
	CENTRAL WASHINGTON REGION (N=21)							
915	Ascension/Lourdes Counseling Center	45,965,371	7,342,329	28,375,907	10,247,135	39,457	0.09%	0.39%
22	Ascension/Lourdes Medical Center	276,286,793	113,413,320	54,100,249	108,773,224	3,552,486	1.29%	3.27%
198	Astria/Sunnyside Community Hospital	Hospital Late in Reporting to Department of Health						
199	Astria/Toppenish Community Hospital***	33,808,825	5,527,641	7,929,884	20,351,300	86,857	0.26%	0.43%
102	Astria/Regional Medical Center***	187,187,948	70,508,758	7,640,217	109,038,973	1,126,121	0.60%	1.03%
158	Cascade Medical Center	19,889,990	10,667,804	2,432,710	6,789,476	320,777	1.61%	4.72%
45	Columbia Basin Hospital	21,841,679	9,317,143	6,164,469	6,360,067	40,791	0.19%	0.64%
168	Confluence/Central Washington Hospital	794,290,460	436,975,077	143,912,609	213,402,774	5,207,842	0.66%	2.44%
205	Confluence/Wenatchee Valley Hospital	589,343,483	251,745,891	110,546,848	227,050,744	4,092,907	0.69%	1.80%
150	Coulee Community Hospital	45,739,632	16,144,479	12,591,103	17,004,050	133,960	0.29%	0.79%
140	Kittitas Valley Hospital	131,421,485	54,517,469	24,098,777	52,805,239	1,109,403	0.84%	2.10%
165	Lake Chelan Community Hospital*	46,097,433	17,977,952	9,059,101	19,060,380	398,385	0.86%	2.09%
147	Mid Valley Hospital	63,063,997	26,217,372	18,271,754	18,574,871	865,660	1.37%	4.66%
107	North Valley Hospital	38,491,932	14,749,081	12,904,245	10,838,606	439,901	1.14%	4.06%
46	PMH Medical Center*	103,262,889	34,724,954	32,648,592	35,889,343	1,527,798	1.48%	4.26%
161	Providence/Kadlec Medical Center	1,782,254,058	730,122,827	385,792,755	666,338,476	27,165,723	1.52%	4.08%
129	Quincy Valley Hospital	8,587,383	1,884,209	1,377,986	5,325,188	162,270	1.89%	3.05%
78	Samaritan Hospital	216,378,956	66,059,209	69,022,633	81,297,114	2,636,350	1.22%	3.24%
23	Three Rivers Hospital	25,704,905	9,287,666	1,539,064	14,878,175	1,054,291	4.10%	7.09%
39	Trios Health	502,877,948	205,149,436	111,448,334	186,280,178	2,181,352	0.43%	1.17%
58	Virginia Mason Memorial Hospital	1,175,431,833	515,266,037	261,815,616	398,350,180	14,839,109	1.26%	3.73%
	CENTRAL WASH REGION TOTALS	6,107,927,000	2,597,598,654	1,301,672,853	2,208,655,493	66,981,440	1.10%	3.03%

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Calendar Year 2017

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	EASTERN WASHINGTON REGION (N=21)							
43	Adventist West/Walla Walla General Hospital	Hospital Late in Reporting to Department of Health						
141	Dayton General Hospital	21,543,773	9,499,647	2,347,562	9,696,564	69,992	0.32%	0.72%
111	East Adams Rural Hospital	10,384,132	3,974,620	1,095,116	5,314,396	42,587	0.41%	0.80%
167	Ferry County Memorial Hospital**	14,639,952				148,615	1.02%	
82	Garfield County Memorial Hospital	5,413,141	2,162,771	1,537,208	5,314,396	10,402	0.19%	0.20%
137	Lincoln Hospital	27,251,079	14,112,556	5,796,783	7,341,740	103,073	0.38%	1.40%
37	MultiCare/Deaconess Hospital	1,473,112,938	705,126,964	321,424,144	446,561,830	2,838,831	0.19%	0.64%
180	MultiCare/Valley Hospital	663,204,244	294,693,101	143,835,252	224,675,891	2,086,201	0.31%	0.93%
21	Newport Community Hospital	47,516,224	17,291,560	14,067,068	16,157,596	489,602	1.03%	3.03%
80	Odesssa Memorial Hospital	5,176,704	1,332,830	1,310,609	2,533,265	17,259	0.33%	0.68%
125	Othello Community Hospital	Hospital Late in Reporting to Department of Health						
139	Providence/Holy Family Hospital	603,951,193	285,951,054	153,598,699	164,401,440	8,621,928	1.43%	5.24%
193	Providence/Mount Carmel Hospital	105,832,301	54,092,708	24,604,092	27,135,501	1,662,337	1.57%	6.13%
162	Providence/Sacred Heart Medical Center	2,462,628,605	1,074,370,256	627,704,386	760,553,963	22,494,418	0.91%	2.96%
194	Providence/Saint Joseph's Hospital	45,086,774	24,853,390	12,192,423	8,040,961	688,685	1.53%	8.56%
50	Providence/Saint Mary Medical Center	534,227,534	271,653,306	85,863,102	176,711,126	7,350,364	1.38%	4.16%
172	Pullman Regional Hospital	114,883,526	38,992,012	14,497,813	61,393,701	870,002	0.76%	1.42%
157	Saint Luke's Rehabilatation Institute	105,475,919	57,948,895	19,730,391	27,796,633	438,384	0.42%	1.58%
42	Shriners Hospital for Children - Spokane	36,460,482	65,346	18,100,772	18,294,364	2,532,969	6.95%	13.85%
108	Tri-State Memorial Hospital	149,462,132	89,405,801	15,615,746	44,440,585	1,822,022	1.22%	4.10%
153	Whitman Medical Center	36,543,954	17,772,883	6,968,306	11,802,765	69,907	0.19%	0.59%
	EASTERN WASH REGION TOTALS	6,462,794,607	2,963,299,700	1,470,289,472	2,018,166,717	52,357,578	0.81%	2.59%
	STATEWIDE TOTALS (N=101)	65,505,778,976	27,077,123,039	13,683,543,541	24,734,073,678	771,585,688	1.18%	3.12%

*Hospital late in reporting final data to Department of Health. Amounts displayed are estimates calculated from quarterly reports.

**Hospital late in reporting final data to Deparment of Health. Amounts displayed are estimates calculated from audited financial statements.

***Partial year data due to change of ownership during the reporting period


Washington State Department of
Health

Report to the Legislature

2018 Charity Care in Washington Hospitals

March 2020

RCW 70.170

Hospital Charity Care and Financial Data
Health Systems Quality Assurance

Washington State Department of Health

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Contents

Executive Summary

The Department of Health is required per RCW 71.170.060 to provide annual updates to the public on the status of charity care performed by hospitals in Washington State. Hospitals in Washington cannot deny patients access to care based on an inability to pay. They are required to develop a charity care policy, and to submit financial data regarding charity care to the Department of Health (department). This report summarizes the charity care data provided by Washington hospitals for the hospital fiscal years (FY) ending in 2018.

Hospitals reported an increase in charity care in FY 2018. Washington hospitals reported $956 million in charity care charges in FY 2018, which amounts to $318 million in actual expenses based on a cost-to-charge formula[1]. These charges reflect an increase of 24 percent from those reported in FY 2017.

The amount of money hospitals spent on charity care services in Washington varied widely with the highest reporting hospital, Harborview Medical Center, accounting for 9 percent of the statewide total charity care charges in 2018. The median amount across all hospitals was $2.21 million; however, the average was more than four times higher at $9.66 million.

For more information on charity care, including detailed reports by hospital, click here:

[1] Since the data in this report are based on billed charges, not the actual payment expected by the hospital, the approximate cost of providing charity care can be estimated by applying a cost-to-charge ratio. Multiplying the dollars by the cost-to-charge ratio results in an approximate cost of what hospitals actually spent providing this service to patients. The statewide cost-to-charge ratio is 0.34. Based on the $956 million reported in charity care charges in FY 2018, the overall cost of providing charity care statewide was about $318 million.

Background on charity care in Washington

What is charity care?

Charity care is defined in chapter 70.170 RCW as "medically necessary hospital health care rendered to indigent persons when third-party coverage, if any, has been exhausted, to the extent that the persons are unable to pay for the care or to pay deductibles or coinsurance amounts required by a third-party payer, as determined by the department." The definition of charity care changed October 1, 2018 as a result of Chapter 263, Laws of 2018. A person is considered indigent under WAC 246-453-040 if family income is at or below 200 percent of the federal poverty guidelines. Washington law prohibits hospitals from denying patient access to care based on inability to pay or adopting admission policies that significantly reduce charity care.

Patients with family incomes below 100 percent of the federal poverty guidelines are entitled to hospital services at no cost. Hospitals must also provide discounted care to patients between 100 percent and 200 percent of the poverty guidelines using a sliding scale (WAC 246-453-040). These are minimum requirements. Hospitals may extend free or discounted care to patients earning more than these levels, and many do. The charity care policies for each hospital in Washington may be found here.[2]

What are hospitals required to report and when?

Hospitals are required by law to submit charity care policies to the department for review at least 30 days before policies are adopted. Hospitals are also required to submit quarterly and year-end financial reports to the department using a uniform system of accounting. The department uses these financial reports to report charity care data and trends for the state each year. Fiscal years vary among hospitals in Washington, with hospital fiscal years ending on March 31, June 30, September 30, or December 31.

Hospitals are required to report total patient services revenue, also called billed charges, and the amount of patient services revenue that is written off as charity care. Hospitals are also required to report bad debt. Bad debt is different from charity care and is defined as uncollectible amounts, excluding contractual adjustments, which arise from failure to pay by patients whose care has not been classified as charity care. All of these data are reported as part of the hospital's year-end financial report.

Hospitals report financial data to the department on an income statement. Below is an abbreviated example of an income statement to illustrate the relationships between the various revenue sources and expenses.

[2] https://www.doh.wa.gov/DataandStatisticalReports/HealthcareinWashington/HospitalandPatientData/HospitalPolicies.

	Hospital: Sample Community Hospital	Comment	Sample Hospital Revenue
=	TOTAL PATIENT SERVICES REVENUE	Inpatient and outpatient revenue equivalent to Total Billed Charges	615,000,000
-	Provision for Bad Debts	Unpaid charges billed to patients who are not eligible for charity care, deducted from total revenue	(15,000,000)
-	Contractual Adjustments	Reductions from billed charges negotiated by insurance companies, deducted from total revenue	(350,000,000)
-	Charity Care	Unpaid charges billed to patients eligible for charity care, deducted from total revenue	(25,000,000)
=	NET PATIENT SERVICE REVENUE	Actual patient revenue received	225,000,000
+	OTHER OPERATING REVENUE	Actual revenue received for office rental, cafeteria income, etc.	10,000,000
=	TOTAL OPERATING REVENUE	Actual patient revenue and other operating revenue	235,000,000
-	TOTAL OPERATING EXPENSES	Total expenses for operating the hospital	(220,000,000)
=	NET OPERATING REVENUE	Cash remaining after operation of patient services	15,000,000
+/-	NON-OPERATING REVENUE-NET OF EXPENSES	Nonpatient revenue (investments, partnership fees)	5,000,000
=	NET REVENUE BEFORE ITEMS LISTED BELOW	Operating plus nonoperating remainder	20,000,000
+/-	EXTRAORDINARY ITEM	One time cash revenue or cash expenses	0
=	NET REVENUE OR (EXPENSE)	Net cash remaining after all the transactions	20,000,000

How do hospitals report charity care and how is it calculated?

The amount of charity care reported by hospitals is based on patient services revenue, known as billed charges. These charges are based on the hospital's charge master rate sheet, which sets the price for every treatment and supply category a hospital uses. Every patient's total bill is comprised of the sum of the charge master rates of the various services or supplies used during the stay before any adjustments based on insurance status. All patients, regardless of insurance status, receive the same billed charges for the same services.

The billed charges reflect a markup that varies among hospitals and is significantly higher than the amount the hospital actually expects to be paid. Medicaid and Medicare pay a set rate for services regardless of billed charges, and private insurance companies negotiate with hospitals for large discounts off the master rate sheet.

Charity care is the amount of billed charges an indigent patient incurs for appropriate hospital-based medical services. Since these charges include the markup, the dollar amount of charity care reported by hospitals overestimates the true cost of providing charity care to indigent patients. To estimate the true cost of providing charity care, the department applies a cost-to-charge ratio. The formula is total operating expenses (the actual cost of running the hospital and providing services) divided by total patient services revenue (billed charges).

2018 Washington state charity care data

Statewide charity care charges for hospital fiscal year 2018

This report describes data collected from licensed Washington hospitals for their fiscal years (FY) ending in 2018. FY 2018 includes data for the 12 months prior to the end of each hospital's fiscal calendar, including data for months in 2017 if the fiscal year starts prior to January 1, 2018.

All charity care data for FY 2018 were due to the department by June 30, 2019. Although the department provides reminders and follow-up by phone and in writing to hospitals that are late in reporting data, some hospitals still have not provided data for their 2018 fiscal year. For 2018, 97 of 103 hospitals reported charity care information in year-end financial reports in time to be used in this report. Of the six hospitals that did not provide year-end reports, we have provided annual financial estimates for two hospitals based on their quarterly financial reports or audited financial statements[3]. For the other four hospitals, no charity care data are available because no FY 2018 financial reports were submitted to the department[4].

Overall, Washington hospitals reported $956 million of charity care charges written off in FY 2018. These charges amounted to 1.36 percent of total patient services revenue and 3.54 percent of adjusted patient services revenue. Adjusted patient services revenue is the amount of revenue for non-Medicare and non-Medicaid payers, which includes private insurance and self-pay. The proportion of patients covered by Medicare or Medicaid varies widely among hospitals. The use of adjusted patient services revenue allows for a comparison of hospital charity care as a percent of privately sponsored patient revenue.[5]

From FY 2009 through FY 2018, statewide charity care charges increased by 16 percent. Statewide hospital total patient services revenue, or billed charges, increased by 102 percent.

[3] Summit Pacific Medical Center (186), and WhidbeyHealth (156).
[4] Astria/Toppenish Community Hospital (199), Astria/Yakima Regional Medical Center (102), Ferry County Memorial Hospital (167), and Othello Community Hospital (125).
[5] Adjusted patient services revenue subtracts Medicare and Medicaid specific patient services revenue from total patient services revenue to allow meaningful comparisons of charity care provided among hospitals. The federal Centers for Medicare and Medicaid Services (CMS) prohibits hospitals from billing patients for the difference between the billed charges and the Medicare or Medicaid payment levels set by CMS. Therefore, patients covered by Medicare or Medicaid can't be charity care patients. The proportion of patients covered by Medicare or Medicaid varies widely among hospitals.

However, from 2013 to 2018, charity care decreased 33 percent while total patient services increased 45 percent. As a percent of total hospital patient services revenue, charity care charges dropped from 2.9 percent to 1.4 percent from 2013 to 2018 (Figure 1 and Table 1).

Figure 1. Statewide Hospital Charity Care in Washington as a Percent of Total Hospital Patient Service Revenue and as a Percent of Adjusted Patient Service Hospital Revenue, Fiscal Year 2009 - 2018.

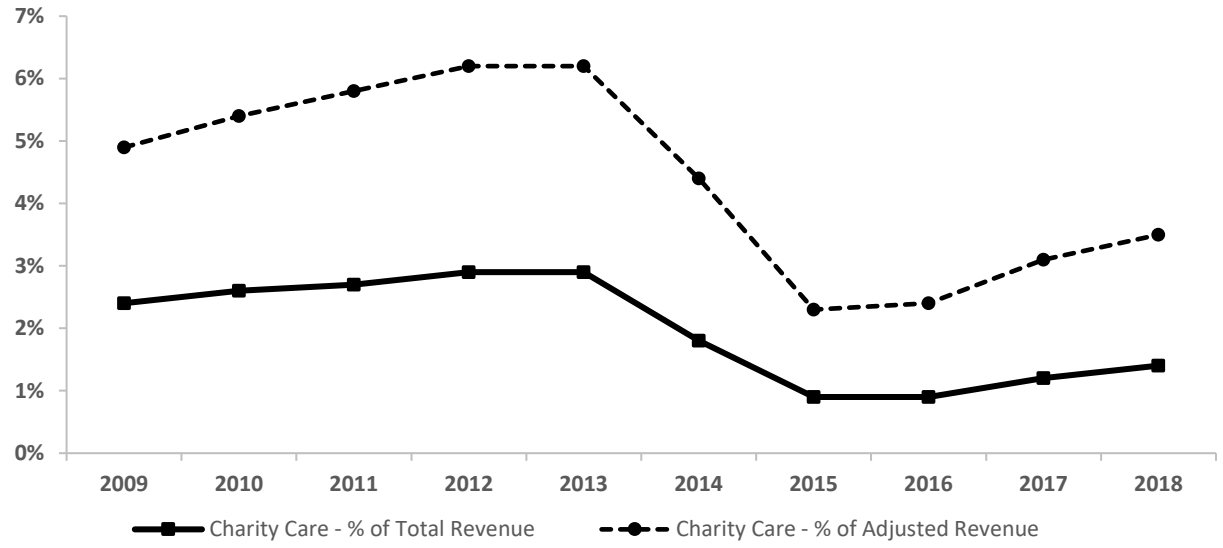


Figure 1 notes: Adjusted patient service revenue is the total patient service hospital revenue minus Medicare and Medicaid patient service charges. Patient service revenue is the same as billed charges.

Table 1. Statewide Hospital Charity Care in Washington, Fiscal Year 2009-2018

	in Millions			Charity Care		
Year	Total Patient Services Revenue	Adjusted Patient Services Revenue	Total Charity Care (Billed Charges)	% of Total Revenue	% of Adjusted Revenue	Operating Margin %
2009	$34,884	$16,962	$824	2.4%	4.9%	6.1%
2010	$38,172	$18,378	$1,001	2.6%	5.4%	5.6%
2011	$41,182	$19,398	$1,123	2.7%	5.8%	3.4%
2012	$44,728	$20,775	$1,285	2.9%	6.2%	5.5%
2013	$48,482	$22,795	$1,422	2.9%	6.2%	5.0%
2014	$51,993	$21,288	$944	1.8%	4.4%	4.6%
2015	$57,703	$23,009	$540	0.9%	2.3%	5.6%
2016	$61,782	$24,102	$568	0.9%	2.4%	2.7%
2017	$65,506	$24,734	$772	1.2%	3.1%	2.0%
2018	$70,459	$27,039	$956	1.4%	3.5%	2.4%

Table 1 notes: Adjusted patient service revenue is the total hospital revenue minus Medicare and Medicaid charges. Operating margin is the total hospital patient service operating revenue (net of deductions) minus total patient service operating expenses expressed as a percent. Note: Patient service revenue is the same as billed charges.

The Affordable Care Act and its initial impact on charity care

The Patient Protection and Affordable Care Act (ACA) was signed into law on March 23, 2010, putting into place provisions for expanding healthcare coverage, controlling healthcare costs, and improving the healthcare delivery system in the United States. The law, aimed at cost-containment, preventive wellness, and quality improvement, has been phased in with significant changes that may have impacted charity care taking effect in 2013, 2014, and 2017.

Three provisions of the ACA most visible to Washington patients—the individual mandate, Medicaid expansion, and creation of health benefit exchanges—all became effective in 2013 and 2014. A report published by the Washington State Office of Financial Management (OFM) estimates that 5.5 percent of the state's population was uninsured in 2017, as compared to 13.9 percent in 2012.[6] The growth of the insured population in Washington led to a 48 percent decline in the amount of hospital charges written off to charity care from 2013 to 2017. Uninsured data for 2017 from OFM and at least two studies have shown modest increases in the uninsured population in both Washington and the U.S. as a whole.[7,8] Should the number of uninsured patients increase, we can expect the use of charity care to increase.

A significant part of the ACA became effective in 2017 regarding full compliance with IRS section 501(r). According to Becker's Hospital Review, "The IRS focus on the activities and policies of tax-exempt hospitals and the implication that tax-exempt hospitals must be required to 'justify' their tax-exempt status, especially with regard to serving patients unable to pay for the costs of their medical care. Internal audit and compliance plans will need to include oversight of these new policies."[9] Section 501(r) also imposed limitations on how much those hospitals may charge for emergency and medically necessary care, and placed restrictions on their billing and collections practices. If a hospital fails to comply with this section, it may be fined or lose its non-profit status. Although many of the charity care requirements of section 501(r) are similar to existing Washington regulations, hospitals' efforts to comply with the new tax regulations may have increased the amount of charity care provided. IRS enforcement of that section led to revocation of at least one hospital's non-profit status[10] in 2017.

Effective January 1, 2019, Congress removed the fiscal penalty in the individual mandate, one of the key provisions of the ACA driving increased insurance coverage. Disagreement exists about

[6] OFM, Research Brief No. 89, "After a three year decline, Washington's uninsured rate shows no change in 2017.", https://ofm.wa.gov/sites/default/files/public/dataresearch/researchbriefs/brief089.pdf, December 2018

[7] Sara R. Collins et al., "First Look at Health Insurance Coverage in 2018 Finds ACA Gains Beginning to Reverse: Findings from the Commonwealth Fund Affordable Care Act Tracking Survey, Feb.–Mar. 2018," *To the Point* (blog), Commonwealth Fund, May 1, 2018.

[8] Dan Witters, "Uninsured Rate Rises in 17 States in 2017," https://news.gallup.com/poll/233597/uninsured-rate-rises-states-2017.aspx, Gallup, May 9, 2018.

[9] Becker's Hospital Review "501r – What does it mean to you?

[10] A Provena facility in Chicago, Illinois had their non-profit status revoked by the IRS at the behest of the Cook County Prosecuting Attorney's office.

the full impact of this change, but some believe that repeal or significant roll-back of ACA provisions could cause charity care to revert to pre-2014 levels.[11,12]

Distribution of charity care among Washington hospitals

Charity care varied widely among hospitals in fiscal year 2018, ranging from $0 to $83 million. The median amount of charity care per hospital was $2.2 million; however, the average was much higher at $9.7 million as several hospitals provided significant charity care. The amount varied among hospitals in rural and urban areas and in different geographic areas of the state. These variations do not seem to be explained by population size. Some of the variation may be a function of the proportion of hospital revenue coming from Medicare and Medicaid.

Differences in charity care among hospitals may reflect demographic and socioeconomic differences in service areas, hospital service availability, and charity care practices within the hospital. A high level of reported charity care, for example, may reflect greater need for charity care in the community. Likewise, a low level of charity care may reflect a relative absence of need for charity care in a hospital's service area.

Adjusting billed charges to determine actual cost of providing charity care

Because billed charges reflect mark-ups that vary between hospitals and are significantly higher than the expected payment, determining the actual cost of providing charity care to eligible patients is challenging. One way to estimate the cost of providing charity care is to use a cost-to-charge ratio.[13] The formula is total operating expenses (the actual cost of running the hospital and providing services) divided by total patient services revenue (billed charges).

As an example of how the cost-to-charge ratio works, if a hospital had billed charges of $1,000,000 and a cost-to-charge ratio of .345, the actual cost for that hospital to treat patients is $345,000. If that same hospital reported charity care billed charges of $100,000, the cost of treating those patients is $34,500. The higher the ratio, the closer the billed charges are to the actual cost of treating patients. This is only an estimate based on overall hospital performance.

[11] The Pew Charitable Trusts, "Costs of Care for Uninsured Would Rise Steeply with Repeal of ACA," http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/01/06/costs-of-care-for-uninsured-would-rise-steeply-with-repeal-of-aca, January 6, 2017.
[12] Fritz Busch, Paul R. Hutchens, "The Individual Mandate Repeal: Will it Matter?" http://www.milliman.com/insight/2018/The-individual-mandate-repeal-Will-it-matter/ Milliman, March 1, 2018.
[13] http://medical-dictionary.thefreedictionary.com/hospital+cost-to-charge+ratio

Washington hospitals' cost-to-charge ratios range from .17 to 2.03. The statewide average was .34. Below are some examples of cost-to-charge ratios for Washington hospitals, including a high, average, and low cost-to-charge ratio.

Hospital	Charity Care Charges	Cost-to-Charge Ratio	Estimated Actual Cost of Charity Care
UW Medicine/Harborview	83 Million	.43	35.5 Million
Kadlec Medical Center	33.4 Million	.36	11.9 Million
Quincy Valley Medical Center[14]	191,650	1.06	202,283

Contribution of all purchasers of care to hospital charity care

Charity care as a percent of adjusted (non-Medicare, non-Medicaid) revenue increased from 4.4 percent to 6.2 percent from FY 2007 through FY 2013, then declined to 4.4 percent in FY 2014, and declined to 2.3 percent in FY 2015, climbing again to 3.1 percent in 2017. In 2018 charity care as a percent of adjusted revenue was 3.5 percent. Because charity care is unreimbursed, all payers – including insurance companies and patients who self-pay – contribute to covering the cost of charity care provided by the hospital. Throughout this time, fluctuations in the statewide operating margin, which is a measure of hospital profitability, do not appear to have adversely affected the amount of charity care provided in Washington (Table 1).

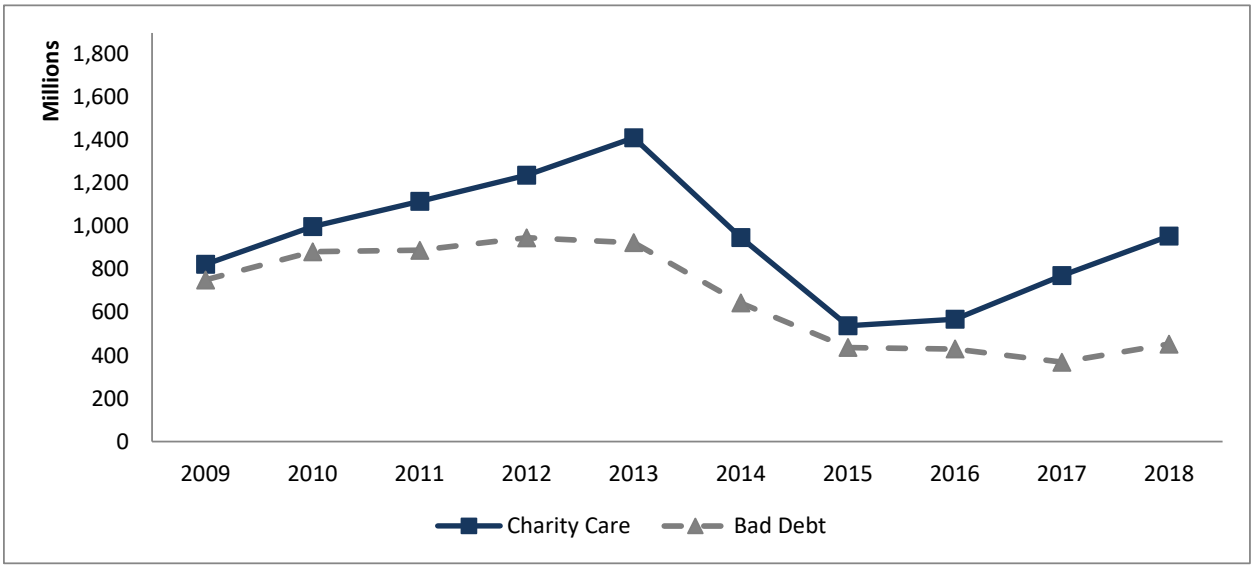
Uncompensated care in Washington

Uncompensated care includes both charity care and bad debt. Looking at uncompensated care gives us a bigger picture of the impact of the ACA and a way to compare Washington to other states.

Prior to the implementation of the ACA, both charity care and bad debt had been increasing. Both began to decline in 2013 with implementation of ACA provisions and this continued until 2017, when charity care began to rise again. In 2018, charity care continued to increase while bad debt leveled off (Figure 2).

[14] Quincy Valley Medical Center is a Critical Access Hospital receives cost based reimbursement from Medicare. This may account for the lower cost to charge ratio.

Figure 2. Hospital Charity Care and Bad Debt Patient Service Charges in Washington, Fiscal Year 2009 - 2018



How does Washington compare to the U.S. in uncompensated care?

No national charity care data are available to draw comparisons between Washington and the rest of the U.S. However, national data are available for uncompensated care, which includes both charity care and bad debt. The national uncompensated care number is built using a formula that includes a cost-to-charge ratio that translates the billed charges written off to uncompensated care into a “cost” or expense. The result is a proxy with which uncompensated care expenses are then compared to total operating costs, not total patient services revenue. The Washington uncompensated care number is built using the same formula.

Uncompensated care as a percent of hospital expenses is lower in Washington than it is in the U.S. as a whole (Figure 3). In the U.S., uncompensated care accounted for 4.2 percent of hospital expenses in FY 2016 (the most recent year of data available), compared to 1.6 percent in Washington. In both Washington and the U.S., uncompensated care remained relatively steady over most of the past 10 years, declining from 2013 onward. Starting in 2017, there has been a slight rise in uncompensated care in Washington (Figure 3).

Figure 3. Hospital Uncompensated Care in Washington and the U.S. as a Percent of Hospital Expenses, Fiscal Years 2009 - 2018

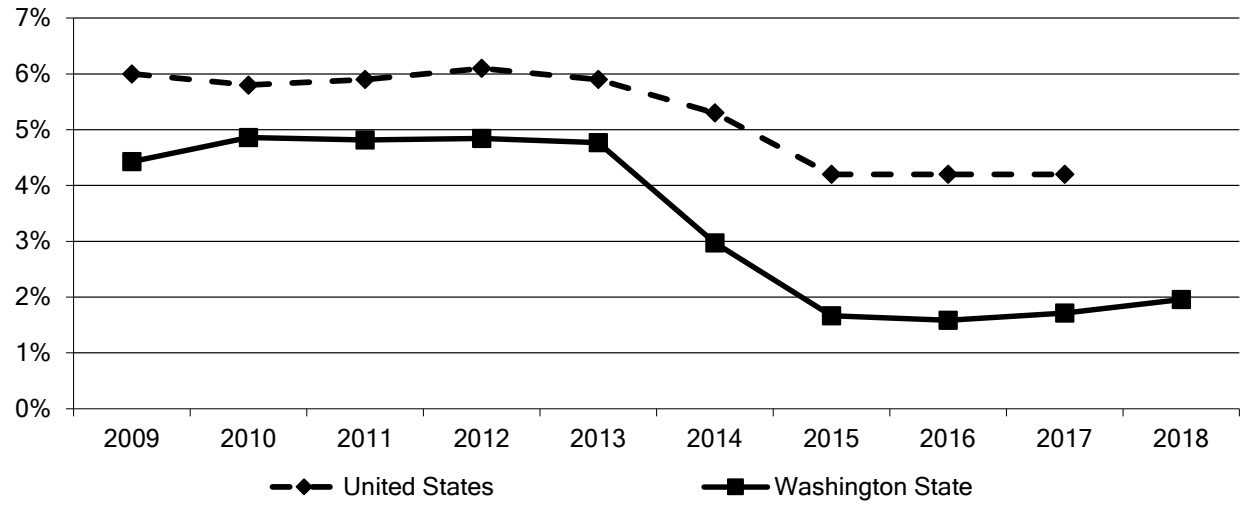


Figure 3 Notes: Uncompensated care includes bad debt and charity care. Uncompensated care as a percent of hospital expenses is calculated by multiplying uncompensated care by the ratio of total expenses to gross patient and other operating revenues. Uncompensated care data for 2018 are not yet available for the U.S. The U.S. data were derived from an American Hospital Association report.[15]

Summary

Implementation of the ACA has changed the landscape of charity care in Washington. More patients have health coverage, either through Medicaid expansion or through purchase of private coverage. As a result, Washington saw the first decline in the amount of charity care reported by hospitals since the department began gathering these data in 1989. That decline, however, has ceased and charity care is increasing again, though it remains below the 2013 level.

Effective January 1, 2019, Congress removed the fiscal penalty in the individual mandate–one of the key provisions of the ACA driving increased insurance coverage. Disagreement exists about the full impact of this change, but some believe that repeal or significant roll-back of ACA could cause charity care to revert to pre-2014 levels.

[15] https://www.aha.org/guidesreports/2018-05-22-trendwatch-chartbook-2018

About this report

The department has issued an annual report since 1990 as directed by chapter 70.170 of the Revised Code of Washington (RCW). Your feedback is important to us. Submit your comments by email at charitycare@doh.wa.gov to help us continue to improve the charity care report.

Appendix

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Calendar Year 2018

Lic. No	Region/Hospital	Revenue Categories - Patient Service Revenue - (Billed Charges) Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	KING COUNTY (N=23)							
921	Cascade Behavioral Hospital	77,077,821	39,729,349	25,216,289	12,132,183	105,083	0.14%	0.87%
126	CHI/Highline Medical Center	914,363,216	386,637,317	237,059,628	290,666,271	19,291,500	2.11%	6.64%
202	CHI/Regional Hospital	46,361,492	31,243,108	4,439,302	10,679,082	589,954	1.27%	5.52%
35	CHI/St. Elizabeth Hospital	212,643,840	79,430,093	43,203,200	90,010,547	2,092,593	0.98%	2.32%
201	CHI/St. Francis Community Hospital	1,193,570,912	467,851,035	279,313,787	446,406,090	22,822,669	1.91%	5.11%
164	EvergreenHealth/Kirkland	1,865,937,636	791,978,053	179,328,330	894,631,253	6,527,444	0.35%	0.73%
148	Kindred Hospital Seattle	135,065,098	60,055,883	3,328,092	71,681,123	0	0.00%	0.00%
183	MultiCare/Auburn Medical Center	811,370,174	429,089,053	196,749,374	185,531,747	23,941,239	2.95%	12.90%
212	MultiCare/Covington	256,133,101	59,443,029	71,378,256	125,311,816	8,609,763	3.36%	6.87%
919	MultiCare/NAVOS	23,320,780	4,768,357	15,604,045	2,948,378	475,824	2.04%	16.14%
131	Overlake Medical Center	1,563,834,104	690,349,044	102,153,218	771,331,842	22,142,173	1.42%	2.87%
3	Providence/Swedish Cherry Hill	1,763,411,238	900,612,253	222,475,627	640,323,358	16,638,144	0.94%	2.60%
1	Providence/Swedish First Hill	4,323,112,340	1,626,997,749	676,562,828	2,019,551,763	34,328,471	0.79%	1.70%
210	Providence/Swedish Issaquah	668,756,533	241,403,179	68,740,261	358,613,093	6,627,502	0.99%	1.85%
204	Seattle Cancer Care Alliance	1,087,661,462	376,879,945	111,839,228	598,942,289	9,207,934	0.85%	1.54%
14	Seattle Children's Hospital	2,747,120,445	36,119,981	1,375,822,321	1,335,178,143	33,468,655	1.22%	2.51%
195	Snoqualmie Valley Hospital	48,170,035	30,482,399	4,393,749	13,293,887	592,414	1.23%	4.46%
904	UHS/BHC Farifax Hospital -Kirkland	150,670,714	32,913,150	67,722,600	50,034,964	431,920	0.29%	0.86%
29	UW Medicine/Harborview Medical Center	2,447,286,219	743,856,616	803,567,081	899,862,522	82,847,101	3.39%	9.21%
130	UW Medicine/Northwest Hospital	1,198,677,124	561,660,334	177,064,649	459,952,141	14,032,615	1.17%	3.05%
128	UW Medicine/UW Medical Center	2,883,288,178	986,020,335	502,026,076	1,395,241,767	28,969,828	1.00%	2.08%
155	UW Medicine/Valley	2,021,898,198	750,659,003	431,061,656	840,177,539	25,050,647	1.24%	2.98%
10	Virginia Mason Medical Center	2,456,386,857	1,132,909,002	181,724,577	1,141,753,278	21,387,921	0.87%	1.87%
	KING COUNTY TOTALS	28,896,117,517	10,461,088,267	5,780,774,174	12,654,255,076	380,181,394	1.32%	3.00%
	PUGET SOUND REGION (Less King Co. N=24)							
106	Cascade Valley Hospital	163,998,925	60,505,716	40,708,738	62,784,471	1,012,324	0.62%	1.61%
213	CHI/Franciscan Rehabilitation Hospital	12,482,393	7,763,290	103,473	4,615,630	0	0.00%	0.00%
142	CHI/Harrison Medical Center	2,118,510,699	1,097,975,501	364,264,076	656,271,122	14,138,591	0.67%	2.15%
209	CHI/St. Anthony Hospital	751,598,147	369,382,650	116,533,256	265,682,241	6,672,216	0.89%	2.51%
132	CHI/St. Clare Hospital	849,024,088	365,467,618	244,560,597	238,995,873	16,692,825	1.97%	6.98%
32	CHI/St. Joseph Medical Center	2,830,178,356	1,301,864,010	620,874,085	907,440,261	32,458,675	1.15%	3.58%
104	EvergreenHealth/Monroe	136,451,584	45,409,580	31,401,911	59,640,093	585,094	0.43%	0.98%
54	Forks Community Hospital	46,367,166	16,474,343	13,958,854	15,933,969	649,026	1.40%	4.07%
134	Island Hospital	230,662,942	110,905,895	20,648,412	99,108,635	503,872	0.22%	0.51%
85	Jefferson Healthcare	227,367,408	133,345,362	35,816,624	58,205,422	2,363,239	1.04%	4.06%
81	MultiCare/Good Samaritan	1,932,854,813	872,709,888	379,380,259	680,764,666	42,916,045	2.22%	6.30%
175	MultiCare/Mary Bridge Children's Hospital	832,747,807	555,632	483,984,670	348,207,505	8,802,487	1.06%	2.53%
176	MultiCare/Tacoma General/Allenmore	3,347,564,929	1,329,394,971	855,345,003	1,162,824,955	77,586,074	2.32%	6.67%
38	Olympic Medical Center	403,824,450	236,656,358	66,484,223	100,683,869	2,649,178	0.66%	2.63%
211	PeaceHealth/Peace Island	27,601,115	14,690,315	3,897,481	9,013,319	426,526	1.55%	4.73%
145	PeaceHealth/St. Joseph Hospital	1,517,451,564	790,652,299	285,541,082	441,258,183	22,941,742	1.51%	5.20%
206	PeaceHealth/United General	121,850,321	61,758,319	24,927,766	35,164,236	2,212,816	1.82%	6.29%
84	Providence/Everett	2,348,409,228	1,115,558,736	406,068,036	826,782,456	38,394,081	1.63%	4.64%
138	Providence/Swedish Edmonds	889,789,246	398,540,692	164,089,617	327,158,937	14,264,017	1.60%	4.36%
207	Skagit Regional Health	1,208,604,028	619,871,701	247,364,747	341,367,580	7,159,337	0.59%	2.10%
924	Smokey Point Behavioral Hospital	79,031,405	18,786,800	34,698,850	25,545,755	1,021,867	1.29%	4.00%
922	UHS/BHC Fairfax Hospital - Everett	30,278,289	8,198,400	14,789,600	7,290,289	25,985	0.09%	0.36%
923	UHS/BHC Fairfax Hospital - Monroe	26,236,005	17,138,800	4,911,200	4,186,005	-3,832	-0.01%	-0.09%
156	WhidbeyHealth*	290,319,039	133,039,032	37,601,133	119,678,874	338,747	0.12%	0.28%
	PUGET SOUND REGION TOTALS	20,423,203,947	9,126,645,908	4,497,953,693	6,798,604,346	293,810,932	1.44%	4.32%

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Calendar Year 2018

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	SOUTHWEST WASHINGTON REGION (N=14)							
173	ArborHealth (formerly Morton General)	43,018,331	22,812,530	10,869,070	9,336,731	154,969	0.36%	1.66%
63	Grays Harbor Community Hospital	368,795,636	184,758,572	97,135,115	86,901,949	745,536	0.20%	0.86%
8	Klickitat Valley Health	42,517,945	19,845,556	11,854,450	10,817,939	735,317	1.73%	6.80%
208	Legacy Salmon Creek Hospital	1,012,056,136	432,483,966	216,347,821	363,224,349	20,278,012	2.00%	5.58%
197	Lifepoint/Capital Medical Center	596,392,509	229,580,603	8,105,346	358,706,560	5,771,094	0.97%	1.61%
152	Mason General Hospital	222,882,635	100,273,094	64,134,251	58,475,290	3,476,258	1.56%	5.94%
79	Ocean Beach Hospital	48,566,738	26,954,367	216,967	21,395,404	99,125	0.20%	0.46%
170	PeaceHealth/Southwest Medical Center	1,822,118,233	882,408,386	391,105,746	548,604,101	28,098,913	1.54%	5.12%
26	PeaceHealth/St. John Medical Center	780,473,535	373,678,262	220,161,229	186,634,044	11,229,345	1.44%	6.02%
191	Providence/Centralia Hospital	740,418,010	383,114,043	165,940,897	191,363,070	14,463,740	1.95%	7.56%
159	Providence/St. Peter Hospital	2,045,470,442	1,141,385,038	333,821,024	570,264,380	30,953,437	1.51%	5.43%
96	Skyline Hospital	27,867,392	13,039,671	543,531	14,284,190	220,418	0.79%	1.54%
186	Summit Pacific Medical Center*	74,304,414	27,918,096	23,621,473	22,764,845	1,260,114	1.70%	5.54%
56	Willapa Harbor Hospital	35,431,018	18,027,082	6,687,730	10,716,206	462,172	1.30%	4.31%
	SOUTHWEST WASH REGION TOTALS	7,860,312,974	3,856,279,266	1,550,544,650	2,453,489,058	117,948,450	1.50%	4.81%
	CENTRAL WASHINGTON REGION (N=21)							
102	Astria/Regional Medical Center	0	0	0	0	0		
198	Astria/Sunnyside Hospital	289,187,816	54,198,074	54,053,606	180,936,136	4,396,039	1.52%	2.43%
199	Astria/Toppenish Hospital	0	0	0	0	0		
158	Cascade Medical Center	24,551,248	13,485,863	3,211,305	7,854,080	318,888	1.30%	4.06%
45	Columbia Bason Hospital	24,426,394	8,973,733	4,317,823	11,134,838	32,801	0.13%	0.29%
168	Confluence/Central Washington Hospital	875,753,594	464,902,179	167,252,958	243,598,457	7,039,240	0.80%	2.89%
205	Confluence/Wenatchee Valley	636,935,560	287,169,622	110,622,545	239,143,393	6,068,329	0.95%	2.54%
150	Coulee Medical Center	52,864,943	15,020,228	21,792,581	16,052,134	240,018	0.45%	1.50%
140	Kittitas Valley Healthcare	140,104,003	53,202,595	23,178,848	63,722,560	955,198	0.68%	1.50%
165	Lake Chelan Community Hospital	47,878,623	20,562,055	10,446,013	16,870,555	575,873	1.20%	3.41%
915	Lifepoint/Lourdes Counseling Center	58,646,197	7,330,664	38,044,607	13,270,926	174,308	0.30%	1.31%
22	Lifepoint/Lourdes Medical Center	271,035,265	110,986,212	50,649,625	109,399,428	5,403,992	1.99%	4.94%
39	Lifepoint/Trios Health	465,491,188	201,920,953	101,866,373	161,703,862	1,584,553	0.34%	0.98%
147	Mid Valley Hospital	65,626,348	25,366,412	20,022,063	20,237,873	920,102	1.40%	4.55%
107	North Valley Hospital	35,559,871	15,230,541	12,399,330	7,930,000	358,603	1.01%	4.52%
46	Prosser Memorial Health	118,391,490	37,289,492	38,722,325	42,379,673	2,108,996	1.78%	4.98%
161	Providence/Kadlec Regional	1,909,301,287	790,540,468	405,135,982	713,624,837	33,479,529	1.75%	4.69%
129	Quincy Valley Medical Center	7,967,813	1,678,879	1,816,300	4,472,634	191,650	2.41%	4.28%
78	Samaritan Healthcare	240,639,714	78,042,365	77,158,439	85,438,910	3,319,907	1.38%	3.89%
23	Three Rivers Hospital	24,158,142	11,780,538	2,691,681	9,685,923	756,482	3.13%	7.81%
58	Virginia Mason Memorial	1,301,320,870	611,969,346	310,962,339	378,389,185	21,706,488	1.67%	5.74%
	CENTRAL WASH REGION TOTALS	6,589,840,366	2,809,650,219	1,454,344,743	2,325,845,404	89,630,996	1.36%	3.85%

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Calendar Year 2018

Lic. No	Region/Hospital	Revenue Categories - Patient Service Revenue - (Billed Charges) Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	EASTERN WASHINGTON REGION (N=21)							
141	Dayton General Hospital	25,380,696	13,269,609	5,778,550	6,332,537	145,726	0.57%	2.30%
111	East Adams Rural Healthcare	10,594,894	4,731,034	883,471	4,980,389	60,355	0.57%	1.21%
167	Ferry County Memorial Hospital	0	0	0	0	0		
82	Garfield County Memorial Hospital	5,639,002	2,826,317	1,229,280	1,583,405	46,781	0.83%	2.95%
926	Inland Northwest Behavioral Health	1,368,400	124,200	586,800	657,400	0	0.00%	0.00%
137	Lincoln Hospital	29,947,454	15,273,201	6,887,914	7,786,339	75,417	0.25%	0.97%
37	MultiCare/Deaconess Hospital	1,484,983,063	521,740,785	28,279,472	934,962,806	10,130,813	0.68%	1.08%
180	MultiCare/Valley Hospital	699,871,111	207,129,562	10,150,353	482,591,196	6,204,838	0.89%	1.29%
21	Newport Hospital	53,245,772	22,868,624	15,226,379	15,150,769	508,334	0.95%	3.36%
80	Odessa Memorial Hospital	5,631,315	1,748,953	1,534,609	2,347,753	17,379	0.31%	0.74%
125	Othello Community Hospital	0	0	0	0	0		
139	Providence/Holy Family Hospital	616,794,119	301,536,217	149,534,802	165,723,100	10,031,846	1.63%	6.05%
193	Providence/Mount Carmel	107,911,711	53,317,424	26,444,437	28,149,850	1,857,229	1.72%	6.60%
162	Providence/Sacred Heart Medical Center	2,513,249,625	1,137,172,324	611,734,771	764,342,530	27,382,906	1.09%	3.58%
50	Providence/St Mary Medical Center	601,681,995	309,004,263	96,343,864	196,333,868	9,758,127	1.62%	4.97%
194	Providence/St. Joseph's	42,274,203	22,043,632	9,211,674	11,018,897	925,393	2.19%	8.40%
172	Pullman Regional Hospital	123,361,960	41,676,939	14,888,941	66,796,080	1,128,013	0.91%	1.69%
42	Shriner's Hospital - Spokane	38,464,481	0	19,338,480	19,126,001	2,739,821	7.12%	14.33%
157	St. Luke's Rehab Institute	117,692,834	58,048,873	25,394,927	34,249,034	916,085	0.78%	2.67%
108	Tri-State Memorial Hospital	168,271,926	98,586,067	19,961,277	49,724,582	2,197,561	1.31%	4.42%
153	Whitman Hospital	43,219,087	22,570,970	5,410,552	15,237,565	183,690	0.43%	1.21%
	EASTERN WASH REGION TOTALS	6,689,583,648	2,833,668,994	1,048,820,553	2,807,094,101	74,310,314	1.11%	2.65%
	STATEWIDE TOTALS (N=103)	70,459,058,452	29,087,332,654	14,332,437,813	27,039,287,985	955,882,086	1.36%	3.54%

*Hospital late in reporting final data to Department of Health. Amounts displayed are estimates calculated from quarterly reports.

**Hospital late in reporting final data to Deparment of Health. Amounts displayed are estimates calculated from audited financial statements.

***Partial year data due to change of ownership during the reporting period


Washington State Department of
Health

Report to the Legislature

2019 Charity Care in Washington Hospitals

April 2021

RCW 70.170

Hospital Charity Care and Financial Data
Health Systems Quality Assurance

Washington State Department of Health

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Washington State Department of Health

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Contents

Executive Summary

The Department of Health (department) is required per RCW 70.170.060 to provide annual updates to the public on the status of charity care provided by hospitals in Washington state. Hospitals in Washington may not deny patients access to care based on an inability to pay. They are required to develop a charity care policy, and to submit financial data regarding charity care to the department. This report summarizes the charity care data provided by Washington hospitals for the hospital fiscal years (FY) ending in 2019.

Hospitals reported an increase in charity care in FY 2019. Washington hospitals reported $1.039 billion in charity care billed charges in FY 2019, which amounts to $349 million in actual expenses based on a cost-to-charge formula[1]. These charges reflect an increase of 8.7 percent from those reported in FY 2018.

The amount of money hospitals spent on charity care services in Washington varied widely with the highest reporting hospital, Harborview Medical Center, accounting for 9 percent of the statewide total charity care charges in 2019. The median amount across all hospitals was $2.48 million; however, the average was more than four times higher at $10.29 million.

Find more information on charity care, including detailed reports by hospital, here.

[1] Because the data in this report are based on billed charges, not the actual payment expected by the hospital, the approximate cost of providing charity care can be estimated by applying a cost-to-charge ratio. Multiplying the dollars by the cost-to-charge ratio results in an approximate cost of what hospitals actually spent providing this service to patients. The statewide cost-to-charge ratio is 0.336. Based on the $1.039 billion reported in charity care charges in FY 2019, the overall cost of providing charity care statewide was about $349 million.

Background on charity care in Washington

What is charity care?

Charity care is defined in chapter 70.170 RCW as "medically necessary hospital health care rendered to indigent persons when third-party coverage, if any, has been exhausted, to the extent that the persons are unable to pay for the care or to pay deductibles or coinsurance amounts required by a third-party payer, as determined by the department." The definition of charity care changed October 1, 2018 as a result of Chapter 263, Laws of 2018. A person is considered indigent under WAC 246-453-040 if family income is at or below 200 percent of the federal poverty guidelines. Washington law prohibits hospitals from denying patient access to care based on inability to pay or adopting admission policies that significantly reduce charity care.

Patients with family incomes below 100 percent of the federal poverty guidelines are entitled to hospital services at no cost. Hospitals must also provide discounted care to patients between 100 percent and 200 percent of the poverty guidelines using a sliding scale (WAC 246-453-040). These are minimum requirements. Hospitals may extend free or discounted care to patients earning more than these levels, and many do. The charity care policies for each hospital in Washington are here.[2]

What are hospitals required to report and when?

Hospitals are required by law to submit charity care policies to the department for review at least 30 days before policies are adopted. Hospitals are also required to submit quarterly and year-end financial reports to the department using a uniform system of accounting. The department uses these financial reports to report charity care data and trends for the state each year. Fiscal years vary among hospitals in Washington, with hospital fiscal years ending on March 31, June 30, September 30, or December 31.

Hospitals are required to report total patient services revenue, also called billed charges, and the amount of patient services revenue that is written off as charity care. Hospitals are also required to report bad debt. Bad debt is different from charity care and is defined as uncollectible amounts, excluding contractual adjustments, which arise from failure to pay by patients whose care has not been classified as charity care. All of these data are reported as part of the hospital's year-end financial report.

Hospitals report financial data to the department on an income statement. Below is an abbreviated example of an income statement to illustrate the relationships between the various revenue sources and expenses.

[2] https://www.doh.wa.gov/DataandStatisticalReports/HealthcareinWashington/HospitalandPatientData/HospitalPolicies.

	Hospital: Sample Community Hospital	Comment	Sample Hospital Revenue
=	TOTAL PATIENT SERVICES REVENUE	Inpatient and outpatient revenue equivalent to Total Billed Charges	615,000,000
-	Provision for Bad Debts	Unpaid charges billed to patients who are not eligible for charity care, deducted from total revenue	(15,000,000)
-	Contractual Adjustments	Reductions from billed charges negotiated by insurance companies, deducted from total revenue	(350,000,000)
-	Charity Care	Unpaid charges billed to patients eligible for charity care, deducted from total revenue	(25,000,000)
=	NET PATIENT SERVICE REVENUE	Actual patient revenue received	225,000,000
+	OTHER OPERATING REVENUE	Actual revenue received for office rental, cafeteria income, etc.	10,000,000
=	TOTAL OPERATING REVENUE	Actual patient revenue and other operating revenue	235,000,000
-	TOTAL OPERATING EXPENSES	Total expenses for operating the hospital	(220,000,000)
=	NET OPERATING REVENUE	Cash remaining after operation of patient services	15,000,000
+/-	NON-OPERATING REVENUE-NET OF EXPENSES	Nonpatient revenue (investments, partnership fees)	5,000,000
=	NET REVENUE BEFORE ITEMS LISTED BELOW	Operating plus nonoperating remainder	20,000,000
+/-	EXTRAORDINARY ITEM	One-time cash revenue or cash expenses	0
=	NET REVENUE OR (EXPENSE)	Net cash remaining after all the transactions	20,000,000

How do hospitals report charity care and how is it calculated?

The amount of charity care reported by hospitals is based on patient services revenue, known as billed charges. These charges are based on the hospital's charge master rate sheet, which sets the price for every treatment and supply category a hospital uses. Every patient's total bill comprises the sum of the charge master rates of the various services or supplies used during the stay before any adjustments based on insurance status. All patients, regardless of insurance status, receive the same billed charges for the same services.

The billed charges reflect a markup that varies among hospitals and is significantly higher than the amount the hospital actually expects to be paid. Medicaid and Medicare pay a set rate for services regardless of billed charges, and private insurance companies negotiate with hospitals for large discounts off the master rate sheet.

Charity care is the amount of billed charges an indigent patient incurs for appropriate hospital-based medical services. Because these charges include the markup, the dollar amount of charity care reported by hospitals overestimates the true cost of providing charity care to indigent patients. To estimate the true cost of providing charity care, the department applies a cost-to-charge ratio. The formula is total operating expenses (the actual cost of running the hospital and providing services) divided by total patient services revenue (billed charges).

2019 Washington state charity care data

Statewide charity care charges for hospital fiscal year 2019

This report describes data collected from licensed Washington hospitals for their fiscal years (FY) ending in 2019. FY 2019 includes data for the 12 months prior to the end of each hospital's fiscal calendar, including data for months in 2018 if the fiscal year starts prior to January 1, 2019.

All charity care data for FY 2019 were due to the department by June 30, 2020. Some hospitals still have not provided data for their 2019 fiscal year. For 2019, 90 of 103 hospitals reported charity care information in year-end financial reports in time to be used in this report. Of the 13 hospitals that did not provide year-end reports, we have provided annual financial estimates for eight hospitals based on their quarterly financial reports or audited financial statements[3]. For the other five hospitals, no charity care data are available because no FY 2019 financial reports were submitted to the department[4].

Overall, Washington hospitals reported $1,039,391,268 in charity care charges written off in FY 2019. These charges amounted to 1.36 percent of total patient services revenue and 3.61 percent of adjusted patient services revenue. Adjusted patient services revenue is the amount of revenue for non-Medicare and non-Medicaid payers, which includes private insurance and self-pay. The proportion of patients covered by Medicare or Medicaid varies widely among hospitals. The use of adjusted patient services revenue allows for a comparison of hospital charity care as a percent of privately sponsored patient revenue.[5]

[3] Snoqualmie Valley Hospital (license number 105), Olympic Medical Center (38), Lifepoint/Lourdes Counseling Center (915), Lifepoint/Lourdes Medical Center (22), Dayton General Hospital (141) Lincoln Hospital (137) Two hospitals provided only one quarterly report in 2019. US Healthvest/South Sound Behavioral Health (928), Wellfound Behavioral Health (927).
[4] Astria/Toppenish Community Hospital (199), Astria/ Regional Medical Center (102), Ferry County Memorial Hospital (167), Garfield County Memorial Hospital (82), and Othello Community Hospital (125).
[5] Adjusted patient services revenue subtracts Medicare and Medicaid specific patient services revenue from total patient services revenue to allow meaningful comparisons of charity care provided among hospitals. The federal Centers for Medicare and Medicaid Services (CMS) prohibits hospitals from billing patients for the difference between the billed charges and the Medicare or Medicaid payment levels set by CMS. Therefore, patients covered by Medicare or Medicaid can't be charity care patients. The proportion of patients covered by Medicare or Medicaid varies widely among hospitals.

Following a decline in charity care after implementation of the Affordable Care Act in 2013, charity care has been rising again since 2016. The rate of increase slowed between 2018 and 2019. As a percent of total hospital patient services revenue, charity care charges dropped from 2.9 percent to 1.4 percent from 2013 to 2019 (Figure 1 and Table 1).

Figure 1. Statewide Hospital Charity Care in Washington, Fiscal Year 2010 - 2019.

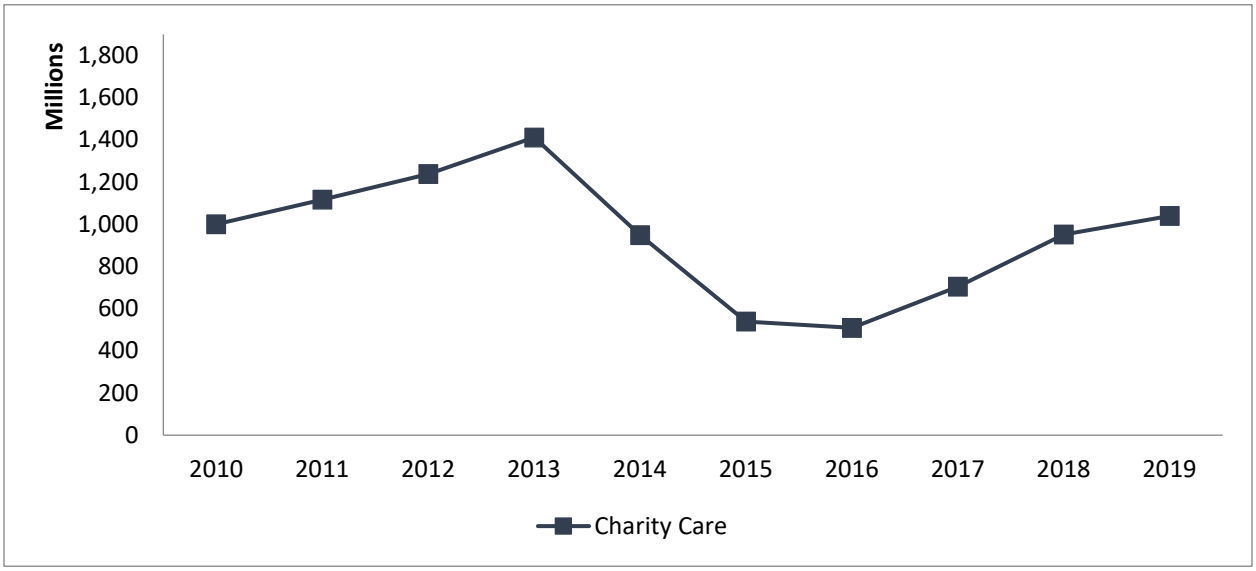


Table 1. Statewide Hospital Charity Care in Washington, Fiscal Year 2010-2019

	in Millions			Charity Care		
Year	Total Patient Services Revenue	Adjusted Patient Services Revenue	Total Charity Care (Billed Charges)	% of Total Revenue	% of Adjusted Revenue	Operating Margin %
2010	$38,172	$18,378	$1,001	2.6%	5.4%	5.6%
2011	$41,182	$19,398	$1,123	2.7%	5.8%	3.4%
2012	$44,728	$20,775	$1,285	2.9%	6.2%	5.5%
2013	$48,482	$22,795	$1,422	2.9%	6.2%	5.0%
2014	$51,993	$21,288	$944	1.8%	4.4%	4.6%
2015	$57,703	$23,009	$540	0.9%	2.3%	5.6%
2016	$61,782	$24,102	$568	0.9%	2.4%	2.7%
2017	$65,506	$24,734	$772	1.2%	3.1%	2.0%
2018	$70,148	$26,850	$951	1.4%	3.5%	2.4%
2019	$76,292	$28,769	$1,039	1.4%	3.6%	2.7%

Table 1 notes: Adjusted patient service revenue is the total hospital revenue minus Medicare and Medicaid charges. Operating margin is the total hospital patient service operating revenue (net of deductions) minus total patient service operating expenses expressed as a percent. Note: Patient service revenue is the same as billed charges.

Distribution of charity care among Washington hospitals

Charity care varied widely among hospitals in fiscal year 2019, ranging from $0 to $96,100,092. The median amount of charity care per hospital was $2,480,097; however, the average was much higher at $10,291,003 as several hospitals provided significant charity care. The amount varied among hospitals in rural and urban areas and in different geographic areas of the state. These variations do not seem to be explained by population size. Some of the variation may be a function of the proportion of hospital revenue coming from Medicare and Medicaid.

Differences in charity care among hospitals may reflect demographic and socioeconomic differences in service areas, hospital service availability, and charity care practices within the hospital. A high level of reported charity care, for example, may reflect greater need for charity care in the community. Likewise, a low level of charity care may reflect a relative absence of need for charity care in a hospital's service area.

Adjusting billed charges to determine actual cost of providing charity care

Because billed charges reflect mark-ups that vary between hospitals and are significantly higher than the expected payment, determining the actual cost of providing charity care to eligible patients is challenging. One way to estimate the cost of providing charity care is to use a cost-to-charge ratio.[6] The formula is total operating expenses (the actual cost of running the hospital and providing services) divided by total patient services revenue (billed charges).

As an example of how the cost-to-charge ratio works, if a hospital had billed charges of $1,000,000 and a cost-to-charge ratio of .345, the actual cost for that hospital to treat patients is $345,000. If that same hospital reported charity care billed charges of $100,000, the cost of treating those patients is $34,500. The higher the ratio, the closer the billed charges are to the actual cost of treating patients. This is only an estimate based on overall hospital performance.

Washington hospitals' cost-to-charge ratios range from .18 to 1.5. The statewide average was .34. Below are some examples of cost-to-charge ratios for Washington hospitals, including a high, average, and low cost-to-charge ratio.

[6] http://medical-dictionary.thefreedictionary.com/hospital+cost-to-charge+ratio

Hospital	Charity Care Charges	Cost-to-Charge Ratio	Estimated Actual Cost of Charity Care
Odessa Memorial Hospital	$28,975	1.51[7]	$43,757
Overlake Hospital Medical Center	$18,059,448	.34	$6,125,673
Multicare/Valley Hospital	$11,961,367	.18	$2,158,349

Contribution of all purchasers of care to hospital charity care

Charity care as a percent of adjusted (non-Medicare, non-Medicaid) revenue increased from 4.4 percent to 6.2 percent from FY 2007 through FY 2013, then declined to 4.4 percent in FY 2014, and declined to 2.3 percent in FY 2015, climbing again to 3.1 percent in 2017 and 3.5 percent in 2018. In 2019 charity care as a percent of adjusted revenue was 3.6 percent. Because charity care is unreimbursed, all payers – including insurance companies and patients who self-pay – contribute to covering the cost of charity care provided by the hospital. Throughout this time, fluctuations in the statewide operating margin, which is a measure of hospital profitability, do not appear to have adversely affected the amount of charity care provided in Washington (Table 1).

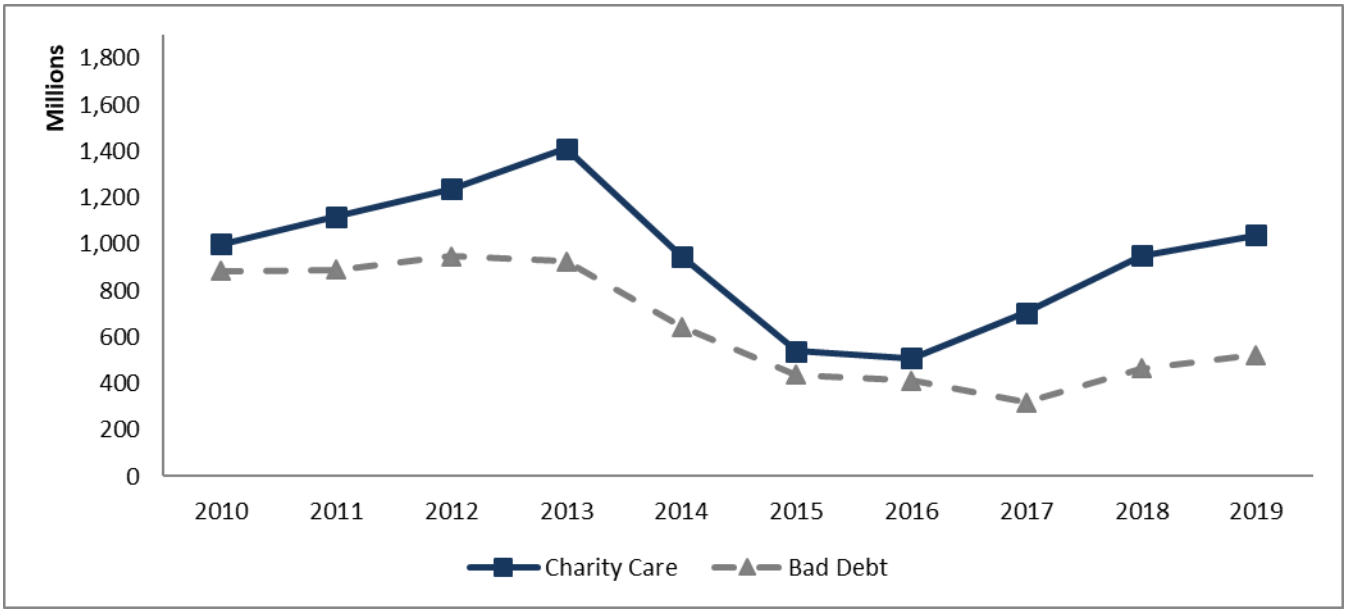
Uncompensated care in Washington

Uncompensated care includes both charity care and bad debt. Looking at uncompensated care gives us a bigger picture of the effect of the Affordable Care Act (ACA) and a way to compare Washington to other states.

Prior to the implementation of the ACA, both charity care and bad debt had been increasing. Both began to decline in 2013 with implementation of ACA provisions. This continued until 2017, when charity care began to rise again. In 2019, charity care and bad debt increased slightly (Figure 2).

[7] Note: The figures in this column are rounded to the third decimal place whereas the Estimated Actual Cost of Charity Care totals in the column to the right are computed by multiplying by the cost-to-charge ratio figure rounded to the eight-decimal place.

Figure 2. Hospital Charity Care and Bad Debt Patient Service Charges in Washington, Fiscal Year 2010 – 2019



Summary

In 2013, as a result of the Affordable Care Act, Washington saw the first decline in the amount of charity care reported by hospitals since the department began gathering these data in 1989. That decline, however, has ceased and charity care has been increasing again. Charity care rates in Washington in 2019 have remained similar to levels in 2018, which includes slight increases in revenue and slight increases in charity care. Charity care charges increased 24 percent between 2017 and 2018, but only 9.3 percent between 2018 and 2019, so the rise may be slowing.

About this report

The department has issued an annual report since 1990 as directed by chapter 70.170 of the Revised Code of Washington (RCW). Your feedback is important to us. Submit your comments by email at charitycare@doh.wa.gov to help us continue to improve the charity care report.

Appendix

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Fiscal Year 2019

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	KING COUNTY (N=23)							
921	Cascade Behavioral Health	91,272,341	44,875,278	32,870,769	13,526,294	141,473	0.16%	1.05%
202	CHI/Regional Hospital	43,100,478	31,796,200	4,055,745	7,248,533	93,568	0.22%	1.29%
126	CHI/Saint Anne Hospital (formerly Highline)	1,018,959,969	437,524,548	245,436,124	335,999,297	15,449,005	1.52%	4.60%
35	CHI/Saint Elizabeth Hospital	248,247,347	93,849,996	45,986,746	108,410,605	3,260,545	1.31%	3.01%
201	CHI/Saint Francis Community Hospital	1,413,260,165	567,288,903	318,361,010	527,610,252	19,148,837	1.35%	3.63%
164	EvergreenHealth/Kirkland	2,017,928,129	834,672,040	183,630,903	999,625,186	7,849,763	0.39%	0.79%
148	Kindred Hospital Seattle	93,935,503	33,233,320	3,512,744	57,189,439	-	0.00%	0.00%
183	MultiCare/Auburn Regional Medical Center	852,214,961	352,942,637	232,372,657	266,899,667	25,121,952	2.95%	9.41%
212	MultiCare/Covington Medical Center	315,470,520	78,687,234	87,468,738	149,314,548	9,106,119	2.89%	6.10%
919	MultiCare/Navos	47,180,395	4,826,660	33,862,012	8,491,723	581,418	1.23%	6.85%
131	Overlake Hospital Medical Center	1,680,136,121	739,227,675	108,609,779	832,298,667	18,059,448	1.07%	2.17%
3	Providence/Swedish - Cherry Hill	1,849,406,531	985,115,561	216,356,781	647,934,189	12,424,017	0.67%	1.92%
1	Providence/Swedish - First Hill	4,334,369,781	1,626,844,698	679,804,315	2,027,720,768	32,798,498	0.76%	1.62%
210	Providence/Swedish - Issaquah	721,666,518	264,746,274	71,645,339	385,274,905	6,960,454	0.96%	1.81%
204	Seattle Cancer Care Alliance	1,298,538,505	453,396,490	128,036,267	717,105,748	13,843,614	1.07%	1.93%
14	Seattle Children's Hospital	2,774,660,535	41,337,872	1,325,534,439	1,407,788,224	25,929,146	0.93%	1.84%
195	Snoqualmie Valley Hospital*	53,365,146	31,544,531	4,565,642	17,254,973	1,101,458	2.06%	6.38%
904	UHS/BHC Fairfax Hospital	149,584,448	28,135,525	76,756,550	44,692,373	114,930	0.08%	0.26%
29	UW Medicine/Harborview Medical Center	2,529,966,620	817,756,464	787,232,752	924,977,404	96,100,092	3.80%	10.39%
130	UW Medicine/Northwest Hospital	1,247,438,480	597,869,653	171,573,791	477,995,036	17,513,389	1.40%	3.66%
128	UW Medicine/University of Washington	3,175,944,959	1,107,129,463	495,213,748	1,573,601,748	27,829,784	0.88%	1.77%
155	UW Medicine/Valley Medical Center	2,155,890,591	831,537,075	436,586,273	887,767,243	20,906,704	0.97%	2.35%
10	Virginia Mason Medical Center	2,649,000,164	1,235,840,378	187,777,852	1,225,381,934	25,661,022	0.97%	2.09%
	KING COUNTY TOTALS	30,761,538,207	11,240,178,475	5,877,250,976	13,644,108,756	379,995,236	1.24%	2.79%
	PUGET SOUND REGION (Less King Co. N=25)							
213	CHI/Franciscan Rehabilitation Hospital	20,450,636	10,395,579	65,598	9,989,459	-	0.00%	0.00%
209	CHI/Saint Anthony Hospital	883,555,068	430,402,277	129,521,732	323,631,059	6,434,697	0.73%	1.99%
132	CHI/Saint Clare Hospital	977,175,653	412,882,806	253,003,969	311,288,878	10,990,695	1.12%	3.53%
32	CHI/Saint Joseph Medical Center - Tacoma	3,220,909,840	1,483,534,959	658,791,305	1,078,583,576	25,276,355	0.78%	2.34%
142	CHI/Saint Michael Hospital (formerly Harrison)	2,678,575,333	1,383,077,968	426,857,426	868,639,939	15,370,856	0.57%	1.77%
104	EvergreenHealth/Monroe	139,542,565	45,831,726	31,472,749	62,238,090	910,299	0.65%	1.46%
54	Forks Community Hospital	50,912,976	19,776,076	13,844,152	17,292,748	583,316	1.15%	3.37%
134	Island Hospital	240,956,743	128,211,325	25,412,280	87,333,138	755,934	0.31%	0.87%
85	Jefferson Healthcare	261,404,232	156,554,618	37,725,365	67,124,249	3,133,646	1.20%	4.67%
81	MultiCare/Good Samaritan Hospital	2,145,418,874	967,112,739	420,631,496	757,674,639	46,912,061	2.19%	6.19%
175	MultiCare/Mary Bridge Children's Health	937,464,445	228,550	541,078,469	396,157,426	7,767,742	0.83%	1.96%
176	MultiCare/Tacoma General - Allenmore	3,617,232,957	1,468,302,293	876,379,895	1,272,550,769	73,406,406	2.03%	5.77%
38	Olympic Medical Center*	443,123,875	254,783,688	68,518,865	119,821,322	2,480,097	0.56%	2.07%
211	PeaceHealth/Peace Island Medical Center	34,363,663	19,432,552	3,896,466	11,034,645	1,018,258	2.96%	9.23%
145	PeaceHealth/Saint Joseph Hospital	1,630,745,258	872,422,089	295,151,237	463,171,932	32,249,494	1.98%	6.96%
206	PeaceHealth/United General Hospital	135,115,901	68,260,088	25,799,616	41,056,197	4,420,347	3.27%	10.77%
84	Providence/Regional Medical Center Everett	2,452,887,044	1,172,084,927	427,566,771	853,235,346	47,071,724	1.92%	5.52%
138	Providence/Swedish - Edmonds	924,873,583	438,146,902	162,937,564	323,789,117	16,102,665	1.74%	4.97%
106	Skagit Regional Health/Cascade Valley Hospital	200,801,840	76,390,787	52,676,993	71,734,060	1,036,164	0.52%	1.44%
207	Skagit Regional Health/Skagit Valley Hospital	1,275,775,923	650,933,657	242,763,965	382,078,301	8,963,308	0.70%	2.35%
923	UHS/BHC Fairfax Hospital - Monroe	25,719,487	13,706,000	6,829,200	5,184,287	42,532	0.17%	0.82%
922	UHS/BHC Fairfax Hospital - North	29,564,217	5,980,800	15,198,400	8,385,017	1,403	0.00%	0.02%
924	US Healthvest/Smokey Point Behavioral Hospital	84,577,133	16,377,000	42,347,300	25,852,833	381,783	0.45%	1.48%
927	Wellfound Behavioral Health**	2,455,296	493,377	997,899	964,020	-	0.00%	0.00%
156	WhidbeyHealth	247,500,850	117,929,944	30,952,366	98,618,540	468,271	0.19%	0.47%
	PUGET SOUND REGION TOTALS	22,661,103,392	10,213,252,727	4,790,421,078	7,657,429,587	305,778,053	1.35%	3.99%

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Fiscal Year 2019

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	SOUTHWEST WASHINGTON REGION (N=15)							
173	Arbor Health (formerly Morton General)	45,139,645	27,598,622	7,587,855	9,953,168	119,590	0.26%	1.20%
63	Grays Harbor Community Hospital	367,356,647	182,403,774	24,976,471	159,976,402	1,640,583	0.45%	1.03%
8	Klickitat Valley Hospital	44,071,986	21,478,685	11,757,856	10,835,445	583,768	1.32%	5.39%
208	Legacy/Salmon Creek Hospital	1,101,530,728	474,349,096	221,834,845	405,346,787	19,235,140	1.75%	4.75%
197	LifePoint/Capital Medical Center	663,162,049	253,921,553	8,375,302	400,865,194	7,409,755	1.12%	1.85%
152	Mason General Hospital	263,528,572	120,146,153	75,131,658	68,250,761	4,857,164	1.84%	7.12%
79	Ocean Beach Hospital	55,031,310	31,252,108	11,990,778	11,788,424	251,073	0.46%	2.13%
26	PeaceHealth/Saint John Medical Center	881,197,932	426,199,092	240,123,543	214,875,297	22,171,985	2.52%	10.32%
170	PeaceHealth/Southwest Medical Center	1,975,066,452	989,028,588	404,367,481	581,670,383	46,995,169	2.38%	8.08%
191	Providence/Centralia Hospital	831,107,340	438,517,545	174,286,605	218,303,190	16,961,690	2.04%	7.77%
159	Providence/Saint Peter Hospital	2,131,918,459	1,191,683,972	336,154,580	604,079,907	30,429,351	1.43%	5.04%
96	Skyline Hospital	28,895,891	14,002,887	776,615	14,116,389	221,157	0.77%	1.57%
186	Summit Pacific Medical Center	86,724,246	31,689,003	27,053,484	27,981,759	1,810,603	2.09%	6.47%
928	US Healthvest/South Sound Behavioral Health**	3,857,000	903,500	2,033,000	920,500	1,400	0.04%	0.15%
56	Willapa Harbor Hospital	37,261,768	19,665,802	7,671,827	9,924,139	353,448	0.95%	3.56%
	SOUTHWEST WASH REGION TOTALS	8,515,850,025	4,222,840,380	1,554,121,900	2,738,887,745	153,041,876	1.80%	5.59%
	CENTRAL WASHINGTON REGION (N=21)							
102	Astria/Regional Medical Center	Not Reported						
198	Astria/Sunnyside Community Hospital	318,267,538	118,610,214	112,725,356	86,931,968	6,145,008	1.93%	7.07%
199	Astria/Toppenish Community Hospital	Not Reported						
158	Cascade Medical Center	25,871,189	13,757,349	3,643,169	8,470,671	223,021	0.86%	2.63%
45	Columbia Basin Hospital	27,745,417	8,593,916	5,731,268	13,420,233	42,464	0.15%	0.32%
168	Confluence/Central Washington Hospital	1,034,643,932	553,225,588	184,785,405	296,632,939	9,925,634	0.96%	3.35%
205	Confluence/Wenatchee Valley Hospital	557,843,530	254,156,640	91,969,768	211,717,122	4,929,638	0.88%	2.33%
150	Coulee Community Hospital	53,036,305	14,228,430	21,331,389	17,476,486	334,430	0.63%	1.91%
140	Kittitas Valley Hospital	152,675,062	62,022,398	27,442,294	63,210,370	459,763	0.30%	0.73%
165	Lake Chelan Community Hospital	44,518,412	19,654,623	9,215,557	15,648,232	710,980	1.60%	4.54%
915	LifePoint/Lourdes Counseling Center*	71,494,147	11,291,538	41,885,007	18,317,602	20,364	0.03%	0.11%
22	LifePoint/Lourdes Medical Center*	303,056,256	125,857,509	48,531,875	128,666,872	4,752,933	1.57%	3.69%
39	LifePoint/Trios Health	502,926,950	216,453,755	110,402,502	176,070,693	2,186,506	0.43%	1.24%
147	Mid Valley Hospital	75,689,086	28,943,046	22,237,335	24,508,705	1,037,876	1.37%	4.23%
107	North Valley Hospital	37,433,055	14,991,334	4,418,391	18,023,330	617,097	1.65%	3.42%
46	Prosser Memorial Health	142,067,798	45,733,975	45,682,787	50,651,036	1,671,832	1.18%	3.30%
161	Providence/Kadlec Medical Center	2,021,338,025	858,905,488	417,247,896	745,184,641	41,095,368	2.03%	5.51%
129	Quincy Valley Hospital	9,794,629	1,511,656	240,380	8,042,593	191,648	1.96%	2.38%
78	Samaritan Hospital	250,016,707	83,492,381	78,346,930	88,177,396	4,264,490	1.71%	4.84%
23	Three Rivers Hospital	23,481,287	13,873,235	8,110,235	1,497,817	584,483	2.49%	39.02%
58	Virginia Mason Memorial Hospital	1,459,296,235	698,795,691	349,528,335	410,972,209	23,259,391	1.59%	5.66%
	CENTRAL WASH REGION TOTALS	7,111,195,560	3,144,098,766	1,583,475,879	2,383,620,915	102,452,926	1.44%	4.30%

Total Patient Service Revenue, Adjusted Patient Service Revenue, and Amount of Charity Care as a Percent for Washington Hospital Fiscal Years Ending During Fiscal Year 2019

		Revenue Categories - Patient Service Revenue - (Billed Charges)						
Lic. No	Region/Hospital	Total Patient Service Revenue	(Less) Medicare Revenue	(Less) Medicaid Revenue	Adjusted Patient Service Revenue	Charity Care	Charity Care as a % of Total Patient Service Revenue	Charity Care as a % of Adjusted Patient Service Revenue
	EASTERN WASHINGTON REGION (N=21)							
141	Dayton General Hospital*	27,423,886	15,008,078	693,218	11,722,590	131,501	0.48%	1.12%
111	East Adams Rural Hospital	9,920,979	4,029,202	2,252,711	3,639,066	66,509	0.67%	1.83%
167	Ferry County Memorial Hospital	Not reported						
82	Garfield County Memorial Hospital	Not reported						
926	Inland Northwest Behavioral Health	27,714,895	4,985,600	1,915,200	20,814,095	116,088	0.42%	0.56%
137	Lincoln Hospital*	33,329,904	16,960,581	7,190,590	9,178,733	187,535	0.56%	2.04%
37	MultiCare/Deaconess Hospital	1,713,095,608	838,084,088	329,548,869	545,462,651	21,079,515	1.23%	3.86%
180	MultiCare/Valley Hospital	748,531,328	340,618,995	148,733,283	259,179,050	11,961,367	1.60%	4.62%
21	Newport Community Hospital	57,107,954	25,912,987	15,214,105	15,980,862	843,280	1.48%	5.28%
80	Odessa Memorial Hospital	5,776,116	1,779,425	1,794,586	2,202,105	28,975	0.50%	1.32%
125	Othello Community Hospital	Not reported						
139	Providence/Holy Family Hospital	674,123,703	327,749,702	160,661,751	185,712,250	11,223,155	1.66%	6.04%
193	Providence/Mount Carmel Hospital	116,521,670	58,410,729	26,523,986	31,586,955	2,264,876	1.94%	7.17%
162	Providence/Sacred Heart Medical Center	2,680,401,648	1,178,255,366	642,007,562	860,138,720	30,232,790	1.13%	3.51%
194	Providence/Saint Joseph's Hospital	36,809,232	19,363,072	8,442,441	9,003,719	895,834	2.43%	9.95%
50	Providence/Saint Mary Medical Center	599,906,993	307,262,761	99,995,610	192,648,622	11,114,101	1.85%	5.77%
172	Pullman Regional Hospital	132,569,203	47,569,175	14,998,525	70,001,503	949,959	0.72%	1.36%
157	Saint Luke's Rehabilatation Institute	116,287,797	58,357,807	24,815,567	33,114,423	1,016,856	0.87%	3.07%
42	Shriners Hospital for Children - Spokane	38,317,817	3,738	18,783,559	19,530,520	3,613,369	9.43%	18.50%
108	Tri-State Memorial Hospital	182,587,520	108,634,154	18,506,951	55,446,415	2,131,025	1.17%	3.84%
153	Whitman Medical Center	48,014,916	19,108,801	7,502,287	21,403,828	266,442	0.55%	1.24%
	EASTERN WASH REGION TOTALS	7,248,441,169	3,372,094,261	1,529,580,801	2,346,766,107	98,123,177	1.35%	4.18%
	STATEWIDE TOTALS (N=105)	76,298,128,353	32,192,464,609	15,334,850,634	28,770,813,110	1,039,391,268	1.36%	3.61%

*Hospital late in reporting final data to Department of Health. Amounts displayed are estimates calculated from quarterly reports.

**Only one quarter reported in 2019.

Washington State Department of
Health

Exhibit 8

FOURTH AMENDMENT TO LEASE

This FOURTH AMENDMENT is made, entered into, and is effective on this 28th day of May, 2021, by and between LURIA FAMILY 1 LP whose business and post office address is 1188 Bishop Street, Suite 1306, Honolulu, Hawaii 96813, hereinafter called "Lessor", and SPECIALTY EYECARE CENTRE, PLLC, whose business and post office address is 1920 116th Avenue NE, Bellevue, Washington 98004, hereinafter called "Lessee".

WITNESSETH

WHEREAS, Mark Luria, as the Lessor, and Dr. David J. McIntyre, M.D., as the lessee, made and entered into that certain Lease Agreement, hereinafter called "Lease", as of March 1, 1992; and

WHEREAS, the premises covered by the Lease is that certain real property and the improvements thereon located at 1920 116th Avenue NE, Bellevue, Washington, to wit: Lot 5, McCarthy Office Park, King County, Washington, according to the plats recorded under Volume 109, Pages 8-10, inclusive, the same consisting of a parcel of land with an area of approximately 32,437 square feet and a building with a gross leasable area of approximately 9,234 square feet, hereinafter collectively called "Real Property"; and

WHEREAS, Mark Luria, as the lessor, and David J. McIntyre, M.D., as the lessee, made and entered into that certain First Amendment To Lease, hereinafter called "First Amendment", as of January, 2003, thereby amending the lease in part; and

WHEREAS, Dr. David J. McIntyre, M.D. assigned the lease, as amended by the First Amendment, to Specialty Eyecare Centre, PLLC, and Specialty Eyecare Centre, PLLC assumed the lease, as amended by the First Amendment, from Dr. David J. McIntyre, M.D., the same being guaranteed by Dr. Howard S. Barnebey and Kim Dawn Barnebey, husband and wife: and

WHEREAS, Mark Luria, as the Lessor, and Specialty Eyecare Centre, PLLC, as the lessee, made and entered into that certain Second Amendment To Lease, hereinafter called "Second Amendment", dated October 1, 2008, thereby further amending the Lease in part, and

WHEREAS, Mark Luria, as the Lessor, and Specialty Eyecare Centre, PLLC, as the lessee, made and entered into that certain Third Amendment To Lease, hereinafter called "Third Amendment", dated August 20, 2016, thereby further amending the Lease in part, and

WHEREAS, Mark Luria has assigned this Real Property and the Lease, as lessor, to Luria Family 1 LP, and

WHEREAS, Lessor and Lessee have mutually agreed to further amend the lease regarding the term of the Lease, the rent under the lease, and certain other matters; and

WHEREAS, Lessor and Lessee now desire to set forth such mutual agreement in writing:

NOW, THERFORE, in consideration of the mutual promises and covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Lessor and Lessee hereby further amend the lease by agreeing as follows:

1. Lessor. The Ownership of the Real Property and the Lease has been assigned from Mark Luria to Luria Family 1 LP. Hereinafter, "Lessor" shall refer to Luria Family 1 LP. Rents and all other monies payable under the Lease shall continue to be paid to Mark Luria as before.

2. Extended Term of Lease. The term of the lease shall be extended for an additional two (2) years, said extended term commencing March 1, 2027, and ending on February 28, 2029, hereinafter called "Extended Term", unless the Lease is terminated earlier as provided therein.

3. No Option to Extend Term. Lessee shall have no option to extend the Extended Term beyond February 28, 2029.

4. Rent Under Lease. The base monthly rent for the Extended Term shall be TWENTY SIX THOUSAND ONE HUNDRED SIXTY THREE AND 00/100 DOLLARS ($26,163.00), the same being payable in advance on or before the first (1st) day of each month.

5. Right of First Refusal. In the event that Lessor decides to sell the Real Property at any time during the Extended Term, Lessee shall have the same right of first refusal to purchase the Real Property from Lessor as provided in Paragraph 4 of the Second Amendment.

6. Amendment of Lease. The Lease, as amended by the First Amendment, the Second Amendment, and the Third Amendment, shall be further amended to the extent set forth in this Fourth Amendment, provided that all the terms, conditions and provisions contained in the lease, as amended by the First Amendment, the Second Amendment, and the Third Amendment, which are not in conflict with the terms, conditions and provisions contained herein, shall remain unchanged and in full force and effect.

7. Execution and Authority. Lessor and Lessee each acknowledge that they have read this Fourth amendment and that they have voluntarily executed this Fourth Amendment with full knowledge and understanding of its significance and effect. Each individual executing this Fourth Amendment hereby represents and warrants that said individual

has the authority to execute this Fourth Amendment on behalf of Lessor or Lessee, as the case may be, in the capacity as shown hereinbelow.

8. Counterparts. This Fourth Amendment may be executed by Lessor and Lessee in counterparts, each of which separately shall be deemed to be an original and all of which together shall constitute one (1) document binding upon both Lessor and Lessee. All duplicate, unexecuted, and unacknowledged pages of the counterparts may be discarded and the remaining pages thereof may be assembled as one (1) document.

9. Facsimile Signatures. This Fourth Amendment may be executed by Lessor and Lessee with Facsimile signatures, which shall be treated as original signatures, and which shall therefore be binding upon both Lessor and lessee as if this Fourth Amendment was executed with original signatures.

10. Drafting. This Fourth Amendment shall be considered as having been drafted by both Lessor and Lessee, shall not be construed or interpreted against either Lessor or Lessee, and shall instead be construed and interpreted in accordance with the fair import of the terms, conditions, and provisions contained herein.

11. Headings. The headings of the numbered paragraphs of this Fourth Amendment are for convenience only and shall not be deemed or construed as defining, describing, enlarging, broadening, limiting, restricting, modifying, or changing the language or meaning of the terms, conditions, and provisions contained herein or the scope, purpose, or intent thereof.

IN WITNESS WHEREOF, Lessor and Lessee have executed this Fourth Amendment as of the day and year first above written.

Luria Family 1 LP Authorized Signatory

By_____
Joshua Luria
"Lessor"

Specialty Eyecare Centre, PLLC

By_____
Howard Barnebey, MD
Its Manager
"Lessee"

State of Washington
County of King

Howard S. Barneby

I certify that I know or have satisfactory evidence that Kim D Barneby [Name of Person] is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: 5/28/2022

(Seal or stamp)

NEGAR BARDIDEH
LICENSE #21010008
NOTARY
PUBLIC
COMM. EXP. 2/19/2025
STATE OF WASHINGTON

Negar Bardideh
Signature

Notary
Title

My appointment expires: 2/19/2025

PERSONAL GUARANTY

This PERSONAL GUARANTY is made on this 28th day of May, 2022 by DR. HOWARD S. BARNEBY and KIM DAWN BARNEBY, husband and wife, both whose business and post office address is 1920 116th Avenue NE, Bellevue, Washington 98004, hereinafter collectively called "Guarantors".

1. Personal Guaranty. Guarantors hereby personally guarantee Lessee's performance and Observance of all of Lessee's obligations under the Lease as amended by the First Amendment, the Second Amendment, the Third Amendment, and the Fourth Amendment.

2. Nature of Personal Guaranty. Guarantors' personal guaranty hereunder shall be unconditional, joint and several, and primary and not secondary.

IN WITNESS WHEREOF, Guarantors have executed this Personal Guaranty as of the day and year first above written.

DR. HOWARD S. BARNEBY

KIM DAWN BARNEBY

"Guarantors"

Exhibit 9

Exhibit 10

Exhibit 11

Contractor or Service Agreement	Type
3M	Equipment or Medical Supply
Aetna	Insurance
Alcon	Equipment or Medical Supply
Avedro	Equipment or Medical Supply
Bausch & Lomb	Equipment or Medical Supply
Cigna	Insurance
Community Health Plan	Insurance
Coventry/First Health	Insurance
Dexta	Equipment or Medical Supply
DSHS	Insurance
First Choice Health	Insurance
Health Net Federal Services (Tricare)	Insurance
Humana	Insurance
Johnson & Johnson	Equipment or Medical Supply
Kaiser	Insurance
Leica	Equipment or Medical Supply
Lenstec	Equipment or Medical Supply
Lensx	Equipment or Medical Supply
Light Med	Equipment or Medical Supply
Luxor-Alcon	Equipment or Medical Supply
MediCleanse	Equipment or Medical Supply
Medtronics	Equipment or Medical Supply
Midmark	Equipment or Medical Supply
Molina	Insurance
NW Benefits Network	Insurance
PHCS/MultiPlan	Insurance
Premera Blue Cross	Insurance
Regence	Insurance
Sony	Equipment or Medical Supply
Soundpath Health	Insurance
Spectra Gases	Equipment or Medical Supply
United Healthcare	Insurance
Welch Allyn	Equipment or Medical Supply
Zeis	Equipment or Medical Supply