# DIABETES EPIDEMIC AND ACTION REPORT

Washington State, 2017

#### Abstract

A collaborative report to the Legislature from the Washington State Department of Health, Washington State Department of Social and Health Services, and Washington State Health Care Authority in response to a proviso in 2015 Senate Bill 6052.

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## DIABETES EPIDEMIC AND ACTION REPORT: 2017 UPDATE

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#### 2014 Diabetes Epidemic and Action Report

http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-342-DiabetesEpidemicActionReport.pdf

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STATE OF WASHINGTON DEPARTMENT OF HEALTH Olympia, Washington 98504

Dear Legislators,

Diabetes can be described by numbers – individual blood glucose measurements, populations affected by the disease, or millions of dollars spent to prevent the disease and its complications. But diabetes is about more than numbers. It is also about people: Children and adults, parents and grandparents, neighbors and friends. It is people of all backgrounds across our state who are affected by the disease and who seek to prevent diabetes' potentially devastating effects.

Diabetes often doesn't occur in isolation – most people with diabetes have at least one other health condition, such as hypertension, coronary artery disease, or depression. People with diabetes also have other health needs, such as oral health, children's preventive care, women's health, vision care, and tobacco cessation. Similarly, people with other health concerns may have undiagnosed diabetes or be at high risk of developing type 2 diabetes, and may need additional monitoring and coordination of care. Discussions about the effects of diabetes and actions to prevent or control it must take into account the broader context. Policies that support access to care and related services, and effective prevention measures must all be brought to bear to improve the diabetes epidemic in our state. Social and demographic factors that impact health must also be considered.

We ask Legislators to keep people with diabetes and at risk of developing diabetes, their families, and caregivers in mind as our state's healthcare landscape changes.

Sincerely,

John Wiesman, DrPH, MPH Secretary of the Department of Health Bill Moss Secretary of the Department of Social and Health Services Dorothy Teeter, MHA Director of the Health Care Authority

# EXECUTIVE SUMMARY

Diabetes continues to be a serious, common, and costly condition in Washington. As our state's population grows and ages, so do the numbers of people with diabetes. According to current estimates, about 622,600 adults aged 20 years and older have diabetes, with a quarter unaware of their diabetes diagnosis. Diabetes remains one of the most common serious medical conditions facing youth, with an estimated 4,500 youth younger than 20 years of age with diagnosed diabetes. Additionally, an estimated two million adults in Washington have prediabetes. Fifteen to 30% of people with prediabetes are expected to develop type 2 diabetes within five years.

In 2015, the Legislature directed the Department of Health, Department of Social and Health Services, and Health Care Authority to jointly submit a report describing the burden of diabetes in Washington, efforts currently underway to address the burden, and additional resources needed. This Diabetes Epidemic and Action Report (DEAR) is an update to the <u>first report submitted in 2014</u>. It contains agency action plans and considerations for the Legislature. In October 2016, the DEAR Cross-Agency Work Group hosted a meeting with representatives from organizations who work to meet the needs of people with diabetes. New and revised strategies emerged from this meeting. These strategies informed the agency action plans and considerations for the Legislature.

The agency action plans are organized around six strategies that align with the <u>Healthier Washington</u> <u>Initiative</u> strategies and measures:

• Prevent type 2 diabetes

- Seek adequate funding for diabetes prevention and care
- Support optimal self-management of diabetes •
- Use diabetes-specific data and information to 

   guide decisions
- Include people affected by diabetes in decisions
- Promote improvements for diabetes prevention and management

To reduce the incidence of type 2 diabetes and to improve the lives of people with diabetes, we ask the Legislature to strongly consider taking the following actions:

- Maintain and further expand access to healthcare coverage
- Help make out-of-pocket costs more affordable for patients with diabetes
- Support Healthier Washington's movement towards value-based payment
- Continue efforts to integrate physical and behavioral healthcare services
- Encourage Accountable Communities of Heath to implement projects that impact diabetes
- Ensure all health plans provide optimal diabetes benefits
- Fund recommendations from the Governor's Council for the Healthiest Next Generation

- Support students with chronic health conditions
- Expand staffing and coordination resources for evidence-based, community-based programs
- Increase utilization of Diabetes Self-Management Education
- Raise public awareness of diabetes prevention and management
- Train healthcare providers to screen for diabetes and deliver high-quality diabetes care in culturally and linguistically appropriate ways
- Support using data to drive decisions and improve linkages between health systems and community support services

# INTRODUCTION

## The Directive

In 2015, the Washington State Legislature directed the Department of Health, Department of Social and Health Services, and Health Care Authority to jointly submit a report to the Legislature describing the burden of diabetes in Washington, efforts currently underway to address the burden, and additional efforts needed. This is the second report of its kind on diabetes in Washington State; the <u>first report</u> was published in 2014.<sup>1</sup>

In summary, the legislation directs the agencies to report on the following for Washington State:

- a. The burden of diabetes
- b. The financial impacts of diabetes
- c. Agency programs addressing diabetes
- d. Coordination between the agencies to address diabetes
- e. Agency Action Plans to address the impacts of diabetes
- f. Actionable items for consideration by the Legislature

Agency Action Plans and Considerations for the Legislature immediately follow this introduction. To read the full legislation, see Appendix 1.

### Diabetes in Washington

Diabetes is a complex group of diseases all related to harmfully high blood glucose (also called high blood sugar or hyperglycemia).

# For more information about risk factors, types of diabetes, its complications, and treatment, see Appendix 2.

#### Statewide

- About 622,600 adults aged 20 years and older (or 1 in 7) living in Washington State have diabetes, with a fourth not aware of their diabetes diagnosis.<sup>2</sup> About 4,500 youth less than 20 years (or 1 in 400) have diagnosed diabetes.<sup>3</sup>
- In addition to those who already have diabetes, an estimated 2 million adults (or 1 in 3) living in Washington State have prediabetes, of which 15-30% will develop type 2 diabetes within 5 years.<sup>4,5</sup>
- After nearly doubling over the last two decades, the age-adjusted rate of diagnosed diabetes among adults may be beginning to slow as of 2011.<sup>6</sup> However, some high-risk subgroups—including adults with a high school education or less, non-Hispanic blacks, and Hispanics—may experience continued increases over time.<sup>7</sup>
- Although the growth in the overall annual number of people with diagnosed diabetes has slowed since 2011, the number with diabetes is still substantial.

- While state-specific data are not available, national studies show the rate of type 1 and type 2 diabetes in youth has increased since early 2000.<sup>8,9</sup>
- Racial and ethnic minorities and people of lower socioeconomic position are more likely to develop diabetes.<sup>10</sup>
- Diabetes is the 7th leading cause of death in Washington State, and it caused or contributed to 5,700 deaths in 2015.<sup>11</sup>
- Diabetes was the primary diagnosis or reason for 9,400 hospitalizations of Washington residents in 2014.<sup>12</sup> An additional 98,600 hospitalizations included diabetes as a contributing diagnosis or reason.
- About 19% of hospitalizations among people with diabetes listed major cardiovascular disease as the primary diagnosis.<sup>12</sup> The longer someone has diabetes, the larger the chance they will develop heart disease.
- Diabetes also contributed to 632 (or 60%) of hospitalizations with non-traumatic, lower extremity amputations.<sup>12</sup>
- Almost half (or total of 818) of new cases of end-stage renal disease in the state were among people with diabetes.<sup>13</sup>
- Diabetes is also the leading cause of new cases of blindness among adults aged 20-74 years.<sup>14</sup>

#### Apple Health Enrollees

- The prevalence and number of people with diabetes greatly varies across Medicaid coverage groups that have vastly different health risk profiles and use patterns.
  - Dual Eligible (enrollees with diabetes): Non-Elderly Disabled 25% (16,912), Elderly 39% (33,827)
  - Medicaid-Only (enrollees with diabetes): Non-Disabled Children <1% (4,519), Disabled Children 2% (422), Non-Disabled Adults 5% (11,625), Disabled Adults 21% (16,508), Elderly 30% (644), Newly-Eligible Adults 7% (48,469)</li>
- The prevalence of diabetes among the Medicaid-only population increased from 4% in 2013 to 5% in 2015 and was primarily driven by the Medicaid expansion of newly-eligible adults that have relatively high prevalence of diabetes (7%).
- Outpatient emergency department use rates are higher for people with diabetes than for those without. For example, non-disabled adults with diabetes experienced 126 outpatient visits per 1,000 member months, compared to 73 visits per 1,000 member months for non-disabled adults without diabetes.
- Inpatient admission rates are higher for people with diabetes than for those without. For example, among newly-eligible adults, the inpatient admission rate for those with diabetes was more than 3 times higher (32 inpatient admissions per 1,000 member months) than for those without diabetes (9 inpatient admissions per 1,000 member months).

#### Public Employees Benefits Board Populations

• About 20,800 Uniform Medical Plan enrollees (or 9%) received medical services related to diabetes. This plan serves nearly two-thirds of Washington's Public Employees Benefit Board populations.

For more information about diabetes in Washington including references and supplemental data, see Appendix 3.

### Financial Impact of Diabetes in Washington

In Washington State, diabetes is costly.

Diabetes costs an estimated \$8 billion each year in Washington State. This includes \$6 billion in direct medical expenses for diagnosed diabetes and \$2 billion (in 2015 dollars) spent on indirect costs from lost productivity due to diabetes. <sup>15</sup> The individual medical cost of having diabetes is approximately \$14,000 per year. This is twice the cost of medical care for people without diabetes.<sup>16</sup>

The average lifetime cost of caring for a person with type 2 diabetes is approximately \$85,200 and can range from \$55,000 to \$130,000.<sup>17</sup> The cost of a new case of type 2 diabetes imposed on the healthcare system is particularly high in people diagnosed with type 2 diabetes at younger ages, mostly due to the longer time diabetes is managed. Women have greater lifetime medical costs than men primarily because even though women have fewer complications, on average, they live longer than men.

Better control of diabetes can reduce cost, improve quality of life, and decrease mortality. A 1percentage point increase in A1c (a laboratory test that estimates average blood glucose over 2-3 months) results in a 4.4% increase (on average) in diabetes-related medical costs, which corresponds to an annual cost increase of \$250 per person.<sup>18</sup>

Preventing type 2 diabetes can also decrease costs. The Washington State Institute of Public Policy found that lifestyle change programs to prevent type 2 diabetes have benefits that consistently outweigh costs.<sup>19</sup>

The cost of diabetes in Washington State is projected to increase from almost \$8 billion in 2015 to more than \$13 billion in 2030.<sup>15</sup>

For more information about the financial impact of diabetes in Washington including references and supplemental data, see Appendix 4.

### Diabetes Activities, Programs, and Services

Efforts are underway in Washington State to prevent type 2 diabetes and to prevent complications in people with all forms of diabetes. However, more can be done to mitigate the impacts of diabetes.

The Department of Health, Department of Social and Health Services, and Health Care Authority support, contribute to, and implement a wide range of activities, programs, and services that seek to

manage and prevent the burden of diabetes. As directed by the legislation, these agencies have developed or updated plans to address diabetes prevention and management. These plans are included in the next section.

For more information about current activities, programs, or services, including funding sources and reach, see Appendix 5.

### Coordination between the agencies

Between 2013 and 2017, collaboration and coordination between the agencies has increased. Staff members from each agency met monthly to produce this report, and in doing so, developed more robust relationships and communication channels between the agencies. Beyond the report, other examples of enhanced coordination include:

- The Healthier Washington Initiative.
- Collaborative efforts to apply for additional funding and technical assistance.
- Increased collaborative support for Medicaid Health Homes.
- Creation of a multi-agency data workgroup.
- Increased participation on the Diabetes Network Leadership Team.
- Increased connections and communication with managed care organizations.
- Increased emphasis on diabetes through use of standardized diabetes measures.
- Identification of diabetes as a key measure in managed care value-based purchasing arrangements.
- Coordinated, intensified effort to expand Diabetes Prevention Programs and Chronic Disease Self-Management Education, in collaboration with regional partner organizations.

For more information about how the agencies are collaborating, and the activities, programs, and services they provide, see Appendix 5.

### Stakeholder involvement and progress

To improve the lives of people with diabetes and to prevent new cases of type 2 diabetes, the agencies identified actions to make progress on the original 10 goals published in the 2014 Diabetes Epidemic and Action Report. Agency action plans were developed after engaging stakeholders at an in-person meeting in October 2016. During this meeting, and through a stakeholder review of the draft report, the agencies identified additional actions for the Legislature to consider that would have positive impacts on people with diabetes and reduce the costs associated with the disease in Washington.

For an update on the progress made on each of the 10 2014 DEAR goals, see Appendix 6. For more details regarding strategies used to incorporate stakeholder feedback into the report, see Appendix 7.

# AGENCY ACTION PLANS

The legislation directed Department of Health, Department of Social and Health Services, and Health Care Authority to provide action plans for how each agency will continue to address the burden of diabetes in Washington State. These plans are aligned with internal agency priorities and, where feasible, are informed by stakeholder input.

The goals and action plans included in this report have evolved since the first 10 goals were published in DEAR 2014. As a reminder, the 2014 goals were:

- A. Ensure all appropriate populations have access to the Diabetes Prevention Program in Washington.
- B. Increase access to safe and affordable active living where people work, learn, live, play, and worship across their lifespan.
- C. Increase access to healthy foods and beverages where people work, learn, live, play, and worship.
- D. Ensure all people with diabetes receive selfmanagement education from a Diabetes Education Program.
- E. Ensure people with diabetes and gum disease have access to guideline-based oral health treatment.

- F. Enhance care coordination for people with both diabetes and mental illness.
- G. Ensure all appropriate populations have access to Chronic Disease Self-Management Education programs in Washington.
- H. Ensure involvement of Community Health Workers to address diabetes in populations with the greatest needs.
- I. Increase stakeholder involvement in policymaking that pertains to diabetes.
- J. Support the Plan for a Healthier Washington's investment in Analytics, Interoperability & Measurement.

## Department of Health

Department of Health's Diabetes Action Plan aligns with the agency's current strategic plan and focuses on population health strategies that impact diabetes and its risk factors. These activities are funded by federal sources. The Washington State Diabetes Network Leadership Team (DNLT) is a key partner in successful implementation of these action plans.

### Prevent Type 2 Diabetes

Aligns with Department of Health Strategic Plan 2016-2019 Goals 2 and 3

| Action  | Timeframe                        | Estimated Resources<br>Needed  | Related<br>DEAR 2014 |
|---|----------------------------------|--|----------------------|
|   |                                  |  | Goals                |
| Increase availability of Diabetes Prevention<br>Programs in Washington by coordinating with<br>organizations offering these programs. | Through<br>September 30,<br>2018 | Resources for the<br>timeframe currently<br>available from<br>federal funds.<br>Funding beyond this<br>timeframe is not yet<br>identified. | A                    |

| Increase coverage for Diabetes Prevention             | Through         | Resources for the      | А    |
|---|-----------------|------------------------|------|
| Programs among payers and employers by                | September 30,   | timeframe currently    |      |
| promoting evidence for the program regarding          | 2018            | available from         |      |
| return on investment and outcomes.                    |                 | federal funds.         |      |
|   |                 | Funding beyond this    |      |
|   |                 | timeframe is not yet   |      |
|   |                 | identified. Consider   |      |
|   |                 | asking the Bree        |      |
|   |                 | Collaborative to       |      |
|   |                 | develop                |      |
|   |                 | recommendations        |      |
|   |                 | for best practices to  |      |
|   |                 | prevent type 2         |      |
|   |                 | diabetes.              |      |
| Increase enrollment in Diabetes Prevention            | Not funded –    | Funding for a          | А    |
| Programs by raising awareness of benefits of these    | timeline not    | coordinated            |      |
| programs among adults with prediabetes,               | applicable (NA) | awareness campaign     |      |
| healthcare providers, and care                        |                 | across state agencies  |      |
| coordinators/Community Health Workers (CHWs).         |                 | and external partners  |      |
|   |                 | has not yet been       |      |
|   |                 | identified.            |      |
| Assist with implementing recommendations from         | NA              | Funding needs vary     | В, С |
| the Governor's Council for the Healthiest Next        |                 | depending on           |      |
| Generation that impact diabetes and assist facilities |                 | recommendations.       |      |
| in being recognized as breastfeeding friendly         |                 | Funding is needed for  |      |
| through Breastfeeding Friendly Washington.            |                 | training providers     |      |
|   |                 | and breastfeeding      |      |
|   |                 | promotion.             |      |
| Continue to implement policy, systems, and            | Through         | Limited resources for  | В, С |
| environment changes to improve healthy eating         | September 30,   | the timeframe are      |      |
| and active living; and support Healthy                | 2018            | currently available    |      |
| Communities.  |                 | from federal funds.    |      |
|   |                 | Funding beyond this    |      |
|   |                 | timeframe is not yet   |      |
|   |                 | identified. Dedicated, |      |
|   |                 | reliable funding       |      |
|   |                 | prioritized to         |      |
|   |                 | communities with       |      |
|   |                 | greatest health        |      |
|   |                 | disparities is needed. |      |

Promote Self-Management of Diabetes <u>Aligns with Department of Health Strategic Plan</u> 2016-2019 Goals 2, 3, and 4

| Action  | Timeframe     | Estimated Resources | Related   |
|---|---------------|---------------------|-----------|
|   |               | Needed              | DEAR 2014 |
|   |               |                     | Goals     |
| Continue to promote models of efficient,            | Through       | Resources for the   | D, G, H   |
| culturally/linguistically sensitive and competent,  | September 30, | timeframe currently |           |
| and readily available Diabetes Education, including | 2018          | available from      |           |
| Chronic Disease Self-Management Education.          |               | federal funds.      |           |
|   |               | Funding beyond this |           |

|   |                                  | timeframe is not yet identified.   |               |
|---|----------------------------------|--|---------------|
| Continue to support training for CHWs to work with<br>patients with chronic diseases as members of<br>expanded health teams, and promote hiring of<br>CHWs by organizations addressing patients with<br>diabetes. Focus training of CHWs on managing<br>diabetes and preventing diabetes complications,<br>including the importance of oral health, vision<br>exams, foot care, and cardiovascular disease<br>prevention. | Through<br>September 30,<br>2018 | Resources for the<br>timeframe currently<br>available from<br>federal funds.<br>Funding beyond this<br>timeframe is not yet<br>identified. | Н             |
| Increase use of Diabetes Self-Management<br>Education and Programs by raising awareness<br>about benefits of self-management and education<br>among people with diabetes, healthcare providers,<br>and care coordinators/CHWs.  | NA                               | Funding is needed for<br>coordinated<br>awareness campaign<br>across state agencies<br>and external<br>partners.                           | D, G, H       |
| Reassess essential health plan benefits for people<br>with diabetes including pharmacy benefits,<br>preventative screenings, equipment, technologies,<br>treatments, and oral healthcare, and encourage<br>employers and issuer to adopt these benefits.  | NA                               | Funding is needed to<br>support health sector<br>agencies (DOH, HCA,<br>DSHS, OIC, DOC, &<br>LNI) to collaborate<br>with stakeholders.     | D, E, F, G, H |

## Use Diabetes-Specific Data and Information to Guide Decisions

Aligns with Department of Health Strategic Plan 2016-2019 Goals 3 and 4

| Action   | Timeframe                        | Estimated Resources<br>Needed  | Related<br>DEAR 2014<br>Goals |
|--|----------------------------------|--|-------------------------------|
| Explore using new data sources, such as clinical<br>data, to estimate population health impacts of<br>diabetes and target interventions. Provide data at<br>Accountable Community of Health (ACH) levels to<br>inform their decision-making.     | NA                               | Staffing from all<br>relevant agencies<br>(including DOH, HCA,<br>DSHS & OFM);<br>funding is needed for<br>accessing data, data<br>analysis,<br>presentation and<br>dissemination. | J                             |
| Continue to track diabetes data from available data<br>sets to assess trends, and share information with all<br>stakeholders to inform decision-making for costs<br>associated with cardiovascular disease and other<br>co-occurring conditions. | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding beyond this<br>timeframe is not yet<br>identified.                                     | L                             |
| Use data to identify populations at highest risk of<br>diabetes and its complications, and use data to<br>inform efforts to prevent and effectively manage<br>diabetes in these populations.   | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding beyond this  | J                             |

|  | timeframe is not yet |  |
|--|----------------------|--|
|  | identified.          |  |

# Include People Impacted by Diabetes in Decisions <u>Aligns with Department of Health Strategic Plan</u> 2016-2019 Goals 3, 4, and 5

| Action  | Timeframe                        | Estimated Resources   | Related   |
|---|----------------------------------|---|-----------|
|   |                                  | Needed  | DEAR 2014 |
|   |                                  |   | Goals     |
| Identify best practices for hearing directly from<br>people with diabetes and those impacted by<br>diabetes and implement these practices. Use that<br>information to drive and inform decisions.   | NA                               | Funding is needed for<br>research (including<br>focus groups and<br>other appropriate<br>data collection<br>methods), including<br>analysis and<br>dissemination of<br>results. May wish to<br>fund one of the<br>state's higher<br>education<br>institutions to<br>porform this work   |           |
| Work with organizations serving people with<br>diabetes, including healthcare and social service<br>providers, to ensure access to linguistically,<br>culturally, and geographically relevant diabetes<br>prevention, education and care. | NA                               | Funding is needed for<br>assessment of<br>current alignment<br>with culturally and<br>linguistically<br>appropriate services<br>(CLAS) standards.<br>Recommendations<br>for improvement<br>would follow initial<br>assessment. Consider<br>funding one of the<br>state's higher<br>education<br>institutions to<br>perform this work. | Η, Ι      |
| Sustain essential support for the Diabetes Network<br>and Diabetes Network Leadership Team and<br>continue to seek diverse, broad, statewide cross-<br>sector membership on the Diabetes Network<br>Leadership Team.                      | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding beyond this<br>timeframe is not yet<br>identified.  | 1         |

### Seek Adequate Funding for Diabetes Prevention and Care

Aligns with Department of Health Strategic Plan 2016-2019 Goals 2, 3, and 4

| Action  | Timeframe                        | Estimated Resources<br>Needed  | Related<br>DEAR 2014<br>Goals |
|---|----------------------------------|--|-------------------------------|
| Work with policymakers to preserve and support<br>improved diabetes care as a result of Medicaid<br>expansion in Washington, and to keep healthcare<br>affordable for those providing or purchasing<br>commercial health plans. | NA                               | Staffing from all<br>relevant agencies<br>(DOH, HBE, HCA,<br>DSHS, OIC, DOC, L &<br>I); Funding is needed<br>to convene external<br>stakeholders for<br>input and review.  | A-J (all)                     |
| Promote essential benefits for the prevention and<br>management of diabetes to Medicaid, PEBB, and<br>other public and private payers and insurers.   | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding for Medicaid<br>and PEBB benefit<br>changes may require<br>legislative<br>authorization or<br>additional budget<br>allocations; however,<br>benefit changes are<br>expected to be cost-<br>neutral or cost-<br>saving. | A, D, E, F, G,<br>H, I        |
| Identify sources of funding, including federal and<br>privately-funded grants, to gain input directly from<br>stakeholders and organizations who serve people<br>with diabetes, through focus groups and other<br>methods.      | NA                               | Current federal<br>funding is not<br>sufficient for this<br>work. Consider<br>funding one of the<br>state's higher<br>education<br>institutions to<br>perform this work.   | 1                             |

### Promote Improvements for Diabetes Prevention and Management

Aligns with Department of Health Strategic Plan 2016-2019 Goal 3

| Action   | Timeframe                        | Estimated Resources<br>Needed   | Related<br>DEAR 2014<br>Goals |
|--|----------------------------------|---|-------------------------------|
| Support team-based care, behavioral health<br>integration, clinical-community linkages, care<br>coordination, evidence-based guidelines, and<br>access to CHWs across plans, payers, and systems<br>that is flexible and adaptable to facilitate best<br>outcomes. | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding beyond this | A-J (all)                     |

|  |                                  | timeframe is not yet identified.   |           |
|--|----------------------------------|--|-----------|
| Support healthcare providers and other service<br>providers, to identify and overcome unconscious<br>bias that negatively impacts delivery of care and<br>services. Promote National Standards for Culturally<br>and Linguistically Appropriate Services (CLAS).   | NA                               | Consider asking the<br>Bree Collaborative to<br>develop<br>recommendations<br>for best practices for<br>overcoming<br>unconscious bias.        | A-J (all) |
| Share available data on diabetes prevention and<br>care with ACHs, healthcare systems, healthcare<br>providers, and healthcare consumers to identify<br>successes and areas for improvement.   | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding beyond this<br>timeframe is not yet<br>identified. | A-J (all) |
| Promote linkages between health systems and<br>community support services, such as bi-directional<br>referrals, with support from technology, such as<br>electronic information exchange. Support<br>connections between health systems for optimal<br>prevention and care, including oral health,<br>behavioral health, ophthalmology, podiatry, and<br>pharmacy. | Through<br>September 30,<br>2018 | Resources for the<br>timeframe are<br>currently available<br>from federal funds.<br>Funding beyond this<br>timeframe is not yet<br>identified. | A-J (all) |

## Health Care Authority

The Washington State Health Care Authority (HCA), through Healthier Washington and the Medicaid Transformation Demonstration, has embarked on a multi-year project to improve the health of Washington's citizens. A transformed health system is envisioned to address current health system deficiencies and achieve the Triple Aim of better health, better care, and lower costs.

The Medicaid Transformation Demonstration provides up to \$1.1 billion of incentives for rewarding high quality care. Fundamental components of transformation include locally-led initiatives to engage and support clients, providers, and communities through:

- Delivery of system transformation strategies led by regional Accountable Communities of Health (ACHs);
- Greater service options to enable older adults and individuals with disabilities to stay at home and delay or avoid the need for more intensive care; and
- Foundational community support services for Medicaid clients with the most critical needs.

Diabetes is significantly featured in HCA's Medicaid Transformation Project Toolkit to guide the work of the Accountable Communities of Health. Diabetes clinical measures are now consistently found throughout agency healthcare contracts including Washington Apple Health (Medicaid), the Public Employees Benefits Board (PEBB) Program, and the Uniform Medical Plan's accountable care program (ACP) contracts with UW Medicine Accountable Care Network and Puget Sound High Value Network.

Since January 1, 2017, HCA has withheld 1% of the medical portion of the premium payments to Apple Health managed care organizations. Contractors are eligible to earn back part or all of the 1% withhold if they:

- Make qualifying provider incentive payments tied to quality and/or financial attainment or losses to health plan subcontractors;
- Have value-based purchasing arrangements in place with downstream subcontractors; and
- Achieve quality improvement targets.

Two diabetes measures are included among the list of nine performance measures linked to payment for Apple Health. Plans must show improvement in management of diabetes through two measures: improvement in a laboratory test commonly used to assess average blood glucose management, and improvement in hypertension for people with diabetes. In addition to these two measures, rewards for HCA's accountable care program contractors in the Public Employees Benefits program also include improved performance on an assessment of the proportion of members receiving a diabetes eye examination.

The HCA Diabetes Action Plan below incorporates the following initiatives already underway, as well as those planned over the next two years:

- 1) Value-based purchasing tied to improved diabetes care as reflected in diabetes performance measures in Apple Health and ACP contracts;
- 2) Annual health plan surveys; and
- 3) The creation of the Healthier Washington Dashboard.

| Action  | Timeframe                                       | Estimated Resources<br>Needed  | Related DEAR<br>2014 Goals |
|---|---|--|----------------------------|
| Implement value-based purchasing language in<br>Apple Health managed care contracting<br>arrangements (HbA1c testing, eye exam, and<br>nephropathy).  | Effective<br>January 1, 2017;<br>January 1 2018 | Support continued<br>efforts to<br>implement value-<br>based purchasing<br>language in all<br>managed care<br>contracts. | 1                          |
| Quantify costs of implementing a Diabetes<br>Prevention Program.  | By July 31, 2017                                | If funding request<br>for expansion of<br>DPP, consider<br>funding.  | Α, Ι                       |
| Quantify costs of implementing a Chronic Disease Self-Management Program.   | By July 31, 2017                                | If funding request, consider funding.  | G, I                       |
| Complete annual health plan survey of diabetes best practices (first survey examined diabetes education programs).  | Effective December<br>31, 2016                  |  | 1                          |
| Report clinical diabetes measures annually<br>using Washington Common Measure Set<br>measures for Apple Health and PEBB contracts.  | Effective<br>December 31,<br>2017               |  | I, J                       |
| Conduct disease management survey of Apple<br>Health and PEBB plans.  | Effective<br>September 30,<br>2017              |  | 1                          |
| Produce Healthier Washington Dashboard<br>(Medicaid only) that includes three diabetes<br>measures; provide performance measure data<br>by county and region. Performance stratified by<br>gender, race, ethnicity, and language. | Effective<br>December 31,<br>2016               | Continued funding<br>support of<br>Medicaid<br>Transformation<br>activities.   | I, J                       |
| Healthier Washington and Medicaid<br>Transformation have prioritized diabetes as a<br>condition on which to focus health care quality<br>improvement efforts.   | Effective<br>December 31,<br>2016               | Continued funding<br>support of<br>Medicaid<br>Transformation<br>activities.   | I, J                       |
| Develop Population Health Driver Diagram in<br>partnership with Department of Health (DOH)<br>and Accountable Communities of Health.  | Effective June<br>30, 2017                      |  | 1                          |
| In collaboration with DOH, explore with Apple<br>Health and PEBB carriers development and<br>implementation of a diabetes care marketing<br>campaign.   | Annually  |  | 1                          |

| Research evidence for diabetes care (pharmacy, technology, and provider management). | Effective June<br>30, 2018 |  | I |
|--|----------------------------|--|---|
| Expand Health Home (Care Coordination) program to King and Snohomish Counties.       | Effective July 1, 2018     | Continued funding support of this program. | F |

## Department of Social and Health Services

Department of Social and Health Services' Diabetes Action Plan aligns with the agency's strategic plan and focuses on providing home- and community-based services. The hallmark of Washington's longterm services and supports system is that, whenever possible, individuals are given the opportunity to live and receive services in their own home or a community setting. Chronic Disease Self-Management Education (DSME) provides support to better build community linkages and foster more productive interactions between informed and activated people living with chronic conditions. DSHS supports the Diabetes Network Leadership Team to better serve the diabetes population.

| Action Item   | Timeframe                   | Estimated Resources  | Related |
|---|-----------------------------|--|---------|
|   |                             | Needed   | Goals   |
| Partner with DOH and HCA to promote multiple<br>modalities of Diabetes Self-Management Education<br>to patients with diabetes, with the goal of<br>increasing the expansion of CDSME programs to<br>include Diabetes Self-Management, and to sustain<br>program availability after the grant ends.  | Through August<br>2018      | Currently funded by<br>federal grant (CDSME<br>PPHF).  | G       |
| Provide support to the Diabetes Network<br>Leadership Team. This work is intended to impact<br>all people with diabetes of all types, as well as<br>people at high risk for developing type 2 diabetes,<br>in Washington.   | Ongoing in line<br>with DOH | No additional<br>resources are<br>needed.  | 1       |
| Support existing "Care Coordination" of diabetes<br>care and management. DSHS accomplishes this<br>through services for Home and Community Based<br>clients. DSHS discusses and defines the following<br>services within their Long Term Care Manuals: Case<br>Management, Nurse Delegation, Health Home.   | Ongoing                     | Resources for the<br>timeframe are<br>currently available<br>from federal and<br>state funds. Will<br>continue to request<br>funds as time<br>continues.   | F       |
| <ul> <li>Support existing "Long Term Care Programs" for<br/>diabetes care and management. DSHS<br/>accomplishes this through services for Home and<br/>Community Based Clients. DSHS discusses and<br/>defines the following services within their Long<br/>Term Care Manuals:</li> <li>State Plan Program: Community First Choice,<br/>Medicaid Personal Care, PACE</li> <li>ALTSA/HCBS 1915c Waiver's: COPES, New<br/>Freedom Waiver</li> </ul> | Ongoing                     | Resources for the<br>timeframe are<br>currently available<br>from federal and<br>state funds<br>(Demonstration<br>Grant- Roads to<br>Community Living).<br>Will continue to<br>request funds as time<br>continues. | F       |
| Continue work to integrate physical and behavioral<br>health services to better care for patients with<br>diabetes and behavioral health conditions.  | Ongoing                     | Resources for the<br>timeframe are<br>currently available<br>from federal and<br>state funds. Will<br>continue to request  | A-J     |

|  |         | funds as time        |   |
|--|---------|----------------------|---|
|  |         | continues.           |   |
| Build a robust long-term care workforce through      | Ongoing | Resources for the    | Н |
| effective marketing. Continue to educate             |         | timeframe currently  |   |
| state-wide and increasing Home Care Aide training    |         | federal and state    |   |
| programs in high schools, skills centers, as well as |         | funds. Will continue |   |
| community and technical colleges.                    |         | to request funds as  |   |
|  |         | time continues.      |   |
| Continue to partner with Health Care Authority in    | Ongoing | Resources for the    | F |
| the administration of the Health Home program.       |         | timeframe currently  |   |
| Provide training to ensure fidelity of Health Home   |         | available from       |   |
| model with emphasis on strengthening self-           |         | federal and state    |   |
| management for individuals participating in Health   |         | funds. Will continue |   |
| Home program.  |         | to request funds as  |   |
|  |         | time continues.      |   |

## State Level Health Indicators

To reduce duplication of effort, existing agreed-upon measures are used to track the effect of the actions mentioned in the Agency Action Plans. Each of these measure sets has its own benchmarks and timelines for measurement. For more information on existing diabetes-related measures that span Washington State agency work:

#### **Healthier Washington Performance Measures**

https://www.hca.wa.gov/about-hca/healthier-washington/performance-measures

#### Local Public Health Indicators (LPHI)

http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServ ices/PublicHealthImprovementPartnership/LocalPublicHealthIndicators

#### **Results Washington**

http://results.wa.gov/what-we-do/measure-results/healthy-safe-communities/goal-map

#### Washington Health Alliance Community Checkup

http://wahealthalliance.org/alliance-reports-websites/community-checkup/

# CONSIDERATIONS FOR THE LEGISLATURE

In order to prevent type 2 diabetes in our state's population, and to assist in managing care and costs for all forms of diabetes, we ask the Legislature and Governor's Office to consider the following recommendations:

- Maintain and further expand access to healthcare coverage
- Help make out-of-pocket costs more affordable for patients with diabetes
- Support Healthier Washington's movement towards value-based payment
- Continue efforts to integrate physical and behavioral healthcare services
- Encourage Accountable Communities of Heath to implement projects that impact diabetes
- Ensure all health plans provide optimal diabetes benefits
- Fund recommendations from the Governor's Council for the Healthiest Next Generation

- Support students with chronic health conditions
- Expand staffing and coordination resources for evidence-based, community-based programs
- Increase utilization of Diabetes Self-Management Education
- Raise public awareness of diabetes prevention and management
- Train healthcare providers to screen for diabetes and deliver high-quality diabetes care in a culturally and linguistically appropriate ways
- Support using data to drive decisions and improve linkages between health systems and community support services

#### 1. Maintain and further expand access to healthcare coverage.

Washington has embraced every opportunity offered at the federal level to expand access to healthcare coverage and as a result has decreased the uninsured rate in Washington from 13.8 percent in 2012 to 5.8 percent in 2015.<sup>20</sup> Increases in the insured population provides for better access to care. We recommend that the Legislature maintain these achievements.

But insurance remains out of reach for some populations that include people with diabetes.<sup>21</sup> According to a 2016 report from the Office of the Insurance Commissioner, some minority populations, counties with rural populations, and people with lower household incomes continue to have much higher uninsured rates compared to whites, more urban populations, and households with higher incomes. To reach these people, we recommend the Legislature consider polices to further expand healthcare access, including support for outreach to all eligible enrollees. Expanded access will be beneficial for type 2 diabetes prevention and care for all forms of diabetes, including gestational diabetes, and will help to address health disparities around diabetes in our population.

Stakeholders who participated in the October 2016 meeting raised concerns about the effect of diabetes on undocumented immigrants who lack insurance and access to services. Research suggests that limiting immigrants' access to more cost-effective outpatient care can increase costs and have impacts on public health.<sup>22</sup>

#### 2. Help make out-of-pocket (OOP) costs more affordable for patients with diabetes.

We recommend the Legislature continue its efforts to address patient out-of-pocket costs for prescription medications, which affect patients with diabetes.<sup>23</sup> Almost one-fourth of all people with diabetes face a high OOP cost burden.<sup>24</sup>

In 2016, the Legislature directed the Department of Health to convene a <u>taskforce to discuss options</u> for addressing rising out-of-pocket medication costs.<sup>25</sup>

Medications are not the sole source of rising OOP costs. Employers coping with rising overall healthcare costs have shifted more costs to employees, in terms of both premium contributions and cost sharing in plan benefit design. Forty-three percent of low-income adults in the United States reported cost barriers to healthcare.<sup>26</sup> Rising OOP costs is a significant challenge that needs to be addressed if we want to improve the health of people with diabetes.

# 3. Support Healthier Washington's movement towards value-based payment as a strategy to improve the quality of care and outcomes for people with diabetes.

The Washington Health Alliance, through its Community Checkup, provides data to Healthier Washington on performance of healthcare systems in Washington.<sup>27</sup> Commercial health plans that submit data to the Washington Health Alliance performed unfavorably on diabetes-related metrics compared to national benchmarks. Medicaid plans in Washington performed worse than the national benchmarks on all measures. Notably, averaged across Medicaid Managed Care Plans, more than half of patients with diabetes had either an A1c—the laboratory test that estimates average blood glucose over 2-3 months—greater than 9% or did not have their A1c measured in 2016. As Healthier Washington moves our state's health payers toward paying for value rather than services, it affords new opportunities to focus on improvements in diabetes care. Another opportunity—a pay-for-performance model for lead organizations in the Health Home program serving dual eligible clients—has been proposed but not yet funded. Health Home services for individuals on Medicaid, which are in need of continued funding, have shown strong improvement in health outcomes including reducing nursing home use and hospital stays.

# 4. Continue efforts to integrate physical and behavioral healthcare services to improve the health of people with diabetes.

People with behavioral health issues are more likely to have diabetes than those without. People with both behavioral health issues and diabetes are more likely to experience barriers that impact their ability to adhere to treatment for diabetes, and are less likely to receive recommended care or monitoring.<sup>28</sup> As a consequence, people with diabetes and a co-existing severe mental illness experience more diabetes complications and die at significantly younger ages than people without severe mental illnesses.<sup>29</sup> Continuing efforts to integrate physical and behavioral health are expected to lead to improvements in the overall health of people with diabetes.

#### 5. Encourage Accountable Communities of Heath to implement projects that impact diabetes.

Each Accountable Community of Health will have the option to implement projects to improve care coordination and prevent and control chronic diseases in their region. Legislators may want to coordinate with the Accountable Community of Health in their district to encourage Medicaid

Transformation projects that impact diabetes. These projects could potentially include activities to address prediabetes, diabetes management, and care coordination for patients with diabetes.

Accountable Communities of Health may prioritize ensuring access to Diabetes Self-Management Education, Diabetes Prevention Programs, and policy, systems and environmental changes that can help prevent type 2 diabetes and lead to healthier lives among those with diabetes, especially in groups experiencing health disparities. As Medicaid Transformation projects are intended to reduce costs, these activities align as the possibility for longer-term health savings from diabetes prevention efforts are well established; the Washington State Institute of Public Policy found that lifestyle change programs to prevent type 2 diabetes have benefits that consistently outweigh costs.<sup>19</sup>

# 6. Ensure all health plans provide optimal diabetes benefits as part of health coverage, in ways that are geographically, culturally and linguistically sensitive.

Coverage of diabetes-related benefits varies from insurer to insurer. Areas to improve coverage for people diagnosed with diabetes include pharmacy benefits, preventive screenings, equipment, technologies, treatments, tobacco cessation, behavioral health, and oral health. It is worthwhile to consider applying principles of Value-Based Benefit Design to the population of people with and at risk of developing diabetes. A step in this direction involves identifying the benefits that provide the greatest improvements to diabetes-related health and requiring all state-regulated insurance plans to cover these benefits.

To prevent new cases of type 2 diabetes, the Legislature may explore ways to encourage payers and insurers to include cost-saving Diabetes Prevention Programs (DPP) in benefits. Currently, coverage for the DPP varies. For the majority of Medicare enrollees, coverage for the program is anticipated to begin in January 2018. PEBB enrollees who meet program eligibility (but not those who have Medicare as their primary insurance) are currently covered. More than 20 other employers in Washington have offered the DPP to their health coverage enrollees, including King County Government and the City of Renton; several health systems, including Providence of Eastern Washington, Peace Health and MultiCare; and private companies such as Costco. The populations who do not have access to DPP as a covered benefit include Medicaid enrollees, and people who are uninsured. The majority of adults in Washington are commercially insured and do not have access to DPP as a covered benefit.

The <u>Washington State Diabetes Prevention Program Action Plan</u> seeks to work with multiple partners to expand coverage for DPP throughout all adult populations—those with health coverage and those without. The Legislature may play a role in acknowledging public and private organizations that support and cover DPP for Washington residents. These may include Accountable Communities of Health that braid coverage together from multiple sources, including insurance plans that offer coverage to employees and family members; Medicare (after January 1, 2018); and philanthropic sources. Another opportunity to address access to DPP is to provide access to the online or mobile version of the program, which may be a better match for some who wish to participate. The Public Employees Benefits Board may act as a "first mover" for access to online DPP. Including access to the DPP as part of essential health benefits is another possible approach.

# 7. Fund and implement recommendations from the Governor's Council for the Healthiest Next Generation

Recommendations from the Governor's Council for the Healthiest Next Generation focus on supporting families in helping their children grow up healthy and creating systems in Washington that serve all children equitably. Strategies address improving health in early learning settings, schools, and communities. These are the primary places children spend their time outside of the home. The practices in these settings can either reinforce or compromise the work of families and caregivers to keep children safe and healthy. Approaching these settings in a comprehensive way when it comes to health is efficient, provides optimal benefits to our children, and can have additional positive impacts, such as protecting the environment. Many of these recommendations would have an impact on students with diabetes or at risk for developing diabetes, such as the following (in prioritized order):

- Support nutrition, physical activity, and water access improvements in schools. Fund the Healthy Kids-Healthy Schools grant program at a similar or increased level. Over \$17 million in requests were received, and 150 school district applications were scored in 2016, for water bottle filling stations and nutrition and physical education/physical activity improvements in schools.
- Improve access to healthy food in schools. Fund opportunities for schools to provide best practices in alternative breakfast delivery models.
- Support outdoor recreation for youth and families. Fund expansion of *No Child Left Inside Grant* program; fund expansion of Youth Athletic Field grant program; maintain funding for State Parks operating budget.
- Implement a sugar-sweetened beverage excise tax at 2 cents per ounce.
- Support before/after school programs related to nutrition and physical activity.
- Support child care providers to meet new licensing requirements. Fund training and consultation to support child care providers to meet new licensing requirements around nutrition, physical activity, and limiting screen time.
- **Expand Infant Toddler Consultation in early learning.** Support Department of Early Learning's expansion of the current Infant Toddler Consultation to include activities that support breastfeeding, nutrition, physical activity, limiting screen time, and environmental health.
- Support nutrition, physical activity, and water access improvements in early learning. Create a Healthy Kids-Healthy Early Learning grant program similar to Healthy Kids-Healthy Schools.

 Support health information outreach program for child care – Family Friend and Neighbor care. Fund outreach and professional technical assistance efforts for implementing best practices on breastfeeding, nutrition, immunizations, oral health, physical activity, and other important areas.

#### 8. Support students with chronic health conditions.

Nationally, diabetes is the third most common chronic health condition among children, affecting approximately 1 in 433 children and adolescents in the United States.<sup>30</sup> In Washington, about 4,500 youth less than 20 years (or 1 in 400) have been diagnosed with diabetes.<sup>3</sup> The American Diabetes Association asserts that appropriate diabetes care at school is "necessary for the student's immediate safety, long-term well-being, and optimal academic performance."<sup>31</sup> While thinking about effective diabetes management, it's important to recognize that diabetes (and especially type 1 diabetes, which is not preventable, and makes up the majority of cases in people under the age of 20 in Washington), is a complicated, multifaceted disease that requires day-to-day and hour-to-hour individualized treatment. It also requires ongoing nursing judgment, including short- and long-term assessments. In addition to providing support for nutrition, built environment, physical activity, and obesity prevention, which are addressed through the Healthiest Next Generation Initiative, the list below includes additional areas that, if funded, could benefit children with diabetes while at school. These actions would likely also benefit students with other common, potentially life-threatening chronic health conditions, including asthma, seizure disorders, food allergies, and others.

*Increase Dedicated Registered School Nurse Hours:* According to the National Association of School Nurses, "the school nurse has the knowledge, skills, and statutory authority to fully meet the healthcare needs of students with diabetes in the school setting... and is the most appropriate staff member in the school to fully meet the healthcare needs of students and should be the key coordinator and care provider for the student who has diabetes."<sup>30</sup> In addition to the Registered Nurse (RN) having the knowledge and understanding to contribute to the success of the student in communicating with healthcare providers, creating healthcare and 504 plans, and supporting students' rights to education, the RN also is essential in providing emotional support and education for students and their families to promote adequate diabetes management, and therefore success in school.

The Office of the Superintendent of Public Instruction (OSPI) reports that while the number of students receiving care for chronic health conditions has continued to rise (from 6,683 in 2002-03 school year to 23,582 in 2015-16), the number of hours of direct nursing care for students has decreased by 50 percent (from 1,087 hours in 2002-03 school year to 503 in 2015-16).<sup>32</sup>

*Provide Funding to Increase Availability of School Based Health Centers:* Under the Affordable Care Act, the rate of uninsured children (age 0-18) in Washington dropped from 5.9% in 2013 to 2.5% in 2015.<sup>33</sup> However, there remain many children who still lack access to the mental and physical health services they need. School based health centers (SBHCs) are one way to help break down the barriers to access. Currently, there are approximately 35 SBHCs in Washington, 26 of which are

located in the Seattle area.<sup>34</sup> The Washington School-Based Health Alliance states, SBHCs are an important bridge between health and education, delivering results that matter to schools, including decreases in absenteeism and improvements in grade point averages. A recent Seattle study showed SBHCs reduce dropout rates for some of the most at-risk students.<sup>34</sup>

*Care Coordination and Medical Homes:* Increasing dedicated school nursing hours and increasing availability of school-based health centers can facilitate improved coordination of care across home, school, and community settings for students with diabetes. Experts agree that coordination of care "...is not only imperative to avoid medication administration errors and inappropriate duplication of services that can create conflicts in treatment but can also be advantageous in making services more effective and efficient. The sharing of high quality information and services across settings can also ensure that a more accurate picture of the child's needs is developed in a reasonable time period."<sup>35</sup>

Research shows that care coordination between schools and healthcare providers for children with special healthcare needs like diabetes is associated with positive outcomes such as increased classroom participation, better grades, and participation in extracurricular activities.<sup>36</sup> Additionally, evidence shows that care coordination may be associated with attendance, which is a prerequisite to classroom participation and success.<sup>37,38</sup>

#### 9. Expand staffing and coordination resources for evidence-based, community-based programs,

including the Diabetes Prevention Program, Chronic Disease Self-Management, and other programs adopted in Washington. While HCA, DSHS, and DOH all work to encourage coverage and availability of these programs through existing public and private health insurance, the staffing for these programs is lacking, or minimally funded through short-term federal grants which have not achieved the desired sustainability. More dedicated staffing at state agencies and funding for coordination at regional levels is needed to be able to realize all of the benefits—financial, societal, and individual of these proven programs. To assist these and other community programs, we recommend enhancing funding for Washington Information Network 2-1-1, which houses a database that assists with referral and coordination between programs, and staffs telephone and chat lines that connect Washington residents with a wide array of services and programs.

Another community-based program that has successfully improved diabetes-related health is the Healthy Communities model. Providing sustainable funding for statewide and local coordination of Healthy Communities projects would allow for evidence-based policy, systems, and environmental changes in the areas of the state with the highest percentages of people with diabetes, and the highest rates of diabetes complications.

#### 10. Increase use of Diabetes Self-Management Education.

Diabetes Self-Management Education (DSME) consists of several components that help patients acquire the knowledge and abilities necessary for diabetes self-care. Studies on DSME show that

these programs decrease A1c levels, reduce healthcare costs, improve quality of life, and reduce the risk of long-term complications.<sup>39</sup> The algorithm of care issued jointly by the American Diabetes Association and the American Association of Diabetes Educators identifies four critical times at which to assess, provide, and adjust DSME: at diagnosis, annually, when complicating factors occur, and when transitions in care occur.<sup>40</sup>

While DSME is covered by Medicaid, Medicare, and most private insurance, low reimbursement rates and limits on coverage can impede organizations' financial ability to maintain DSME programs. Stakeholders recommend supporting Medicaid/Apple Health in providing optimal DSME benefits to match the national standard of care provided through Medicare. The limited number of hours of education currently allowed by insurance prevents some people from receiving the amount of diabetes education they need. Lack of funding for uninsured residents of Washington also negatively impacts the ability of DSME programs to serve the entire population, although many programs attempt to do so through uncompensated care.

While DSME is available in most regions across Washington State, and covered by insurance in most cases, use is still low. Several opportunities exist to route more people with diabetes to DSME and support. These include raising awareness of the availability and effectiveness of diabetes education to both providers and people with diabetes, incentivizing providers to refer patients to DSME, increasing the modalities of DSME offered, including the Diabetes Self-Management Program model (previously known as the Stanford Model, now supported by the Self-Management Resource Center) that includes a combination of education and support, and reaching out directly to people with diabetes rather than requiring a referral.

#### 11. Raise public awareness of diabetes prevention and management

Without sufficient funding, public awareness initiatives do not have the reach and penetration needed to change attitudes and behaviors. Nationally-developed public service advertisements have not resonated with audiences in Washington. Funding is needed to conduct research that leads to developing campaigns that can influence Washingtonians, especially those people with and at risk for diabetes. Research is also needed to determine the most effective and cost-effective communication channels and media. Currently, no funding exists for wide reaching awareness-raising campaigns that align with the infrastructure available in Washington State to provide diabetes prevention and management.

Another key area for public education is around the link between cardiovascular disease and diabetes. Elevated blood pressure and elevated blood glucose, and abnormal lipids, are a particularly dangerous combination. These conditions damage blood vessels, which leads to cardiovascular disease and, in turn, heart attacks, strokes, vision loss, kidney disease, and lower limb amputations. Controlling all three—blood pressure, blood sugar, and lipids—is essential for people with diabetes.<sup>41</sup> Additionally, smoking exacerbates these problems, contributing to higher rates of

complications and death among smokers with diabetes. Smoking cessation is particularly beneficial for people with diabetes. Smoking is also emerging as an independent risk factor for the development of type 2 diabetes. Increasing access to cessation services is crucial for preventing complications and deaths from diabetes.

# **12.** Train healthcare providers to screen for diabetes and deliver high-quality diabetes care in culturally and linguistically appropriate ways.

Healthcare providers serving populations experiencing diabetes-related health disparities need training in best practices to address diabetes in populations experiencing disparities in outcomes.

Washington State is an incredibly culturally and linguistically diverse state. With that cultural and linguistic diversity comes cultural and language barriers to receiving healthcare. Almost 8% of Washington residents have limited English proficiency (LEP), which means they speak English less than very well.<sup>42</sup> Of Washington's foreign-born population, the rate of LEP is substantially higher. Around 45% of residents who were born in another country report having limited English proficiency.<sup>42</sup> There are considerable differences between groups born outside the U.S. in prevalence of overweight and diabetes. The better able we are to look at the data within specific subgroups, the better we can tailor interventions to reduce risks.<sup>43</sup>

Research has shown that the language barriers experienced by individuals with LEP affect their health outcomes and adherence to treatment plans. For example, in a study of over 1,600 Spanish-speaking Latinos with diabetes, researchers noted a significant increase in the proportion of patients who achieved glycemic control by simply switching from an English-speaking provider to a Spanish-speaking provider.<sup>44</sup>

The Department of Health and Human Services' Office of Minority Health developed a framework for addressing health and healthcare-related disparities. This framework is called the National Standards for Culturally and Linguistically Appropriate Services (CLAS). There are 15 standards that serve as a guide for organizations to ensure their services are culturally and linguistically appropriate, which are divided into three themes: 1) Governance, Leadership, and Workforce; 2) Communication and Language Assistance, and 3) Engagement, Continuous Improvement, and Sustainability. Healthcare providers and organizations should implement the CLAS Standards that are relevant to their scope of practice. For theme 1, this would include increasing efforts to recruit and hire a workforce that reflects the diversity of the patients seen and ensuring that all healthcare providers are regularly trained on cultural humility and implicit bias. For theme 2, this would include ensuring that language assistance is advertised and provided at every point of contact a patient has with an organization, and that interpretation and translation services are provided for free by qualified and certified professionals. For theme 3, this would include getting feedback directly from individuals with diabetes about how to provide more culturally and linguistically appropriate services and then implementing activities to respond to those needs. Online CLAS trainings and resources are available at <u>www.healthequity.wa.gov</u>.

The Governor's Interagency Council on Health Disparities has supported the CLAS Standards as an activity that can help reduce health disparities. In addition, they recommend strategies that ensure all healthcare providers receive the training and resources they need to provide culturally competent care to all patients regardless of race/ethnicity, culture, socioeconomic status, or language. This can be accomplished by: 1) requiring all licensed healthcare providers to receive cultural competence training as a condition for initial licensure, 2) encouraging healthcare employers to deliver cultural competence training as a part of ongoing staff development, and 3) requiring health professions education institutions to report on the cultural competence training offered and the degree to which the training has integrated existing cultural competence standards.

To increase the availability of culturally and linguistically appropriate services, Washington needs to first ensure that care is accessible to individuals with limited English proficiency. Interpretation and translation services must be provided by all providers and organizations that receive any federal financial assistance, which includes reimbursement from Medicaid or Medicare.

Secondly, the healthcare workforce must be able to provide culturally appropriate care. Data about the diversity of our healthcare workforce is limited, but past surveys have shown that Washington's communities of color are underrepresented in health professions. Having a healthcare workforce that reflects the diversity of the patients it serves is essential in eliminating healthcare disparities, providing culturally competent care, and improving health outcomes. Additionally, some evidence shows that having a diverse healthcare workforce can also improve patient access, satisfaction, and adherence to treatment plans.

Achieving a workforce that reflects the diversity of Washington is a long-term goal, which will require intentional effort by educational institutions to increase enrollment of and academic support for diverse students. Although cultural competency training is included in many health profession programs, there are no systems in place to ensure the quality, frequency, or comprehensiveness of this education. Ongoing high-quality cultural humility training is also needed to ensure culturally appropriate care.<sup>45</sup>

Additionally, more accurate data are needed to determine where gaps exist in current language services. Funding for surveys, such as one being developed by the University of Washington and Washington State Coalition for Language Access, and other research into language services availability and best practices is needed to address health disparities.

# 13. Support using data to drive decisions and improve linkages between health systems and community support services.

The Legislature's continued support of work in Analytics, Interoperability, and Measurement (AIM) through Healthier Washington supports people with diabetes, and those at high risk for developing diabetes. Through AIM, analytic tools, interoperable systems and standardized measurement strategies support approaches to delivering whole-person healthcare, and to standardizing and integrating data across health delivery and social service systems. Sufficient funding for collecting, storing, analyzing and disseminating data related to diabetes is necessary to maintain and expand new and existing systems.

### Support for future reports

Completing the legislative directive to develop this report in a comprehensive way requires a significant amount of resources. Where possible, this report responds to the directive in the legislation. For the 2017 report, funding allocated in Department of Health's budget supported staff time to coordinate meetings, facilitate communication between agencies, and consult with data and content experts.

The three agencies recognize the importance of responding to the legislation as written, but compiling some of the requested information is not within our expertise. Increased funding would allow the agencies to dedicate more staff time for content development and thorough data analyses, aimed at examining disease prevalence, including healthcare conditions associated with diabetes, such as hypertension, renal, and cardiac disease. The Legislature may wish to direct agencies to contract cost, financial impact, and return on investment analyses to agencies such as the Washington State Institute for Public Policy or the Office of the State Actuary.

# APPENDIX 1: LEGISLATION

## Engrossed Substitute Senate Bill 6052, Section 219 (2015)

\$38,000 of the general fund-state appropriation for fiscal year 2016 and \$38,000 of the general fundstate appropriation for fiscal year 2017 are provided solely for the department of health, the department of social and health services, and the health care authority to continue to collaborate to submit a coordinated report on diabetes to the governor and appropriate committees of the legislature by June 30, 2017. The report on diabetes must include the following:

- a) An analysis of the financial impact and reach that diabetes of all types is having on programs administered by each agency and individuals enrolled in those programs, including:
  - i. The number of individuals with diabetes that are impacted or covered by these programs;
  - ii. The number of family members of individuals with diabetes that are impacted by these programs;
  - iii. The financial toll or impact that diabetes and its complications places on these programs, and how the financial toll or impact compares to that of other chronic diseases and conditions;
- b) An assessment of the benefits of programs and activities implemented by the agencies to control and prevent diabetes, including documentation of the amount and source of the agencies' funding for these programs and activities;
- c) A description of the level of coordination existing between the agencies on activities, programmatic activities, and messaging on managing, treating, or preventing all forms of diabetes and its complications;
- d) The development of or revision to each agency's action plan for addressing the impact of diabetes together with a range of actionable items for either each agency or consideration by the legislature, or both. The plans must, at a minimum:
  - i. Identify proposed action steps to reduce the impact of diabetes, prediabetes, and related diabetes complications, especially for Medicaid populations;
  - ii. Identify expected outcomes in subsequent biennia; and
  - iii. Establish benchmarks for controlling and preventing relevant forms of diabetes and appropriate measures for success;
- e) An estimate of the costs, return on investment, and resources required to implement the plans identified in subsection (d) of this section.

# APPENDIX 2: WHAT IS DIABETES?

Diabetes is a complex group of diseases all related to harmfully high blood glucose (also called high blood sugar or hyperglycemia). Normally, our digestive tract breaks down the carbohydrates we eat and converts them to glucose. Cells throughout our body absorb the glucose and use it for energy, with the help of a hormone called insulin. If our body does not make insulin, does not make enough, or cannot use it effectively, we develop diabetes.

Diabetes is a chronic condition; there is no cure, but it can be controlled. Left uncontrolled, high blood glucose levels damage our eyes, heart, kidneys, nervous system, and other organs. Uncontrolled diabetes in combination with uncontrolled high blood pressure and other common risk factors greatly increases the risk of heart disease, stroke, kidney disease, and other complications from diabetes. Diabetes is among the top 10 causes of deaths nationally, and it contributes to deaths from many other conditions.<sup>5</sup>

#### **Type 1 Diabetes**

Type 1 diabetes (also called juvenile diabetes or insulin-dependent diabetes) occurs when the body's immune system attacks and destroys certain cells in the pancreas which produce insulin. People with type 1 diabetes need to use insulin constantly to stay alive, via multiple daily injections or an insulin pump, and must carefully balance their food intake and exercise to regulate their blood sugar levels. Hypoglycemia, or dangerously low blood sugar, is a common and potentially life-threatening complication with which people who rely on insulin must contend. Tight control of blood glucose levels, which prevents the long-term complications associated with diabetes, can lead to more frequent hypoglycemia.

Type 1 diabetes is usually diagnosed in children, teenagers, or young adults. A variant type, called Latent Autoimmune Diabetes in Adults, is occasionally found in adults over 30. A very rare form, called monogenic diabetes, is sometimes mistaken for type 1 diabetes but typically strikes newborns.

We do not know exactly what causes type 1 diabetes, though genetic factors appear to play a role. There are no modifiable factors, such as obesity or high blood pressure, known to contribute to type 1 diabetes. Research is taking place in Washington and internationally to develop new treatments, tests for detecting risk of development of type 1 diabetes, and hopefully a cure for type 1 diabetes.

#### Type 2 Diabetes

In type 2 diabetes, the pancreas makes some insulin but not enough, the body is unable to use insulin correctly, or both. This type does not always require the person to take insulin. Type 2 diabetes accounts for 90–95 percent of all people with diabetes.<sup>5</sup>

Many risk factors for type 2 diabetes have been identified. Some, such as age and family history, cannot be changed; others can be changed. In particular, being overweight or obese, lack of physical activity,

high blood pressure and cholesterol, and smoking significantly increase the risk of developing type 2 diabetes. Once someone has diabetes (of any type), these factors can make the impacts and consequences of diabetes worse.

| Modifiable<br>Overweight or obesity<br>Physical inactivity | <b>Non-Modifiable</b><br>Age (45 or older)<br>Ethnicity | <b>Socially Determined</b><br>Access to/affordability of healthy food<br>Access to/affordability of health care |
|--|---|---|
| Tobacco use  | Family history (first degree relative)                  | Access to/affordability of physical activity  |
| High blood pressure  | History of gestational diabetes                         | Discrimination based on geography   |
| Abnormal cholesterol levels                                | Polycystic Ovarian Syndrome<br>(PCOS)                   | Discrimination based on race  |
| Prediabetes (impaired glucose                              | Acanthosis Nigricans (darkened,                         | Discrimination based on socioeconomic   |
| tolerance, impaired fasting glucose, or abnormal glucose)  | thickened skin around neck and armpits)                 | status  |
| Depression   |   |   |
| Cardiovascular disease                                     |   |   |

#### **Risk Factors Associated with the Development of Type 2 Diabetes**

Source: National Institutes of Health (https://www.niddk.nih.gov/health-information/diabetes/overview/risk-factors-type-2-diabetes) and Scientific Statement: Socioecological Determinants of Prediabetes and Type 2 Diabetes (http://care.diabetesjournals.org/content/diacare/36/8/2430.full.pdf).

Health systems and public health interventions that raise awareness of non-modifiable risk factors, reduce modifiable risk factors, and address social determinants of health have the greatest potential impact on the prevention and/or delay of onset of type 2 diabetes. The social determinants of health can exacerbate diabetes risk factors through reduced access to and practice of healthy behaviors.

Excess weight complicates the management of diabetes and increases the risk of cardiovascular complications and cardiovascular death in people with diabetes. About 83 percent of Washington adults with diabetes are overweight or obese.<sup>46</sup> The same social and environmental forces that have driven increases in overweight and obesity are also likely to be contributing to more cases of type 2 diabetes.

Insufficient physical activity also increases the risk of developing prediabetes and type 2 diabetes. For those who have any form of diabetes, regular physical activity improves blood glucose control, reduces cardiovascular risk factors, contributes to weight loss, and improves well-being. About 62 percent of Washington adults with diabetes do not get enough physical activity.<sup>46</sup>

Controlling risk factors for cardiovascular disease is an essential part of diabetes treatment for people with both type 1 and type 2 diabetes. Clinical trials have shown that blood pressure and lipid (cholesterol) control reduce diabetes complications by up to 50 percent.<sup>5</sup> About 55 percent of Washington adults with diabetes have a history of high blood pressure and 48 percent have a history of high cholesterol.<sup>46</sup>

Tobacco use is an independent risk factor for developing type 2 diabetes and cardiovascular disease, and smoking can make diabetes management more difficult for people with diabetes of any type. People

who smoke have a higher risk of serious complications from diabetes. About 19 percent of Washington adults with diabetes currently smoke cigarettes.<sup>46</sup>

Other factors known to be associated with increased risk of developing type 2 diabetes include having a parent or sibling with diabetes, polycystic ovary syndrome (a hormonal disorder among women of reproductive age), and a history of cardiovascular disease.

In addition, factors such as insufficient sleep, psychological stress (including chronic stress associated with income inequality and discrimination), endocrine disruptors, medications, and intrauterine and intergenerational effects have been less thoroughly studied, and their contribution to type 2 diabetes may have been underestimated.<sup>47</sup>

#### **Pregnancy and Diabetes**

Gestational diabetes is a form of diabetes in women that occurs during pregnancy, and affects about 7 percent of pregnant women. Women who are older than 25, or who have pre-pregnancy hypertension or high cholesterol, a prior pregnancy, a family history of diabetes, or a higher body mass index are more likely to develop gestational diabetes.<sup>48</sup> There is no known way to prevent gestational diabetes, but it can be managed through diet, exercise, and, if necessary, insulin. Usually, a woman's blood glucose returns to normal after the birth; if not, she may be diagnosed with type 2 diabetes or prediabetes. Gestational diabetes also puts both mother and child at a higher risk of developing type 2 diabetes later in life.

Distinct from gestational diabetes, maternal diabetes occurs when a woman had diabetes before becoming pregnant. This occurs in about 1 percent of pregnancies. All women with diabetes who wish to become pregnant are encouraged to plan pregnancies in advance, and achieve ideal blood glucose control and manage weight prior to pregnancy for the best outcomes.

Both gestational and maternal diabetes can create serious threats to mother and baby, including premature birth, preeclampsia (a disorder that occurs only during pregnancy and the postpartum period that can cause death), higher risk of birth injury, or Caesarean delivery. Inadequate care of maternal diabetes before and during pregnancy can lead to heart or neural tube birth defects, pre-term birth, or miscarriage. Self-management and medical care to manage blood sugar before and during pregnancy reduces the risks. Treatments for gestational diabetes may include healthy eating and regular physical activity alone, or in combination with insulin or other medications.<sup>49</sup> When prenatal care is not accessed, gestational diabetes has the potential to go undiagnosed and pose serious risks for both mother and baby. The U.S. Preventive Services Task Force recommends screening for gestational diabetes in asymptomatic pregnant women after 24 weeks of gestation. Women with gestational and maternal diabetes are encouraged to breastfeed their babies, as this benefits both mother and infant.<sup>50</sup> Women who have delivered a baby weighing more than nine pounds are at higher risk of developing diabetes, both immediately following delivery and in subsequent years.

#### Prediabetes

Based on national surveys, about one-third of all adults in Washington have prediabetes, but most of them don't know it.<sup>51</sup> Prediabetes is largely asymptomatic. To identify people with prediabetes and type 2 diabetes, guidelines released by the U.S. Preventive Services Task Force in 2015 recommend screening for abnormal blood glucose and type 2 diabetes mellitus in adults who are at increased risk for diabetes. Prediabetes is defined as having blood glucose levels higher than normal, but not high enough to be classified as diabetes, and results from the same risk factors that contribute to type 2 diabetes. People with prediabetes have a much greater chance of developing type 2 diabetes or gestational diabetes, but not type 1 diabetes. Those with prediabetes are also at higher risk of cardiovascular disease, whether they later develop diabetes or not. Prediabetes indicates abnormalities in glucose levels have begun, but may be reversed. Once type 2 diabetes is diagnosed, few individuals are able to return to blood glucose levels in the prediabetes or normal ranges.

#### Complications

Uncontrolled or inadequately controlled diabetes often leads to severe health consequences. Shortterm, life-threatening complications include ketoacidosis (where high levels of acids in the body reach poisonous levels due to an inability to use carbohydrates for fuel), hyperosmolarity (where blood glucose levels are dangerously high), or coma. People with type 1 diabetes are generally at greater risk of short-term life-threatening complications. Long-term complications include kidney disease, ulcers on the legs, damaged nerves in the arms and legs, and eye diseases that can cause blindness. Diabetes is the leading cause of new cases of blindness among adults aged 20–74 years.<sup>14</sup> Foot infections can develop and be resistant to healing, sometimes leading to amputations.

In addition, many patients hospitalized for heart disease, lower-extremity conditions (such as peripheral arterial disease, ulcer, inflammation, infection, or neuropathy), stroke, pneumonia, or influenza are also diagnosed with diabetes, which likely contributed to or worsened their condition.

People with diabetes, especially type 2, are at increased risk of heart attack and stroke. For people with type 2 diabetes, controlling blood pressure is essential to prevent heart disease and stroke, and the disability and death that can result from these conditions.

#### **Prevention and Treatment**

The good news is that many cases of type 2 diabetes can be prevented or delayed.<sup>52</sup> For most people with diabetes, a combination of diabetes self-management and preventive care can prevent or delay complications. For people with type 1 diabetes, near-constant self-management (or management by a parent or caregiver) of glucose levels is essential to prevent life-threatening short-term complications.

For people who have been diagnosed with prediabetes, type 2 diabetes can be prevented or delayed by adopting a lifestyle that includes at least 150 minutes of physical activity a week, eating a balanced diet, and, if they are overweight or obese, losing 5-10 percent of body weight.<sup>52</sup> Evidence-based programs,
such as the Diabetes Prevention Program, provide support and education to people with prediabetes wanting to make these changes.

Until there is a cure, people with diabetes require regular preventive treatment to delay the natural progression of the disease. Much of the treatment, such as routine blood sugar monitoring, must be self-managed by the patient or a caregiver. In type 1 diabetes, daily insulin is required. Type 2 diabetes can often be controlled through oral medications without insulin. For all forms of diabetes, patients need annual eye, foot, kidney function, and dental exams, among other treatments. Checks of blood pressure and feet for sores are recommended at each medical visit.

Healthy eating and regular physical activity are crucial to successfully managing diabetes. People with diabetes face the same barriers to regular active living and healthy eating as everyone else, and people who have both diabetes and disabilities face even greater challenges.

# APPENDIX 3: DIABETES IN WASHINGTON

## Statewide

In Washington State diabetes is common and serious. About 622,600 adults aged 20 years and older (or 1 in 7) have diabetes, with a fourth not aware they have it.<sup>2</sup> About 4,500 youth younger than 20 years of age (or 1 in 400) have diagnosed diabetes.<sup>3</sup> In addition to those who already have diabetes, an estimated 2 million adults (or 1 in 3) have prediabetes of which 15-30% of these individuals will develop type 2 diabetes within 5 years.<sup>4,5</sup>

After nearly doubling over the last two decades, the continued growth in diagnosed diabetes among adults may be beginning to slow as of 2011.<sup>6,7</sup> This applies to both diabetes prevalence (the total percentage of people with the disease at a given time) and incidence (the rate of newly diagnosed cases in a given year). Although the overall numbers of people with diabetes are not growing dramatically each year, they still remain alarmingly high and some high-risk subgroups may experience continued increases over time (including non-Hispanic blacks and Hispanics along with those with a high school education or less).



Diabetes is one of the most common chronic diseases of childhood.<sup>53</sup> While state data are not available, national studies show both the incidence and prevalence of type 1 and type 2 diabetes in youth has increased since early 2000.<sup>8,9</sup>

| Summary     | Type 1 (0-19 years)                                     | Type 2 (10-19 years)                       |
|-------------|---|--|
| Prevalence  | 21% increase from 0.15% to 0.19%                        | 31% increase from 0.03% to 0.05%           |
| 2001 – 2009 | Increases occurred in both sexes, those aged 5 years or | Increases occurred in both sexes, all age- |
|             | older, and in white, black, Hispanic, and Asian Pacific | groups, and in white, Hispanic, and black  |
|             | Islander youth  | youth                                      |

| Incidence | Increased by 1.8 percent annually              | Increased by 4.8% annually                  |
|-----------|--|---|
| 2002—2012 | Increasing more among Hispanic youth than non- | Increasing more in racial and ethnic groups |
|           | Hispanic white youth                           | other than non-Hispanic whites              |

*Age and Gender.*<sup>10</sup> Only 6 percent of Washington adults under 65 have diagnosed diabetes, but 20 percent of adults over 65 have the disease. Men and women under 45 have the same prevalence of diagnosed diabetes. However, after age 45, more men have diagnosed diabetes than women.



*Race and Hispanic Origin.*<sup>10</sup> Racial and ethnic minorities are more likely to develop diabetes. In Washington State, Native Hawaiian/Other Pacific Islanders, Hispanics, blacks, and American Indians/Alaska Natives experience higher prevalence of diagnosed diabetes than non-Hispanic whites.

*Economic Factors and Education.*<sup>10</sup> People of lower socioeconomic position are also more likely to develop diabetes. Washington adults with incomes less than \$25,000 were twice as likely to have diagnosed diabetes as those with incomes of \$75,000 or more. Adults with a high school education or less were almost twice as likely to have diagnosed diabetes as those with a college degree or more.



*Hospitalizations*.<sup>12</sup> Diabetes was the primary diagnosis or reason for 9,400 hospitalizations of Washington residents in 2014. An additional 98,600 hospitalizations included diabetes as a contributing diagnosis or reason.

*Complications*. About 19% of hospitalizations with diabetes listed major cardiovascular disease as the primary diagnosis.<sup>12</sup> Diabetes also contributed to 632 (60 percent) of hospitalizations with non-traumatic, lower extremity amputations.<sup>12</sup> Almost half (total of 818) of new cases of end-stage renal disease in the state were among people with diabetes.<sup>13</sup> Diabetes is also the leading cause of new cases of blindness among adults aged 20-74 years.<sup>14</sup> Washington adults with diabetes are about twice as likely to report being disabled or limited in their activities because of physical, mental, or emotional problems (46 percent) than adults without diabetes (22 percent). Adults with diabetes are also much more likely to report use of special equipment for health reasons—such as a cane, wheelchair, special bed, or special telephone—(26 percent) than adults without diabetes (6 percent).<sup>46</sup>

*Deaths*.<sup>11</sup> Diabetes is the seventh leading cause of death in Washington State, and caused or contributed to 5,700 deaths in 2015. Data show patterns of diabetes death rates with respect to age, gender, race, Hispanic origin, economic factors, and education are similar to those for diabetes prevalence.

**Note:** This summary focuses on the statewide burden of diabetes. It is important to note that local assessments have shown that health status varies between counties and among smaller areas and subpopulations within counties. The Washington State Department of Health Chronic Disease Profiles provide subpopulation and county-level data on chronic diseases (including diabetes), related risk factors, socioeconomic conditions, and preventive care utilization. The profiles can be accessed here: <a href="http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/ChronicDiseaseProfiless">http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/ChronicDiseaseProfiless</a>

# Apple Health Enrollees

As of 2015, there were 1.9 million Apple Health enrollees of all ages. About 687,000 adult enrollees were newly eligible due to the expansion of the Affordable Care Act (ACA) in 2014. Enrollees with diabetes were identified based on ProviderOne fee-for-service claim and managed care encounter data (Chronic Illness and Disability Payment System (CDPS) and MedicaidRx categories), as well as CARE assessments (ICD-9-CM diagnosis codes). A two-year window was used to identify people with diabetes enrolled in Medicaid. That is, clients may be identified as having diabetes during the measurement year or the year prior to the measurement year.

The CDPS and MedicaidRx categories used to identify diabetes are listed below, which are based on ICD-CM codes and national drug codes.

| Diagnosis Disease Category | Description             | Sample Diagnoses                    |
|----------------------------|-------------------------|-------------------------------------|
| DIA1H                      | Diabetes, type 1 high   | Type 1 diabetes with renal          |
|                            |                         | manifestations/coma                 |
| DIA1M                      | Diabetes, type 1 medium | Type 1 diabetes without             |
|                            |                         | complications                       |
| DIA2M                      | Diabetes, type 2 medium | Type 2 or unspecified diabetes with |
|                            |                         | complications                       |
| DIA2L                      | Diabetes, type 2 low    | Type 2 or unspecified diabetes      |
|                            |                         | without complications               |

| Prescription Disease Category | Description | Summary Drug Descriptions |
|-------------------------------|-------------|---------------------------|
| MRX10                         | Diabetes    | Hypoglycemics, insulin    |

The ICD-9-CM diagnosis codes used to identify diabetes in the CARE assessment were 250, 3572, 3620, 36641, and 6480.

Medicaid coverage groups: The Medicaid population is comprised of subgroups with vastly different health risk profiles and use patterns. Consequently, we present results separately for these distinct coverage groups:

- Dual eligible populations
  - Elders age 65 and above
  - People under age 65—almost all of whom are age 18-64 and qualify for Medicaid in disability-related coverage categories
- Medicaid-only populations
  - Elders age 65 and above
  - Adults age 18 to 64 with disabilities
  - Adults age 18 to 64 without disabilities qualifying for "classic" Medicaid coverage in place prior to expansion under the ACA
  - Adults age 18 to 64 without disabilities qualifying for expanded Medicaid coverage under the ACA beginning in January 2014
  - Children under age 18 with disabilities

#### o Children under age 18 without disabilities

It is important to note that the "Disabled Adult" coverage group in Calendar Years (CY) 2012 and 2013 includes people enrolled in Presumptive Supplemental Security Income, Disability Lifeline, and Alcohol and Drug Addiction and Treatment and Support Act coverage categories that transitioned to the "Newly-Eligible Adult" coverage group in January 2014 after the expansion of Medicaid coverage under the ACA.

|                       |              | CY2012    |            |              | CY2013    |            |
|-----------------------|--------------|-----------|------------|--------------|-----------|------------|
| Eligibility Group     | Enrollees w/ | Enrollees | Prevalence | Enrollees w/ | Enrollees | Prevalence |
|                       | diabetes     |           |            | diabetes     |           |            |
| Medicaid-Only         | 38038        | 1081517   | 3.52%      | 38826        | 1099062   | 3.53%      |
| Non-Disabled Children | 3526         | 689155    | 0.51%      | 3793         | 700995    | 0.54%      |
| Disabled Children     | 470          | 17135     | 2.74%      | 432          | 17237     | 2.51%      |
| Non-Disabled Adults   | 9961         | 237274    | 4.20%      | 10151        | 238709    | 4.25%      |
| Disabled Adults       | 23576        | 136157    | 17.32%     | 23904        | 140146    | 17.06%     |
| Elderly               | 505          | 1796      | 28.12%     | 546          | 1975      | 27.65%     |
| Newly-Eligible Adults |              |           |            |              |           |            |
|                       |              |           |            |              |           |            |
| Dual Eligible         | 50490        | 144587    | 34.92%     | 49858        | 146030    | 34.14%     |
| Non-Elderly Disabled  | 17340        | 63904     | 27.13%     | 63778        | 63778     | 26.56%     |
| Elderly               | 33150        | 80683     | 41.09%     | 32921        | 82252     | 40.02%     |

| <b>Prevalence of Diabetes</b> | (Calendar | Year 2012-2015) |
|-------------------------------|-----------|-----------------|
|-------------------------------|-----------|-----------------|

|                       | CY2014       |           |            | CY2015       |           |            |
|-----------------------|--------------|-----------|------------|--------------|-----------|------------|
| Eligibility Group     | Enrollees w/ | Enrollees | Prevalence | Enrollees w/ | Enrollees | Prevalence |
|                       | diabetes     |           |            | diabetes     |           |            |
| Medicaid-Only         | 67951        | 1584931   | 4.29%      | 82187        | 1781568   | 4.61%      |
| Non-Disabled Children | 4081         | 736108    | 0.55%      | 4519         | 770325    | 0.59%      |
| Disabled Children     | 390          | 16955     | 2.30%      | 422          | 17316     | 2.44%      |
| Non-Disabled Adults   | 10713        | 226001    | 4.74%      | 11625        | 225872    | 5.15%      |
| Disabled Adults       | 16681        | 80207     | 20.80%     | 16508        | 78940     | 20.91%     |
| Elderly               | 606          | 2118      | 28.61%     | 644          | 2147      | 30.00%     |
| Newly-Eligible Adults | 35480        | 523542    | 6.78%      | 48469        | 686968    | 7.06%      |
|                       | ·            |           |            | •            |           |            |
| Dual Eligible         | 50893        | 151606    | 33.57%     | 50739        | 154183    | 32.91%     |
| Non-Elderly Disabled  | 17287        | 66232     | 26.10%     | 16912        | 66599     | 25.39%     |
| Elderly               | 33606        | 85374     | 39.36%     | 33827        | 87584     | 38.62%     |

From 2012 to 2013, the prevalence of diabetes among the Medicaid-only population in Washington State changed little; however, the prevalence rate increased from 3.53% in 2013 to 4.61% in 2015. The increasing trend of diabetes seems to be mainly driven by the Medicaid expansion as the newly-eligible adults had a relatively high prevalence of diabetes. During 2012 to 2015, the prevalence of diabetes among people dually eligible for Medicare declined from 34.92% to 32.91%. Among dual eligibles, the prevalence of diabetes trended downwards for both non-elderly disabled people and elders.

There were huge differences in the prevalence of diabetes across Medicaid subpopulations. Diabetes was more prevalent among elders than among non-elderly adults or children. In CY 2014, among Medicaid-only clients, elders had the highest prevalence rate at 28.61%. Diabetes was more prevalent among people with disabilities than those without disabilities. The prevalence of diabetes among Medicaid-only disabled adults was 20.8%, compared to only 4.74% among Medicaid-only non-disabled adults. Among disabled children, diabetes prevalence was 2.3%, compared to 0.55% for Medicaid-only non-disabled children.

Diabetes was more prevalent among adults qualifying for Medicaid as "Newly Eligible" under the ACA (6.78%), compared to non-disabled adults enrolled in pre-existing Medicaid coverage categories (4.74%). It should be noted that the "newly-eligible adult" population included people with relatively high health needs previously eligible for medical assistance under the Presumptive SSI and Disability Lifeline programs.

Diabetes was more prevalent among people dually eligible for Medicare than people enrolled in comparable Medicaid-only coverage. The prevalence of diabetes among elderly dual eligibles was 39.36%, compared to 28.61% among non-dual, Medicaid-only elderly. Among non-elderly disabled dual eligibles, diabetes prevalence was 26.10%, compared to 20.80% for Medicaid-only disabled clients.

|   | Non-Disabled Children   |           |            | Disabled Children       |           |            |  |
|---|-------------------------|-----------|------------|-------------------------|-----------|------------|--|
|   | Enrollees<br>w/diabetes | Enrollees | Prevalence | Enrollees<br>w/diabetes | Enrollees | Prevalence |  |
| Gender  |                         |           |            |                         |           |            |  |
| Male  | 2196                    | 373709    | 0.59%      | 231                     | 11314     | 2.04%      |  |
| Female  | 1885                    | 362399    | 0.52%      | 159                     | 5641      | 2.82%      |  |
| Age   |                         |           |            |                         |           |            |  |
| 05  | 262                     | 270656    | 0.10%      | 53                      | 3444      | 1.54%      |  |
| 611   | 1555                    | 251468    | 0.62%      | 133                     | 6668      | 1.99%      |  |
| 1217  | 2264                    | 213984    | 1.06%      | 204                     | 6843      | 2.98%      |  |
| Race/ethnicity  |                         |           |            |                         |           |            |  |
| White alone, not Hispanic   | 2049                    | 353700    | 0.58%      | 186                     | 7484      | 2.49%      |  |
| Any Minority, including Hispanic  | 2032                    | 382408    | 0.53%      | 204                     | 9471      | 2.15%      |  |
| Hispanic  | 1227                    | 234279    | 0.52%      | 104                     | 4792      | 2.17%      |  |
| Black or African-American   | 476                     | 72777     | 0.65%      | 65                      | 3175      | 2.05%      |  |
| American Indian or Alaska Native  | 266                     | 40115     | 0.66%      | 42                      | 1608      | 2.61%      |  |
| Asian/Pacific Islander  | 259                     | 67943     | 0.38%      | 23                      | 1183      | 1.94%      |  |
| Note: Clients were categorized into two mutually exclusive race/ethnicity groups: non-Hispanic white and any minority including Hispanic. Those identified as minority were further categorized into four groups. The numbers of these four |                         |           |            |                         |           |            |  |

Prevalence of Diabetes among Medicaid-Only Children (Calendar Year 2014)

groups may not sum to the number of minority because people could identify themselves as belonging to more than one race.

The prevalence of diabetes was higher among youth 12-17 years compared to those less than 12 years. Diabetes was more prevalent among non-Hispanic white children than minority children. Among the minority children, children identified themselves as American Indians/Alaska Natives had the highest prevalence rate, while Asian/Pacific Islander children had the lowest rate.

|                                  | Non-Disabled Adults*    |           |            | Disabled Adults*        |           |            |  |
|----------------------------------|-------------------------|-----------|------------|-------------------------|-----------|------------|--|
|                                  | Enrollees<br>w/diabetes | Enrollees | Prevalence | Enrollees<br>w/diabetes | Enrollees | Prevalence |  |
| Gender                           |                         |           |            |                         |           |            |  |
| Male                             | 2715                    | 65149     | 4.17%      | 6699                    | 38944     | 17.20%     |  |
| Female                           | 7998                    | 160852    | 4.97%      | 9982                    | 41263     | 24.19%     |  |
| Age                              |                         |           |            |                         |           |            |  |
| 1824                             | 1077                    | 76365     | 1.41%      | 436                     | 9137      | 4.77%      |  |
| 2534                             | 2888                    | 77635     | 3.72%      | 1170                    | 12773     | 9.16%      |  |
| 3544                             | 3552                    | 48236     | 7.36%      | 1994                    | 11329     | 17.60%     |  |
| 4554                             | 2435                    | 19700     | 12.36%     | 4954                    | 20279     | 24.43%     |  |
| 5564                             | 761                     | 4065      | 18.72%     | 8127                    | 26689     | 30.45%     |  |
| 6574                             | 0                       | 0         | 0.00%      | 0                       | 0         | 0.00%      |  |
| 7584                             | 0                       | 0         | 0.00%      | 0                       | 0         | 0.00%      |  |
| ≥85                              | 0                       | 0         | 0.00%      | 0                       | 0         | 0.00%      |  |
| Race/ethnicity                   |                         |           |            |                         |           |            |  |
| White alone, not Hispanic        | 5157                    | 126605    | 4.07%      | 10344                   | 52347     | 19.76%     |  |
| Any Minority, including Hispanic | 5556                    | 99396     | 5.59%      | 6337                    | 27860     | 22.75%     |  |
| Hispanic                         | 2572                    | 44850     | 5.73%      | 1508                    | 6262      | 24.08%     |  |
| Black or African-American        | 1280                    | 24469     | 5.23%      | 2192                    | 10373     | 21.13%     |  |
| American Indian or Alaska Native | 906                     | 16278     | 5.57%      | 1804                    | 8357      | 21.59%     |  |
| Asian/Pacific Islander           | 1286                    | 22553     | 5.70%      | 1535                    | 6104      | 25.15%     |  |

Prevalence of Diabetes among Medicaid-Only Adults (Calendar Year 2014)

|        | Elderly                 |           |            | Newly-Eligible Adults*  |           |            |  |
|--------|-------------------------|-----------|------------|-------------------------|-----------|------------|--|
|        | Enrollees<br>w/diabetes | Enrollees | Prevalence | Enrollees<br>w/diabetes | Enrollees | Prevalence |  |
| Gender |                         |           |            |                         |           |            |  |
| Male   | 221                     | 841       | 26.28%     | 16864                   | 258078    | 6.53%      |  |
| Female | 385                     | 1277      | 30.15%     | 18616                   | 265464    | 7.01%      |  |
| Age    |                         |           |            |                         |           |            |  |
| 1824   |                         |           |            | 1467                    | 87825     | 1.67%      |  |
| 2534   |                         |           |            | 3901                    | 153577    | 2.54%      |  |
| 3544   |                         |           |            | 5912                    | 96980     | 6.10%      |  |
| 4554   |                         |           |            | 11230                   | 100669    | 11.16%     |  |
| 5564   |                         |           |            | 12970                   | 84491     | 15.35%     |  |
| 6574   | 407                     | 1343      | 30.31%     | 0                       | 0         | 0.00%      |  |

| 7584                             | 159 | 614  | 25.90% | 0     | 0      | 0.00% |
|----------------------------------|-----|------|--------|-------|--------|-------|
| ≥85                              | 40  | 161  | 24.84% | 0     | 0      | 0.00% |
| Race/ethnicity                   |     |      |        |       |        |       |
| White alone, not Hispanic        | 237 | 860  | 27.56% | 19798 | 334938 | 5.91% |
| Any Minority, including Hispanic | 369 | 1258 | 29.33% | 15682 | 188604 | 8.31% |
| Hispanic                         | 134 | 436  | 30.73% | 6776  | 75037  | 9.03% |
| Black or African-American        | 57  | 176  | 32.39% | 3185  | 43847  | 7.26% |
| American Indian or Alaska Native | 8   | 33   | 24.24% | 2146  | 26455  | 8.11% |
| Asian/Pacific Islander           | 182 | 670  | 27.16% | 4570  | 56432  | 8.10% |

Clients were categorized into two mutually exclusive race/ethnicity groups: non-Hispanic white and any minority including Hispanic. Those identified as minority were further categorized into four groups. The numbers of these four groups may not sum to the number of minority because people could identify themselves as belonging to more than one race.

\*For non-disabled adults, disabled adults, and newly-eligible adults, if they were age 65 at the end of the measurement year (age conflicts with Medicaid coverage group), we still classified them into the 55-64 age group. If they were age 66 and older, they were deleted from the analysis because of possible data error.

Among Medicaid-only adults, the prevalence rate of diabetes was higher among women than men. Among non-elderly adults, the prevalence of diabetes increased with age, with the 55 to 64 age group having the highest prevalence rate. Among elders, although the prevalence of diabetes decreased with age, the prevalence rates were well above 20%. Diabetes was more prevalent among minority Medicaidonly adults than non-Hispanic white Medicaid-only adults. Among non-disabled adults, there was little difference in the prevalence of diabetes among the four minority groups. Among elders, African-Americans had the highest prevalence rate at 32.39% while American Indians/Alaska Natives had the lowest rate (24.24%).

|        | Non-Elderly Disabled    |           |            | Elderly                 |           |            |  |
|--------|-------------------------|-----------|------------|-------------------------|-----------|------------|--|
|        | Enrollees<br>w/diabetes | Enrollees | Prevalence | Enrollees<br>w/diabetes | Enrollees | Prevalence |  |
| Gender |                         |           |            |                         |           |            |  |
| Male   | 7528                    | 31881     | 23.61%     | 11382                   | 28864     | 39.43%     |  |
| Female | 9759                    | 34351     | 28.41%     | 22224                   | 56510     | 39.33%     |  |
| Age    |                         |           |            |                         |           |            |  |
| 024    | 142                     | 2055      | 6.91%      |                         |           |            |  |
| 2534   | 1009                    | 9945      | 10.15%     |                         |           |            |  |
| 3544   | 2469                    | 12799     | 19.29%     |                         |           |            |  |
| 4554   | 5402                    | 19083     | 28.31%     |                         |           |            |  |
| 5564   | 8265                    | 22350     | 36.98%     |                         |           |            |  |
| 6574   |                         |           |            | 15718                   | 39808     | 39.48%     |  |
| 7584   |                         |           |            | 11510                   | 26625     | 43.23%     |  |
| ≥85    |                         |           |            | 6378                    | 18941     | 33.67%     |  |

Prevalence of Diabetes among Dual Eligibles (Calendar Year 2014)

| Race/ethnicity                        |                 |             |                 |                |              |          |  |  |
|---------------------------------------|-----------------|-------------|-----------------|----------------|--------------|----------|--|--|
| White alone, not Hispanic             | 11525           | 47286       | 24.37%          | 19973          | 53934        | 37.03%   |  |  |
| Any Minority, including Hispanic      | 5762            | 18946       | 30.41%          | 13633          | 31440        | 43.36%   |  |  |
| Hispanic                              | 1759            | 4996        | 35.21%          | 3604           | 7664         | 47.03%   |  |  |
| Black or African-American             | 1911            | 6767        | 28.24%          | 1896           | 4217         | 44.96%   |  |  |
| American Indian or Alaska Native      | 1334            | 5011        | 26.62%          | 1084           | 2524         | 42.95%   |  |  |
| Asian/Pacific Islander                | 1279            | 4062        | 31.49%          | 7568           | 18147        | 41.70%   |  |  |
| Clients were categorized into two mut | ually exclusive | race/ethnic | ity groups: noi | n-Hispanic whi | te and any m | ninority |  |  |

including Hispanic. Those identified as minority were further categorized into four groups. The numbers of these four groups may not sum to the number of minority because people could identify themselves as belonging to more than one race.

Among persons less than 65 years dually eligible for Medicare, females (primarily disabled adults) had a higher prevalence of diabetes than males. Among those dual eligible 65 and older, the prevalence of diabetes varied little by gender. Among disabled dual eligible less than 65 years, the risk of diabetes rose as people got older, with the 55 to 64 age group having the highest rate (36.98%). Among those 65 and older dually eligible for Medicare, the prevalence of diabetes peaked at age 75 to 84 (43.23%), after which the prevalence seemed to drop off, similar to the general population of Washington State.

Among people enrolled in both Medicare and Medicaid, minorities had higher rates of diabetes, compared to non-Hispanic whites. Among the minority groups, Hispanics had the highest prevalence of diabetes.

| Prevalence of Comorbid Disease Conditions among Medicaid-Only Clients with and without Diabete | S |
|--|---|
| (Calendar Year 2014)   |   |

|                              |  | Disable | Disabled Adults |         | Children | Non-disabled Adults |      | Non-disabled Children |          | r Elderly     |       | Newly-Eligible Adults |         |
|------------------------------|--|---------|-----------------|---------|----------|---------------------|------|-----------------------|----------|---------------|-------|-----------------------|---------|
|                              |  | Has Dia | abetes?         | Has Dia | abetes?  | Has Diabetes?       |      | Has Di                | iabetes? | Has Diabetes? |       | Has Dia               | abetes? |
|                              |  | Yes     | Yes No          |         | No       | Yes                 | No   | Yes                   | No       | Yes           | No    | Yes                   | No      |
|                              | SAMPLE DIAGNOSES   | %       | %               | %       | %        | %                   | %    | %                     | %        | %             | %     | %                     | %       |
| BY CDPS DISEASE              |  |         |                 |         |          |                     |      |                       |          |               |       |                       |         |
| Cancer, very                 | Pancreatic cancer, secondary<br>malignant neoplasms, multiple<br>myeloma | 1.4%    | 1.0%            | 0.0%    | 0.2%     | 0.3%                | 0.1% | 0.0%                  | 0.0%     | 1.8%          | 1 5%  | 0.7%                  | 0.2%    |
| Cancer high                  | Lung cancer, ovarian cancer  | 2.2%    | 1 2%            | 5.6%    | 1 2%     | 0.6%                | 0.2% | 0.5%                  | 0.1%     | 1 7%          | 1 2%  | 0.0%                  | 0.2%    |
| Cancer, medium               | Mouth, breast or brain cancer,<br>malignant melanoma                     | 0.8%    | 0.6%            | 0.3%    | 0.2%     | 0.3%                | 0.1% | 0.1%                  | 0.0%     | 0.7%          | 0.3%  | 0.4%                  | 0.2%    |
| Cancer, low                  | Colon, cervical, or prostate cancer,<br>carcinomas in situ               | 2.3%    | 1.3%            | 0.0%    | 0.1%     | 0.7%                | 0.4% | 0.0%                  | 0.0%     | 1.5%          | 1.9%  | 1.4%                  | 0.6%    |
| Very high                    | Heart transplant status/complications                                    | 1.8%    | 0.5%            | 2.3%    | 0.8%     | 0.3%                | 0.1% | 0.2%                  | 0.0%     | 1.0%          | 0.3%  | 0.4%                  | 0.1%    |
| Cardiovascular,<br>medium    | Congestive heart failure,<br>cardiomyopathy                              | 13.5%   | 4.0%            | 2.3%    | 1.9%     | 2.8%                | 0.5% | 0.7%                  | 0.3%     | 13.0%         | 5.7%  | 5.8%                  | 1.0%    |
| Cardiovascular,<br>low       | Endocardial disease, myocardial<br>infarction, angina                    | 19.6%   | 9.0%            | 6.9%    | 6.1%     | 7.8%                | 2.5% | 2.2%                  | 0.9%     | 20.5%         | 9.7%  | 12.4%                 | 3.5%    |
| Cardiovascular,<br>extra low | Hypertension   | 38.0%   | 16.0%           | 4.4%    | 0.7%     | 29.3%               | 4.3% | 3.5%                  | 0.2%     | 41.1%         | 24.0% | 40.4%                 | 7.9%    |
| Cerebrovascular,<br>low      | Intracerebral hemorrhage, precerebral occlusion                          | 5.5%    | 2.1%            | 3.6%    | 1.4%     | 0.8%                | 0.1% | 0.3%                  | 0.1%     | 6.1%          | 2.4%  | 1.9%                  | 0.3%    |
| CNS, high                    | Quadriplegia, amyotrophic lateral sclerosis                              | 1.2%    | 1.2%            | 2.1%    | 2.2%     | 0.1%                | 0.0% | 0.2%                  | 0.0%     | 0.7%          | 0.2%  | 0.2%                  | 0.1%    |
| CNS, medium                  | Paraplegia, muscular dystrophy,<br>multiple sclerosis                    | 4.0%    | 3.3%            | 5.6%    | 4.0%     | 1.0%                | 0.3% | 0.3%                  | 0.1%     | 1.0%          | 0.2%  | 1.2%                  | 0.4%    |
| CNS, low                     | Epilepsy, Parkinson's disease, cerebral<br>palsy, migrane                | 27.8%   | 11.8%           | 13.8%   | 9.1%     | 10.2%               | 2.1% | 3.1%                  | 1.0%     | 16.8%         | 6.9%  | 14.1%                 | 2.9%    |
| DD, medium                   | Severe or profound mental retardation                                    | 0.1%    | 0.2%            | 0.0%    | 0.4%     | 0.0%                | 0.0% | 0.1%                  | 0.0%     | 0.0%          | 0.1%  | 0.0%                  | 0.0%    |
| DD, low                      | Mild or moderate mental retardation,<br>Down's syndrome                  | 1.3%    | 1.9%            | 7.9%    | 7.7%     | 0.1%                | 0.1% | 0.7%                  | 0.2%     | 0.0%          | 0.0%  | 0.1%                  | 0.0%    |
| Eye, low                     | Retinal detachment, choroidal<br>disorders                               | 1.9%    | 0.5%            | 1.3%    | 0.3%     | 0.9%                | 0.1% | 0.2%                  | 0.1%     | 2.8%          | 0.4%  | 1.5%                  | 0.2%    |
| Eye, very low                | Cataract, glaucoma, congenital eye<br>anomaly                            | 12.6%   | 3.2%            | 3.1%    | 1.6%     | 3.6%                | 0.4% | 0.5%                  | 0.3%     | 23.3%         | 11.2% | 9.2%                  | 1.1%    |

| Genital, extra<br>low           | Uterine and pelvic inflammatory disease, endometriosis            | 6.6%   | 4.0%   | 2.8%  | 1.4%   | 8.3%   | 4.5%    | 1.7%  | 0.7%    | 8.3%  | 6.2%  | 5.9%   | 3.0%    |
|---------------------------------|---|--------|--------|-------|--------|--------|---------|-------|---------|-------|-------|--------|---------|
| Gastro, high                    | Peritonitis, hepatic coma, liver<br>transplant                    | 2.4%   | 1.4%   | 12.6% | 5.3%   | 0.6%   | 0.2%    | 1.7%  | 0.1%    | 1.5%  | 0.5%  | 0.8%   | 0.2%    |
| Gastro, medium                  | Regional enteritis and ulcerative colitis, enterostomy            | 13.1%  | 5.5%   | 2.8%  | 0.9%   | 7.1%   | 1.4%    | 2.6%  | 0.2%    | 4 5%  | 2.6%  | 8.2%   | 2.1%    |
| Castro low                      | Ulcer, hernia, GI hemorrhage,                                     | 04.70  | 14.000 | 2.070 | 5.70   | 45.000 | 1.470   | 2.070 | 0.270   | 4.570 | 2.070 | 0.270  | 2.170   |
| Hematological,                  |   | 24.7%  | 14.8%  | 1.9%  | 5.7%   | 15.9%  | 6.4%    | 4.4%  | 2.1%    | 21.0% | 12.2% | 15.6%  | 6.5%    |
| extra high<br>Hematological.    | Hemophilia  | 0.1%   | 0.1%   | 0.0%  | 0.1%   | 0.0%   | 0.0%    | 0.1%  | 0.0%    | 0.0%  | 0.0%  | 0.0%   | 0.0%    |
| very high                       | Hemoglobin-S sickle-cell disease                                  | 0.0%   | 0.1%   | 0.0%  | 0.2%   | 0.0%   | 0.0%    | 0.0%  | 0.0%    | 0.0%  | 0.0%  | 0.0%   | 0.0%    |
| Hematological,<br>medium        | Other hereditary hemolytic anemias,<br>aplastic anemia            | 3.3%   | 1.6%   | 6.4%  | 1.4%   | 1.4%   | 0.4%    | 0.8%  | 0.2%    | 1.5%  | 0.5%  | 1.7%   | 0.5%    |
| Hematological,<br>low           | Other white blood cell disorders, other coagulation defects       | 4.6%   | 2.0%   | 1.0%  | 0.8%   | 1.6%   | 0.6%    | 0.4%  | 0.2%    | 3.6%  | 2.2%  | 2 1%   | 0.7%    |
|                                 | AIDS, pneumocystis pneumonia,                                     | 0.70   | 1.004  | 0.000 | 0.00   | 0.000  | 0.404   | 0.000 | 0.000   | 0.004 | 0.404 | 0.004  | 0.404   |
| HIV, medium                     | Asymptomatic HIV infection  | 0.7%   | 0.3%   | 0.3%  | 0.1%   | 0.2%   | 0.1%    | 0.0%  | 0.0%    | 0.2%  | 0.1%  | 0.3%   | 0.4%    |
| Infectious, high                | Staphylococcal or pseudomonas septicemia                          | 0.2%   | 0.1%   | 1.0%  | 0.2%   | 0.1%   | 0.0%    | 0.0%  | 0.0%    | 0.2%  | 0.1%  | 0.2%   | 0.0%    |
| Infectious,<br>medium           | Other septicemia, pulmonary or<br>disseminated candida            | 6.8%   | 2.2%   | 1.8%  | 0.5%   | 2.0%   | 0.4%    | 0.4%  | 0.1%    | 4 1%  | 1.9%  | 3 1%   | 0.7%    |
|                                 | Poliomyelitis, oral candida, herpes                               | 0.070  | 2.270  | 1.070 | 0.370  | 2.070  | 0.470   | 0.470 | 0.170   | 4.170 | 1.770 | 5.170  | 0.770   |
| Infectious, low                 | Zoster  | 9.5%   | 7.1%   | 1.0%  | 0.7%   | 2.8%   | 1.3%    | 0.7%  | 0.9%    | 3.8%  | 2.8%  | 4.2%   | 2.0%    |
| Metabolic, high                 | Panhypopituitarism, pituitary dwarfism                            | 4.2%   | 1.2%   | 16.9% | 1.9%   | 3.0%   | 0.4%    | 6.8%  | 0.2%    | 3.6%  | 0.4%  | 3.0%   | 0.4%    |
| medium                          | malnutrition, parathyroid   | 9.5%   | 3.5%   | 4.9%  | 1.9%   | 3.0%   | 0.5%    | 1.1%  | 0.2%    | 7.3%  | 2.7%  | 4.9%   | 1.0%    |
| Metabolic, very<br>low          | Other pituitary disorders, gout                                   | 8.8%   | 5.1%   | 12.8% | 14.7%  | 4.4%   | 1.4%    | 3.6%  | 1.7%    | 7.1%  | 3.2%  | 5.7%   | 1.8%    |
| Psychiatric, high               | Schizophrenia   | 9.3%   | 8.2%   | 2.6%  | 0.3%   | 0.4%   | 0.2%    | 0.2%  | 0.0%    | 1.0%  | 0.9%  | 0.9%   | 0.6%    |
| medium                          | Bipolar affective disorder  | 9.8%   | 9.0%   | 16.2% | 16.7%  | 3.3%   | 1.6%    | 3.1%  | 0.7%    | 2.0%  | 1.3%  | 3.4%   | 2.2%    |
| Psychiatric,<br>medium low      | Major recurrent depression  | 21.4%  | 18.3%  | 27.4% | 20.9%  | 15.3%  | 9.2%    | 18.3% | 5.8%    | 9.2%  | 5.9%  | 12.3%  | 8.1%    |
| Psychiatric, low                | Other depression, panic disorder,<br>phobic disorder              | 13.4%  | 7.7%   | 4.9%  | 2.0%   | 10.6%  | 5.3%    | 6.6%  | 1.7%    | 9.1%  | 5.2%  | 10.9%  | 5.0%    |
| Pulmonary, very<br>high         | Cystic fibrosis, lung transplant,<br>tracheostomy status          | 4.0%   | 1.1%   | 4.4%  | 1.9%   | 0.4%   | 0.1%    | 0.5%  | 0.1%    | 2.0%  | 0.6%  | 0.8%   | 0.1%    |
| Pulmonary, high                 | Respiratory arrest or failure, primary<br>pulmonary hypertension  | 0.5%   | 0.3%   | 0.5%  | 0.1%   | 0.2%   | 0.0%    | 0.0%  | 0.0%    | 1.5%  | 0.5%  | 0.2%   | 0.1%    |
| Pulmonary,<br>medium            | Other bacterial pneumonias, chronic<br>obstructive asthma         | 10.7%  | 4.9%   | 5.1%  | 3.9%   | 3.1%   | 0.8%    | 0.9%  | 0.5%    | 10.6% | 6.0%  | 5.1%   | 1.4%    |
| Pulmonary, low                  | Viral pneumonias, chronic bronchitis,<br>asthma, COPD             | 26.8%  | 17.2%  | 20.0% | 13.8%  | 14.9%  | 7.4%    | 12.2% | 7.8%    | 10.6% | 6.7%  | 13.4%  | 6.6%    |
| Renal, extra high               | Hypotension of hemodialysis, dialysis<br>catheter infection       | 1.6%   | 0.2%   | 0.3%  | 0.1%   | 0.2%   | 0.0%    | 0.0%  | 0.0%    | 1.2%  | 0.2%  | 0.3%   | 0.0%    |
| Renal, very high                | Chronic renal failure, kidney<br>transplant status/complications  | 10.3%  | 2.0%   | 2.1%  | 0.6%   | 2.2%   | 0.2%    | 0.3%  | 0.0%    | 12.5% | 2.5%  | 4.4%   | 0.4%    |
| Renal, medium                   | Acute renal failure, chronic nephritis,<br>urinary incontinence   | 1.7%   | 0.3%   | 1.0%  | 0.3%   | 1.1%   | 0.1%    | 0.3%  | 0.0%    | 1.2%  | 0.0%  | 1.3%   | 0.1%    |
| Renal, low                      | Kidney infection, kidney stones,<br>hematuria, urethral stricture | 12.7%  | 7.4%   | 26.4% | 10.0%  | 2.7%   | 1.1%    | 20.7% | 0.9%    | 11.6% | 6.5%  | 3.6%   | 1.3%    |
| Skeletal medium                 | Chronic osteomyelitis, aseptic necrosis                           | 11 49/ | 7.20/  | 7 20/ | 4 10/  | 4 29/  | 1.0%    | 1 09/ | 1 10/   | 4 69/ | 2 20/ | E 20/  | 2.2%    |
| Skeletal, medium                | Rheumatoid arthritis, osteomyelitis,                              | 11.4%  | 1.3%   | 1.2%  | 0.1%   | 4.3%   | 1.9%    | 1.9%  | 1.1%    | 4.5%  | 3.2%  | 5.3%   | 2.2%    |
| Skeletal, low<br>Skeletal, very | systemic lupus<br>Osteoporosis, musculoskeletal                   | 15.0%  | 9.8%   | 11.0% | 5.9%   | 7.7%   | 3.6%    | 3.6%  | 1.8%    | 11.9% | 10.4% | 9.0%   | 4.4%    |
| low                             | anomalies   | 11.3%  | 7.7%   | 7.4%  | 4.9%   | 6.7%   | 3.6%    | 5.0%  | 3.0%    | 7.6%  | 3.2%  | 6.9%   | 4.0%    |
| Skin, high                      | Decubitus ulcer   | 2.9%   | 0.8%   | 0.0%  | 0.3%   | 0.2%   | 0.0%    | 0.0%  | 0.0%    | 1.5%  | 0.7%  | 0.6%   | 0.1%    |
| SKIII, IOW                      |   | 5.6%   | 1.1%   | 0.3%  | 0.2%   | 1.5%   | 0.1%    | 0.1%  | 0.0%    | 2.1%  | 0.7%  | 2.8%   | 0.2%    |
| Skin, very low<br>Substance     | Cellulitis, burn, lupus erythematosus                             | 16.7%  | 10.5%  | 11.5% | 5.5%   | 10.8%  | 5.0%    | 6.9%  | 3.3%    | 5.3%  | 2.9%  | 10.5%  | 5.2%    |
| abuse, low                      | Drug abuse, dependence, or psychosis                              | 15.6%  | 13.5%  | 1.5%  | 1.2%   | 5.9%   | 4.9%    | 1.0%  | 0.4%    | 0.8%  | 0.6%  | 6.4%   | 6.3%    |
| abuse, very low                 | psychosis   | 4.6%   | 5.1%   | 0.3%  | 0.4%   | 2.4%   | 1.8%    | 0.5%  | 0.2%    | 0.8%  | 0.9%  | 4.3%   | 3.5%    |
|                                 |   |        |        |       |        |        |         |       |         |       |       |        |         |
| N                               |   | 16,681 | 63,526 | 390   | 16,565 | 10,713 | 215,288 | 4,081 | 732,027 | 606   | 1,512 | 35,480 | 488,062 |
|                                 |   |        | 80.207 |       | 16.955 |        | 226,001 |       | /36,108 |       | 2,118 |        | 523.542 |

HOW TO INTERPRET THIS TABLE: Chronic disease conditions were identified by applying the Chronic Illness and Disability Payments System (CDPS) to clients' fee-for-service medical claims in FY 2005. Counts are hierarchically unduplicated within a disease group. For example, a client with diagnoses of schizophrenia and depression will be counted only once in the "Psychiatric, high" category. Thus, percentages can be added within a disease category (e.g., Psychiatric) to produce the unduplicated percentage of clients in that disease category. Cilents with diagnoses in multiple categories (e.g., Cardiovascular and Psychiatric) will be counted once in each broad category represented in their medical claims diagnoses. For more information about the CDPS, see Kronick R, Gilmer T, Dreyfus T, et al. Improving health-based payment for Medicaid beneficiaries: CDPS. Health Care Fin Rev 2000; 21:29-64.

# Prevalence of Comorbid Disease Conditions among Dual-Eligible Clients with and without Diabetes (Calendar Year 2014)

|                           |  | Elde    | erly   | Non-Elderly | / Disabled |
|---------------------------|--|---------|--------|-------------|------------|
|                           |  | Has Dia | betes? | Has Dia     | betes?     |
|                           |  | Yes     | No     | Yes         | No         |
|                           | SAMPLE DIAGNOSES   | Total   | Pcnt   | Total       | Pcnt       |
| BY CDPS DISEASE GROUP     |  |         |        |             |            |
| Cancer, very high         | Pancreatic cancer, secondary malignant neoplasms, multiple myeloma | 1.7%    | 1.6%   | 1.2%        | 0.9%       |
| Cancer, high              | Lung cancer, ovarian cancer  | 3.4%    | 3.3%   | 2.8%        | 1.9%       |
| Cancer, medium            | Mouth, breast or brain cancer, malignant melanoma                  | 2.6%    | 2.4%   | 2.0%        | 1.4%       |
| Cancer, low               | Colon, cervical, or prostate cancer, carcinomas in situ            | 5.0%    | 4.2%   | 2.9%        | 2.0%       |
| Cardiovascular, very high | Heart transplant status/complications                              | 1.3%    | 0.4%   | 3.6%        | 0.8%       |
| Cardiovascular, medium    | Congestive heart failure, cardiomyopathy                           | 25.7%   | 13.8%  | 17.2%       | 4.5%       |
| Cardiovascular, low       | Endocardial disease, myocardial infarction, angina                 | 46.3%   | 31.2%  | 33.1%       | 12.8%      |
| Cardiovascular, extra low | Hypertension   | 74.0%   | 50.8%  | 62.8%       | 23.7%      |
| Cerebrovascular, low      | Intracerebral hemorrhage, precerebral occlusion                    | 11.7%   | 7.5%   | 7.0%        | 2.9%       |
| CNS, high                 | Quadriplegia, amyotrophic lateral sclerosis                        | 0.8%    | 0.6%   | 1.9%        | 2.0%       |
| CNS, medium               | Paraplegia, muscular dystrophy, multiple sclerosis                 | 2.8%    | 1.9%   | 6.5%        | 6.5%       |
| CNS, low                  | Epilepsy, Parkinson's disease, cerebral palsy, migrane             | 29.2%   | 17.8%  | 33.9%       | 17.7%      |
| DD, medium                | Severe or profound mental retardation                              | 0.2%    | 0.2%   | 1.1%        | 0.7%       |
| DD, low                   | Mild or moderate mental retardation, Down's syndrome               | 0.5%    | 0.5%   | 3.4%        | 4.1%       |
| Eye, low                  | Retinal detachment, choroidal disorders                            | 1.7%    | 1.1%   | 2.3%        | 0.6%       |
| Eye, very low             | Cataract, glaucoma, congenital eye anomaly                         | 25.0%   | 17.5%  | 15.2%       | 5.7%       |
| Genital, extra low        | Uterine and pelvic inflammatory disease, endometriosis             | 8.8%    | 7.2%   | 6.3%        | 3.9%       |
| Gastro, high              | Peritonitis, hepatic coma, liver transplant                        | 2.1%    | 1.5%   | 3.7%        | 2.1%       |
| Gastro, medium            | Regional enteritis and ulcerative colitis, enterostomy             | 6.3%    | 4.4%   | 12.2%       | 5.5%       |
| Gastro, low               | Ulcer, hernia, GI hemorrhage, intestinal infectious disease        | 28.3%   | 21.7%  | 33.0%       | 18.7%      |
| Hematological, extra high | Hemophilia   | 0.0%    | 0.0%   | 0.0%        | 0.1%       |
| Hematological, very high  | Hemoglobin-S sickle-cell disease                                   | 0.0%    | 0.0%   | 0.0%        | 0.0%       |
| Hematological, medium     | Other hereditary hemolytic anemias, aplastic anemia                | 1.4%    | 0.9%   | 2.5%        | 1.2%       |
| Hematological, low        | Other white blood cell disorders, other coagulation defects        | 5.0%    | 3.1%   | 6.3%        | 2.7%       |
| AIDS, high                | AIDS, pneumocystis pneumonia, cryptococcosis                       | 0.2%    | 0.1%   | 0.9%        | 1.1%       |
| HIV, medium               | Asymptomatic HIV infection   | 0.5%    | 0.2%   | 1.3%        | 1.0%       |
| Infectious, high          | Staphylococcal or pseudomonas septicemia                           | 0.2%    | 0.1%   | 0.4%        | 0.2%       |
| Infectious, medium        | Other septicemia, pulmonary or disseminated candida                | 7.3%    | 3.7%   | 8.0%        | 2.8%       |
| Infectious, low           | Poliomyelitis, oral candida, herpes zoster                         | 4.7%    | 4.2%   | 8.9%        | 5.7%       |
| Metabolic, high           | Panhypopituitarism, pituitary dwarfism                             | 1.9%    | 0.9%   | 3.7%        | 1.5%       |
| Metabolic, medium         | Kwashiorkor, merasmus, and other malnutrition, parathyroid         | 10.9%   | 6.1%   | 13.8%       | 4.9%       |
| Metabolic, very low       | Other pituitary disorders, gout                                    | 14.8%   | 10.5%  | 14.4%       | 7.3%       |
| Psychiatric, high         | Schizophrenia  | 3.1%    | 2.5%   | 11.9%       | 10.8%      |
| Psychiatric, medium       | Bipolar affective disorder   | 7.5%    | 6.0%   | 15.2%       | 14.1%      |
| Psychiatric, medium low   | Major recurrent depression   | 13.7%   | 10.1%  | 31.1%       | 27.0%      |
| Psychiatric, low          | Other depression, panic disorder, phobic disorder                  | 27.1%   | 23.4%  | 31.2%       | 21.1%      |
| Pulmonary, very high      | Cystic fibrosis, lung transplant, tracheostomy status              | 4.5%    | 2.3%   | 4.3%        | 1.2%       |
| Pulmonary, high           | Respiratory arrest or failure, primary pulmonary hypertension      | 1.0%    | 0.8%   | 1.0%        | 0.5%       |
| Pulmonary, medium         | Other bacterial pneumonias, chronic obstructive asthma             | 15.9%   | 10.0%  | 14.7%       | 5.9%       |
| Pulmonary, low            | Viral pneumonias, chronic bronchitis, asthma, COPD                 | 31.5%   | 24.0%  | 35.0%       | 19.7%      |
| Renal, extra high         | Hypotension of hemodialysis, dialysis catheter infection           | 2.6%    | 0.4%   | 6.4%        | 1.0%       |
| Renal, very high          | Chronic renal failure, kidney transplant status/complications      | 23.3%   | 9.3%   | 17.5%       | 3.4%       |
| Renal, medium             | Acute renal failure, chronic nephritis, urinary incontinence       | 7.2%    | 1.3%   | 11.3%       | 2.0%       |
| Renal, low                | Kidney infection, kidney stones, hematuria, urethral stricture     | 33.2%   | 24.9%  | 21.8%       | 14.2%      |
| Skeletal, medium          | Chronic osteomyelitis, aseptic necrosis of bone                    | 9.9%    | 7.7%   | 13.7%       | 7.8%       |
| Skeletal, low             | Rheumatoid arthritis, osteomyelitis, systemic lupus                | 21.7%   | 20.5%  | 21.1%       | 14.3%      |
| Skeletal, very low        | Osteoporosis, musculoskeletal anomalies                            | 18.3%   | 14.0%  | 24.0%       | 15.9%      |

| Skin, high                | Decubitus ulcer                         | 5.9%   | 3.1%   | 4.6%   | 1.6%   |
|---------------------------|---|--------|--------|--------|--------|
| Skin, low                 | Other chronic ulcer of skin             | 9.3%   | 4.0%   | 10.4%  | 2.4%   |
| Skin, very low            | Cellulitis, burn, lupus erythematosus   | 14.7%  | 8.1%   | 22.3%  | 10.8%  |
| Substance abuse, low      | Drug abuse, dependence, or psychosis    | 2.4%   | 1.8%   | 10.3%  | 9.4%   |
| Substance abuse, very low | Alcohol abuse, dependence, or psychosis | 1.8%   | 2.4%   | 6.1%   | 6.6%   |
|                           |   |        |        |        |        |
| TOTAL                     |   | 33,606 | 51,768 | 17,287 | 48,945 |
|                           |   |        | 85,374 |        | 66,232 |

HOW TO INTERPRET THIS TABLE: Chronic disease conditions were identified by applying the Chronic Illness and Disability Payments System (CDPS) to clients' fee-for-service medical claims in FY 2005. Counts are hierarchically unduplicated within the disease group. For example, a client with diagnoses of schizophrenia and depression will be counted only once in the "Psychiatric, high" category. Thus, percentages can be added within a disease category (e.g., Psychiatric) to produce the unduplicated percentage of clients in that disease category. Clients with diagnoses in multiple categories (e.g., Cardiovascular and Psychiatric) will be counted once in each broad category represented in their medical claims diagnoses. For more information about the CDPS, see Kronick R, Gilmer T, Dreyfus T, et al. Improving health-based payment for Medicaid beneficiaries: CDPS. Health Care Fin Rev 2000; 21:29-64.

Comorbidities were identified using the Chronic Illness and Disability Payment System (CDPS) diagnosisbased risk grouper developed by researchers at UC San Diego. Disease prevalence is hierarchically unduplicated within each disease category. For example, a client with diagnoses of congestive heart failure and hypertension will be counted only once in the "Cardiovascular, medium" category. Thus, percentages can be added within a disease category (e.g., Cardiovascular) to produce the unduplicated percentage of clients in that disease category at all levels of severity. Clients with diagnoses in multiple disease categories (e.g., Cardiovascular and Psychiatric) will be counted once in each broad disease category represented in their healthcare claim/encounter diagnoses.

People with diabetes were significantly more likely to have cardiovascular disease than those without diabetes. For example, among Medicaid-only disabled adults:

- 14 percent of people with diabetes had a "cardiovascular, medium" diagnosis, such as congestive heart failure, compared to only 4 percent without diabetes.
- 20 percent of people with diabetes had a "cardiovascular, low" diagnosis, such as myocardial infarction, compared to only 9 percent without diabetes.
- 38 percent of people with diabetes had a "cardiovascular, extra low" diagnosis, such as hypertension, compared to only 16 percent without diabetes.

People with diabetes were more likely to have a range of other chronic disease conditions, including gastrointestinal, renal, eye, and pulmonary conditions.

### Outpatient Emergency Department Visits and Inpatient Admissions (per 1,000 member months) Among Medicaid-Only Clients

|                      | Disabled Adults |       | Disa<br>Chil | ıbled<br>dren | Non-dis<br>Adu                | abled<br>Its | Non-disabled<br>Children |               | Elderly |              | Newly-Eligible<br>Adults |      |
|----------------------|-----------------|-------|--------------|---------------|-------------------------------|--------------|--------------------------|---------------|---------|--------------|--------------------------|------|
|                      | Has Diabetes?   |       | Has Di       | abetes?       | Has Diabetes? Has Diabetes? H |              | Has Dia                  | Diabetes? Has |         | as Diabetes? |                          |      |
|                      | Yes             | No    | Yes          | No            | Yes                           | No           | Yes                      | No            | Yes     | No           | Yes                      | No   |
| Outpatient ED Visits | 171.4           | 110.4 | 102.6        | 61.9          | 126.2                         | 73.2         | 60.9                     | 37.9          | 98.6    | 47.3         | 101.9                    | 64.4 |
| Inpatient Admissions | 49.5            | 19.4  | 43.6         | 13.1          | 30.6                          | 18.3         | 11.9                     | 8.8           | 64.4    | 30.2         | 32.2                     | 9.4  |

Medical service use information is provided for people enrolled in Medicaid-only coverage.

- Outpatient emergency department use rates were significantly higher for people with diabetes than for those without diabetes. For example, non-disabled adults with diabetes experienced 126 outpatient visits per 1,000 member months, compared to 73 visits per 1,000 member months for non-disabled adults without diabetes.
- Inpatient admission rates were significantly higher for people with diabetes than for those without diabetes. For example, among newly-eligible adults, the inpatient admission rate for those with diabetes was more than three times as high as that for those without diabetes. Newly-eligible adults with diabetes experienced 32 inpatient admissions per 1,000 member months, compared to 9 inpatient admissions per 1,000 member months for newly-eligible adults without diabetes.

### Public Employees Benefits Board Populations

Uniform Medical Plan (UMP) serves nearly two thirds of Washington's Public Employees Benefit Board populations (225,543 people of all ages in 2014). The other third is served by Kaiser WA (formerly Group Health) and Kaiser NW. In 2014, 9 (±<1) percent of UMP enrollees – 20,757 people – received medical services related to diabetes, though this might be an underestimate of all UMP clients who had a diagnosis of diabetes in the past but did not receive services for it in 2014. Diabetes was more common among UMP enrollees ages 65 and older compared to those who were younger than 65. In older age groups (65+) males were more likely to receive health services for diabetes than females. Among younger UMP enrollees ages 18 to 64, those who are enrolled in UMP and Medicare (who were eligible due to disability) concurrently had the highest concentration of diabetes-related services received in 2014.



Source: Uniform Medical Plan 2014 claims data from Public Employees Benefits Board Managed Care source claims database <sup>a</sup>Presence of type 1 or type 2 diabetes i dentified by counting number of members who had a claim with a diabetes diagnosis in calendar year 2014

# APPENDIX 4: FINANCIAL IMPACT OF DIABETES IN WASHINGTON

The financial data reported in this section is limited to what was accessible within the allocated budget and agency expertise. Please see the support for future reports subsection at the end of the Considerations of the Legislature section.

Diabetes costs an estimated \$8 billion each year in Washington State. This includes \$6 billion in direct medical expenses for diagnosed diabetes and \$2 billion (in 2015 dollars) spent on indirect costs from lost productivity due to diabetes.<sup>15</sup> The individual medical cost of having diabetes is approximately \$14,000 per year. This is twice the cost of medical care for people without diabetes.<sup>16</sup>

All types of elevated blood glucose cost an estimated \$7 billion each year in Washington State. This includes \$5.4 billion in direct medical expenses for diagnosed and undiagnosed diabetes, gestational diabetes, and prediabetes and \$1.6 billion (in 2012 dollars) spent on indirect costs from lost productivity due to diabetes.<sup>54</sup>

For the nine most commonly treated conditions among U.S. adults in 2013, the highest average expenses per person were for the treatment of heart conditions (\$3,794 per person), trauma-related disorders (\$3,070) and diabetes (\$2,565).<sup>55</sup>

The average lifetime cost of caring for a person with type 2 diabetes is approximately \$85,200 and can range from \$55,000 to \$130,000.<sup>17</sup> The cost of a new case of type 2 diabetes imposed on the healthcare system is particularly high in people diagnosed with type 2 diabetes at younger ages, mostly due to the longer cumulative time to manage diabetes. Women have greater lifetime medical costs than men primarily because even though women have fewer complications, on average, they live longer than men.

Better control of diabetes can reduce cost, increase quality of life, and decrease mortality rate. A onepercentage point increase in A1c led to a 4.4% increase (on average) in diabetes-related medical costs, which corresponds to an annual cost increase of \$250 per person.<sup>18</sup>

The cost of diabetes in Washington State is projected to increase from almost \$8 billion in 2015 to more than \$13 billion in 2030.

| Washington State Forecasts       | 2015          | 2020          | 2025           | 2030           |
|----------------------------------|---------------|---------------|----------------|----------------|
| Total annual cost (2015 dollars) | \$7.9 Billion | \$9.8 Billion | \$11.6 Billion | \$13.4 Billion |
| Annual medical costs             | \$6.0 Billion | \$7.4 Billion | \$8.8 Billion  | \$10.1 Billion |
| Annual nonmedical costs          | \$1.9 Billion | \$2.4 Billion | \$2.8 Billion  | \$3.3 Billion  |

Source: Institute for Alternative Futures, Diabetes 2030 Forecasting Model (<u>http://www.altfutures.org/projects/diabetes-2030/</u>). Research funded by Novo Nordisk Inc. Note: These forecasts are based on the latest available national diabetes data, including U.S Census Bureau population projections, the CDC National Diabetes Statistics Report, 2014, CDC diabetes morbidity trend reports, CDC's latest diabetes prevalence projections to 2050 and Dall, et al. "The Economic Burden of Elevated Blood Glucose Levels in 2012: Diagnosed and Undiagnosed Diabetes, Gestational Diabetes Mellitus, and Prediabetes," Diabetes Care 2014;37:3172-3179. These forecasts assume a steady, but conservative, reduction in the number of people with complications due to better awareness of the risks of diabetes, earlier screening and intervention, and more effective therapies.

In June 2017, the Centers for Disease Control and Prevention (CDC) published estimates of annual total costs attributable to diabetes by state.<sup>56</sup> These costs were broken down by perspective, looking at total, Medicaid, private insurance, and employer costs associated with diabetes based on 2013 dollars. CDC estimated that based on 2013 dollars, Washington incurred \$413.7 million dollars in medical costs associated with diabetes for Medicaid enrollees ages 19 and older. CDC estimated annual diabetes-attributable medical costs incurred by private insurers in Washington for enrollees ages 19 and older in 2013 dollars at \$985.4 million. And for Washington employers, CDC estimated annual diabetes-attributable costs (direct and indirect) in 2013 dollars at \$1,954.6 million for covered lives ages 18-74.

|                  | Age Group<br>(in years) | Direct Cost<br>(\$ in Millions) | Indirect Cost<br>(\$ in Millions) | Total Cost<br>(\$ in Millions) | Total Cost per Person<br>with Diabetes (\$)* |
|------------------|-------------------------|---------------------------------|-----------------------------------|--------------------------------|--|
| State Total      | 19+                     | 3,353.10                        | 4,472.10                          | 7,825.20                       | \$16,708                                     |
| Medicaid         | 19+                     | 413.7                           |                                   |                                | \$4,434                                      |
| Private Insurers | 19+                     | 985.4                           |                                   |                                | \$4,131                                      |
| Employers        | 18-74                   |                                 |                                   | 1,954.60                       | \$10,225                                     |

\*Total costs include annual medical (direct) and indirect costs attributable to diabetes.

### Cost-Benefit Analysis

Unfortunately, cost-benefit analyses have not been performed for many interventions used to prevent and manage diabetes. The Diabetes Prevention Program is one intervention where the costs and benefits have been well-researched. In May 2017, the Washington State Institute for Public Policy (WSIPP) updated their cost-benefit analysis for Lifestyle interventions to prevent diabetes: Shorter-term programs with group-based counseling.<sup>57</sup> This program corresponds to community-based implementation of the Diabetes Prevention Program in Washington. WSIPP's analysis predicts that the program will produce benefits greater than the costs, and that the net benefits minus costs overall exceed \$13,000 per participant, including \$4,875 of benefit for taxpayers for each program participant.

#### Lifestyle interventions to prevent diabetes: Shorter-term programs with groupbased counseling

**Health Care: Obesity and Diabetes** 

Benefit-cost estimates updated May 2017. Literature review updated February 2017.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our Technical Documentation.

Program Description: All lifestyle diabetes prevention programs target individuals at high risk for developing type 2 diabetes, providing them with counseling and other support. Programs in this specific category are shorter-term, lower-cost, group-based counseling programs provided in community settings (e.g., YMCA's, churches).

| Benefit-Cost Summary Statistics Per Participant |                            |                                 |          |  |  |  |  |
|---|----------------------------|---------------------------------|----------|--|--|--|--|
| Benefits to:                                    |                            |                                 |          |  |  |  |  |
| Taxpayers<br>Participante                       | \$4,875                    | Benefit to cost ratio           | \$30.82  |  |  |  |  |
| Others  | \$6,303<br>\$1,359         | Chance the program will produce | \$13,309 |  |  |  |  |
| Indirect<br>Total benefits                      | <u>\$1,218</u><br>\$13,756 | benefits greater than the costs | 80 %     |  |  |  |  |
| Net program cost<br>Benefits minus cost         | (\$446)<br>\$13,309        |                                 |          |  |  |  |  |

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2016). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our Technical Documentation.

# APPENDIX 5: ACTIVITIES, PROGRAMS, AND SERVICES

This appendix includes an overview of the programs or organizations supported by the Department of Health, Department of Social and Health Services, and Health Care Authority to address diabetes prevention or management.

# Department of Health

At the Department of Health, work to address diabetes is predominantly housed in the Prevention and Community Health Division. Its programs include:

- Heart Disease, Stroke, and Diabetes Prevention Unit
- Healthiest Next Generation Initiative
- Healthy Eating Active Living Program
- Community Health Worker Training
- Diabetes Surveillance, Epidemiology, and Evaluation
- Plan for Improving Population Health Project

These programs are described in detail below. In addition, several other programs within the division address the common risk factors for multiple chronic health conditions, including diabetes. These programs are Oral Health; Tobacco and Vapor Product Prevention and Control; and Healthy Communities. These programs do not use a "single disease" approach to addressing chronic health conditions. Instead, they integrate funding from a variety of federally-funded programs to achieve greater change in the medical and social systems that broadly affect people's health.

#### Heart Disease, Stroke, and Diabetes Prevention Unit

The Heart Disease, Stroke, and Diabetes Prevention Unit's overall approach is to promote social, environmental, policy, and systems approaches at state and community levels to reduce the burden of heart disease, stroke, and diabetes among all Washington residents, especially those who are disproportionately affected. This team's work includes promoting cardiovascular and diabetes awareness; supporting evidence-based practices for quality care; promoting the use of community health workers in addressing chronic disease; engaging all types of health professionals to promote team-based care for all people with chronic conditions; and offering educational support. The Heart Disease, Stroke, and Diabetes Prevention Unit has three main focus areas:

- Diabetes Prevention Program
- Diabetes Network Leadership Team
- Diabetes Self-Management Education
- Diabetes Prevention Program: The Centers for Disease Control and Prevention (CDC) considers the evidence-based Diabetes Prevention Program (DPP) to be the gold standard treatment for prediabetes in order to prevent or delay the onset of type 2 diabetes. The DPP is a public-private partnership of community organizations, private insurers, healthcare organizations, employers, and government agencies.

Currently, Washington has 25 Diabetes Prevention Programs listed in the Registry of Recognized Programs maintained by the CDC, the fourth most of any state. DPPs are operated by YMCAs, Washington State University Extension, and non-profit health organizations. Washington State University and the University of Washington's Schools of Pharmacy have begun to integrate the Diabetes Prevention Program in their curricula; community pharmacies in urban, suburban and rural areas will also be able to offer the program. Tribes in Washington State, and other organizations, may also offer the DPP without participating in the national registry. The program is available through health insurance or the wellness plans of several employers in the state, including the Public Employees Benefits Board for state employees and others accessing benefits through the board.

At a variety of events and community settings, the program uses a nine-question CDC Risk Quiz to assess a person's risk of developing diabetes. People with quiz scores indicating high risk are encouraged to receive blood testing, often onsite. Those who test in the prediabetes range are referred to a DPP provider (YMCA or Washington State University Extension) that can answer questions and enroll them in a DPP class.

In the class, participants work with a lifestyle coach in a group setting. They follow a curriculum involving 22 sessions over one year that teaches ways to reduce the chance of developing diabetes. The group setting makes the program more cost-effective. A significant number of people tested have a blood sugar level in the diabetes range. These people are encouraged to follow up with a primary care provider for diagnostic testing.

The goal of this work, over time, is to make the Diabetes Prevention Program available in Washington to all adults with prediabetes.

Diabetes Self-Management Education: Diabetes Self-Management Education (DSME) helps patients acquire the knowledge, skills, and abilities necessary for diabetes self-care. Through one-on-one coaching, it incorporates the needs, goals, and life experiences of the person with diabetes and is guided by evidence-based standards. The overall objectives are to support the person's informed decision-making, self-care behaviors, problem-solving, and active collaboration with the healthcare team and to improve clinical outcomes, health status, and quality of life.<sup>58</sup>

The Medicaid DSME Reimbursement Program is a partnership between the Health Care Authority and the Department of Health. It provides access to DSME services for Apple Health clients with diabetes through about 130 DSME programs at local hospitals and clinics throughout the state. The reimbursement is from federal dollars.

Potentially, every person with diabetes enrolled in Apple Health could use DSME. Due to the nature of the service, it is difficult to know how many people actually use it, yet there is broad agreement

that DSME is underused.<sup>59</sup> Changes to billing instructions made in December 2014 expanded access to DSME by expanding which provider types can provide DSME per national standards.

DSME is distinct from chronic disease self-management education (CDSME) programs, which are provided in a group setting by a lay leader and which complement DSME and diabetes management in primary care.

This work is intended to reach all people with diabetes in Washington, but may be particularly beneficial for people with type 2 diabetes.

For greater coordination, referrals, and outreach for all health education programs available to people with diabetes in Washington, the Department of Health partners with WIN 2-1-1, Washington's Information Network.

Diabetes Network Leadership Team: The Diabetes Network Leadership Team includes
representatives from 40 self-selected organizations and agencies that work to promote diabetes
prevention and control. The Diabetes Network Leadership Team guides and supports the
empowerment of the Washington State Diabetes Network and implementation of the DEAR goals
and actions. Since 2004, the team has met quarterly to share information and identify shared goals,
strategies, and priorities. These shared goals, strategies, and priorities guide the work of the
participating organizations and agencies.

This work is intended to impact all people with diabetes of all types, as well as people at high risk for developing type 2 diabetes, in Washington.

| American Diabetes Association   | Providence Medical Group         | Washington State Department of Social |
|---------------------------------|----------------------------------|---------------------------------------|
| Benton-Franklin Health District | QFC Pharmacy                     | and Health Services Washington        |
| Chelan-Douglas Health District  | Qualis Health                    | Association of Community and Migrant  |
| Coordinated Care                | SANOFI                           | Health Centers                        |
| Foundation for Healthy          | Spokane Regional Health District | Washington Dental Service Foundation  |
| Generations                     | Tacoma-Pierce County Health      | Washington State Pharmacy             |
| Franciscan Medical Group        | Department                       | Association                           |
| Diabetes Services               | Tri-Cities Diabetes Coalition    | WSU College of Nursing                |
| Grant County Health District    | UW Health Promotion Research     | WSU College of Pharmacotherapy        |
| Health Care Authority           | Center                           | WSU Extension                         |
| Healthy Living Collaborative    | Vector Advantage Consulting      | Yakima Valley Memorial Hospital       |
| Inland Northwest Health         | Washington State Department of   | YMCA of Pierce and Kitsap Counties    |
| Services                        | Health                           | YMCA of Seattle                       |
| Kitsap Public Health            |                                  | YMCA of Spokane                       |

#### Diabetes Network Leadership – Represented Organizations as of May 1, 2017\*

\*Additional *non-voting* representation includes: African American Reach and Teach Health Ministry, Community CHOICE, Fresenius Medical Care, Prevention First, Sea Mar Community Health Centers, Seattle University College of Nursing, University of Washington School of Pharmacy, and Washington Information Network 2-1-1.

#### Healthiest Next Generation Initiative

In September 2014, Governor Jay Inslee launched the <u>Healthiest Next Generation Initiative</u> in collaboration with families, community leaders, businesses, and agencies across the state to make our next generation the healthiest one ever. The goal of the initiative is to make changes in early learning settings, schools, and communities that will improve the health of all children in Washington State, including the estimated 4,500 kids with diabetes.<sup>3</sup> Much of the work focuses on helping children maintain a healthy weight which is a primary prevention strategy for diabetes.

Department of Health leads the initiative with Department of Early Learning and the Office of Superintendent of Public Instruction. Together, these three agencies have:

- Convened community, business, and state agency leaders each year to prioritize policy and budget recommendations to create the healthiest next generation ever.
- Identified and developed resources to ensure children are active, eating healthy, and drinking clean water in early learning settings and schools.
- Promoted healthy eating and active living goals in the Early Childhood Education and Assistance Program (ECEAP) performance standards.
- Revised statewide guidelines for quality health and fitness education to help children be more active at school and establish the concepts and skills necessary for safe and healthy living.
- Implemented Healthy Kids-Healthy Schools grants.

Other Department of Health achievements aligned with this initiative include:

- Launching <u>Breastfeeding Friendly Washington</u> hospitals and birthing facilities, a voluntary recognition program for facilities implementing practices to support breastfeeding.
- Receiving and implementing a \$5.86 million U.S. Department of Agriculture grant to promote the purchase of fruits and vegetables by Supplemental Nutrition Assistance Program (SNAP) recipients.
- Participating in the first cohort of the <u>Childhood Obesity Intervention Cost Effectiveness Study</u> at the Harvard TH Chan School of Public Health.

#### Healthy Eating Active Living Program

The Healthy Eating Active Living Program (HEAL) strives to reduce the burden of obesity and chronic disease and increase the proportion of Washingtonians with a healthy weight. The HEAL program works on equitable and sustainable solutions to improve nutrition, increase physical activity, and support breastfeeding in early learning, schools, communities, worksites, healthcare, and faith-based settings. HEAL's main priorities are to:

- Help partners integrate healthy eating, active living, and breastfeeding best practices into state and local plans, procedures, systems, and policies (<u>Health in All Policies</u>).
- Implement <u>Healthy Nutrition Guidelines</u> in state agencies (Executive Order 13-06).
- Coordinate <u>Breastfeeding Friendly Washington</u>.

- Lead and coordinate <u>Washington's Food Insecurity Nutrition Incentives Program</u>.
- Partner to <u>improve food options</u>, including sodium reduction, in retail, food banks, and restaurants.
- Work with partners on <u>Complete Streets</u>, <u>Safe Routes to School</u>, and <u>Shared Use</u>.
- Work with partners in <u>early learning</u> to support <u>healthy eating and active play in childcare</u>.
- Partner on <u>Comprehensive School Physical Activity Programs</u> and healthy eating in schools.
- Support Governor Inslee's <u>Healthiest Next Generation Initiative</u>.

#### Community Health Worker Training Program

Community Health Workers (CHWs) are frontline public health workers who are trusted members of their communities and have an unusually close understanding of it. The Community Health Worker Training Program is a free eight-week combination of online and in-person training designed to strengthen the skills, knowledge, and abilities of community health workers.

Department of Health staff facilitate the training across all Accountable Community of Health (ACH) regions in the state. Community health workers who complete the 30-hour core training curriculum then have access to 20 health-specific online modules on topics such as hypertension, cardiovascular health, diabetes and prediabetes, understanding disparities and social determinants, health literacy, oral health, tobacco cessation, motivational interviewing, healthy eating and active living, and more. Taken together, the 20 health-specific modules provide an additional 100+ hours of training curricula specifically designed for CHWs.

The training program is aligned with several of the recommendations included in the <u>2016 Community</u> <u>Health Worker Task Force Recommendations Report</u> for Healthier Washington. A 2015 <u>program</u> <u>evaluation report</u> indicated a high satisfaction rating with almost 90% of participants recommending the DOH training program to their colleagues. A <u>training data report</u> compiled in March of 2016 provides a breakdown of the CHW training participants by corresponding ACH region, with a general overview of the number of participants by county, the participant's self-identified CHW role, and participating agencies.<sup>60</sup>

Since 2012, DOH has provided core competency training to 1,457 community health workers and related staff across the state, and training to 1,216 community health workers about specific health topics. Of the latter, 140 CHWs have completed diabetes-specific training.

#### Diabetes Surveillance, Epidemiology, and Evaluation

To make informed program and policy decisions about diabetes, we need reliable data. The Diabetes Surveillance, Epidemiology, and Evaluation section—along with many partners—collects and analyzes data, interprets the results, and disseminates its findings on health status, risk behavior, barriers to care, and other health issues related to diabetes through all stages of life. As part of this work, the section evaluates whether programs are implemented as designed, who they affect, and how they affect them. This section uses data and science to inform discussions on public health issues among programs and

partners. It also offers technical assistance to help decision-makers integrate data and science into their decisions.

Partners include other Department of Health staff, other state and federal agencies, local health agencies, tribal nations, healthcare providers, universities and other researchers, peers in other states, advocacy groups, schools and education systems, and not-for-profit organizations. Working together, staff and partners receive more accurate, clear, relevant, and timely information, can better integrate data into decision making, and make everyone more informed about the health status of the people of Washington.

#### Plan for Improving Population Health

The Plan for Improving Population Health (P4IPH), part of the Healthier Washington initiative, is designed to operationalize a prevention and population health approach in health system transformation. It is a collaboration among healthcare, public health, and community partners. As part of this effort, the Department of Health is taking steps to align investments to communities in support of population health improvement, including funding, technical assistance, and subject matter expertise.

In 2016, leaders from Department of Health, Health Care Authority, and Department of Social and Health Services convened a work session to identify priority population health focus areas. Although several focus areas were determined to be priorities, diabetes prevention and control was selected as the primary focus area for a statewide effort.

The <u>Population Health Planning Guide</u> (Guide) is being developed by the Department of Health as a web-based resource housing evidence-informed population health tools and resources. These include key elements of a population health approach, as well health-issue-specific information. Two key frameworks used in the Guide are the Center for Disease Control and Prevention's (CDC) <u>"Buckets of Prevention,"</u> and the Population Health Driver Diagram.

The CDC framework identifies three types of prevention that improve population health:

- Traditional clinical prevention interventions—the traditional approach, typically fee-for-service
- Innovative clinical preventive interventions and community linkages—extending care to community settings and connecting patients with community resources
- Total population or community-wide interventions—these interventions target a total population or subpopulation, and typically involve policy, systems, and environmental change

The **Population Health Driver Diagram** organizes strategies and interventions around the key question, *"What is going to drive the change we want to see?"* In January 2017, representatives from DOH, HCA, and DSHS convened with a consultant from Public Health Foundation to develop a draft population health driver diagram for diabetes prevention and control. This group included several members of the

DEAR Cross-Agency Workgroup. Following the workshop, team members refined the diagram to ensure:

- Primary drivers aligned with recommended strategies from the DEAR.
- Secondary drivers included strategies in each of the three buckets of prevention.

The purpose of the <u>Population Health Driver Diagram for diabetes prevention and control</u> is to provide a high-level framework for state and local partners, and to reinforce the approach of intervening at the clinical, community-linkage, and total-population levels in order to achieve desired change. Partners, including Accountable Communities of Health (ACHs) and multi-sector partners within the ACHs, will be encouraged to individualize the diagram to adjust for their unique needs and resources. Additional tools and resources will be in the Guide to assist in these efforts, with special attention to issues of health equity.

# Department of Social and Health Services

Department of Social and Health Services (DSHS) is made up of eight administrations. Four of the eight administrations have programs that provide services and resources that can contribute to the improvement in clinical outcomes for children and adults with diabetes:

- Aging and Long-Term Support Administration (ALTSA) provides long-term support and services to more than 65,000 seniors and individuals with disabilities and supports 13 local Area Agencies on Aging (AAA). Home and Community Services staff along with AAAs provide case management services for individuals in community-based residential care settings and in their own homes.
- Behavioral Health Administration (BHA) provides prevention, intervention, inpatient treatment, outpatient treatment, and recovery support to people with addiction and mental health needs. BHA's Division of Behavioral Health and Recovery (DBHR) provides financial support and direction to nine Behavioral Health Organizations, providing publicly funded mental health services and substance use disorder treatment to over 340,000 clients biannually. The administration also oversees three state psychiatric hospitals as well as forensic services for individuals with behavioral health issues involved with the criminal justice system.
- Children's Administration (CA) works to keep children safe from abuse and neglect and to support birth, foster, kinship, and adoptive families. CA helps families find resources to keep kids safe and works in collaboration with the Fostering Well-Being Care Coordination Unit.
- Developmental Disabilities Administration (DDA) provides residential services, day service, and employment support services for clients with development disabilities. DDA supports 31,651 clients with some paid services, including 17,075 participants on five Medicaid 1915(c) Home and Community-Based Service Waivers, operating 33 local offices, four state-operated residential habilitation centers, and three state-operated supported living alternative programs.

DSHS provides services and support to clients with chronic disease and diabetes through the following programs:

#### Medicaid Health Homes

The Health Home program is administered in partnership by DSHS and the Health Care Authority. The program serves clients of all ages who have one chronic condition and are at high risk of a second. Diabetes is one of the identified chronic conditions within the eligibility criteria. Health Home services promote person-centered health action planning to empower clients to take charge of their own healthcare. This is accomplished through care coordination between the client's healthcare providers, development of a person-centered health action plan (HAP), education, health promotion, and care transitions between institutional settings and the community. The HAP is developed by the client and their Health Home Care Coordinator (CC). The CC identifies individualized short- and long-term goals, action steps to achieve the individualized goals, health screenings, and an assessment that determines the client's readiness for change. Clients may choose to have health goals targeted to manage and improve their diabetes. The Health Home CC works with the client to coach and support them in meeting their health goals for optimal health and to promote wellness. The CC will work with the client's care providers to ensure open communication and coordination. With the addition of King and Snohomish counties in 2017, the Health Home program will be available statewide.

#### Advanced Home Care Aide Specialist Worker Training:

The Advanced Home Care Aide Specialist (AHCAS) program is a pilot with a mission focused on reducing the frequency and intensity of challenging behaviors while supporting health promotion and selfmanagement of care. Home and Community Services (HCS) collaborates with Developmental Disabilities Administration (DDA) and the SEIU NW 775 on this program, developing a person-centered advanced skills training combined with one-on-one positive behavior support for eligible pairs of care recipients and individual providers.

The pilot focuses support on both the person receiving services and the caregiver to leverage personal care hours and increase client engagement. Individual Providers learn active listening skills, de-escalation techniques, problem solving and the principles of recognizing what is important to the person, not just what is important for them. This evidence-based person-centered approach to care strengthens relationships and empowers the care recipient.

DSHS is demonstrating value-based purchasing through the ACHAS program. A rate enhancement is offered to IPs after they complete specialized training and are paired with individuals who have high predictive modeling health scores. This improvement enhances both provider and client satisfaction, engagement as well as better health, increased independence and quality of life.

#### Family Caregiver Support Program

*Family Caregiver Support Program (FCSP)* offers an evidence-based caregiver assessment, consultation and care planning process (TCARE<sup>®</sup>) in addition to other supportive services, including: help in finding and accessing local resources and services, caregiver support groups and counseling; training on specific caregiving topics including Alzheimer's or dementia; caregiver education; respite care; access to supplies and equipment; and support/practical information and caregiving suggestions. FCSPs are built to provide self-care to the caregivers, help the caregivers learn skills to care for individuals, and decrease process to improve their health and well-being.

#### Wellness Education

With health literacy at the core, the Wellness Education is a cost-efficient service that promotes independence, empowerment, and self-management of overall health for clients. Wellness Education gathers information during client assessment to create customized articles, delivered in a newsletter format, for approximately 34,000 clients with diabetes, a risk factor for developing diabetes, or other health condition. Each newsletter delivers content tailored specifically to the person with actionable items to improve overall well-being. Topics include diabetes management, comorbidities of diabetes, and information related to community engagement, social needs, and life goals. *"It helped me realize there is more I can do for my health, and I do."* When surveyed, clients overwhelmingly report that Wellness Education helps them make positive changes for their health. By combining existing participant data with a powerful data analytics system, Wellness Education has been successful in empowering people to achieve their own health and wellness goals.

#### Chronic Disease Self-Management Education

Since 2012, coordination among agencies to deliver Chronic Disease Self-Management Education (CDSME) has grown significantly. Grant funding has allowed 56 organization to become licensed to provide CDSME programs, holding over 750 workshops, engaging over 7,700 Washingtonians. DSHS continues to offer CDSME programs through a two-year grant from Prevention Public Health Funds.

#### Diabetes Self-Management Program

Diabetes Self-Management Program (DSMP) is one of the suite of programs offered within CDSME. DSMP is provided for 2 ½ hours a week for six weeks, in community settings such as churches, community centers, libraries and hospitals. The workshops are led by lay leaders and master trainers qualified by the Self-Management Resource Center, previously housed at Stanford. Participants make weekly action plans, share experiences, and help each other solve problems they encounter in creating and carrying out their self-management program. People with type 2 diabetes attend workshops in groups of 12-16 people. Subjects covered include:

- Techniques to deal with the symptoms of diabetes.
- Appropriate exercise for maintaining and improving strength and endurance.
- Healthy eating.

- Appropriate use of medication.
- Working more effectively with healthcare providers.

#### Community Living Connections

The 13 Area Agencies on Aging (AAAs) are the hubs for a network of community services for older adults, people with disabilities, and family caregivers. Priority is given to older people who are low-income, minorities, people who live in rural areas, and those who have limited English proficiency. Information about, and assistance in accessing community services is available through Washington State's <u>Community Living Connections</u>. This network is designed to place highly visible and trusted staff in every community where older people of all incomes and disabilities can get information and one-on-one person-centered counseling on the full range of long-term services and support options. The network and its staff do so by:<sup>61</sup>

- Creating person-centered, community-based environments that promote independence and dignity for individuals.
- Providing easy access to information and one-on-one counseling to assist people in exploring a full range of long-term support options.
- Providing resources and services that support the needs of family caregivers.

Services and resources accessed through Community Living Connections that can support individuals with diabetes vary somewhat from region to region, but generally include:

- Diabetes support groups
- Meals on Wheels (home delivered meals)
- Foot care through contracts with nurses
- Nutrition education, screening, and counseling
- Senior drug education
- Education on Medicare wellness benefits

- Enrollment Assistance to Medicare Part D, Low Income Subsidy, and Medicare Savings Programs
- Family or kinship caregiver programs
- Nursing and social worker evaluations and connection to services if clients don't meet the threshold for Medicaid
- Enhanced fitness®
- Adult Day Health

#### Long Term Service and Supports

Long Term Services and Supports (LTSS) are provided through the Aging and Long-Term Support Administration (ALTSA), Area Agencies on Aging (AAA), and Developmental Disabilities Administration (DDA). These services include personal care services which are provided in individuals' private residences and in community-based residential care facilities. LTSS are available through ALTSA and AAAs for older adults and people with functional disabilities who are age 18 and older. DDA provides LTSS to individuals with developmental disabilities who are age three and older. Priority attention is given to low-income individuals and families. Many (48 percent) of the clients receiving long-term services and supports have a diagnosis of diabetes. Case managers from ALTSA, AAAs, and DDA use a person-centered approach to work with each client to complete an individualized assessment, develop a service plan, and coordinate with caregivers and other health and social service providers as needed.

The assessment tool used by case managers to evaluate the service needs of each individual is called the Comprehensive Assessment and Reporting Evaluation (CARE). Assessment areas in CARE related to diabetes include:

- Diagnoses
- Medications, use, and ability to selfadminister
- Treatments related to diabetes including injections, blood glucose testing, routine lab work, etc.
- Meal preparation, feeding, and shopping
- Nutritional needs
- Skin care needs including application of lotion, care to lower extremities, and pressure ulcers
- Foot care needs
- Notation of dental visits and oral health

- Pain and pain management
- Bowel and bladder care
- Weight management
- Sleep issues
- Care to support impaired vision
- Fall risk and fall impacts
- Pain and pain impacts
- Mobility support (wheel chair, bed, transfers, ambulation and orthotic use)
- Medical Equipment and Supply needs
- Transportation to medical appointments

Most clients receive in-home services, while others are in assisted living facilities or adult family homes. These community settings are much less expensive than institutional settings such as nursing facilities and Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF/IID). Key partners in providing LTSS also include residential providers, home care agencies, individual paid providers, Service Employees International Union (SEIU), Leading Age, Adult Family Home Council (AFHC), and Washington Health Care Association (WHCA).

In addition to personal care services, long-term care services include:

- Comprehensive assessments
- Case management
- Oversight of licensed facilities
- Adult protective services
- Skilled nursing services
- Adult Day health services
- DDA habilitation services

LTSS are designed to maximize each client's independence, dignity, and quality of life, and assist them in residing in the least restrictive care setting of their choice.

- Senior information and assistance
- Family caregiver support program
- Client training/wellness education
- Nutrition counseling
- Nurse delegation
- Nurse consultation services

#### Care Transitions programs

Care Transitions programs are administered at the local level by AAAs and area hospitals. Initial funding came from a U.S. Department of Health and Human Services Administration for Community Living grant to DSHS/ALTSA, and the second opportunity came as a pilot project directly from CMS to four AAAs for Medicare fee-for-service patients. The objectives are to partner and coordinate with hospitals, using a coaching model, in order to (1) decrease participant readmission rates and (2) improve health and chronic condition self-management. Individuals participating in care transitions programs commonly have multiple chronic conditions including diabetes. One model, Care Transitions Intervention (CTI) is a four-week evidence-based process that encourages patients to take a more active role in their healthcare. Patients receive specific tools and skills that are reinforced by a "transition coach" who follows patients across settings for the first four weeks after leaving the hospital. The transition coach focuses on: medication self-management; patient-centered health record to guide patients through the care process; primary care provider and specialist follow-up; and patient comprehension of worsening condition and appropriate next steps. In 2015, Qualis Health captured data for five counties (Benton, Franklin, Skagit, Whatcom and Yakima) for individuals having Medicare and participating in any number of care transition programs in the state. Their data showed an 8.3 percent average reduction in readmission rates as compared to baseline. With the CTI model, the evidence now shows overall improvement in chronic disease self-management that lasts nine months or more following the intervention.

In general, the Community Living Connections (CLCs) support care transitions through braided funding including Health Homes, local funding, Older American Act funding, grant funds, and some state general funds. However, without targeted funding, and with costs of base services increasing, and flat or reduced revenue, the work is steadily declining from serving several thousand people across the state to less than 50 in federal fiscal year 2016. One AAA continues to strive toward serving its non-Medicaid population, using the Bridge Model. Another is developing its medical business acumen to sell care transition services to acute care hospitals, nursing facilities, and other healthcare providers and plans as they strive to meet Affordable Care Act performance requirements. Several AAA Medicaid Case Managers employ CTI concepts and coaching methods as part of their Medicaid case management functions. Department of Social and Health Services and Qualis Health continue to provide unfunded technical support to the AAAs and their CLCs.

#### **Nursing Services**

Every Home and Community Service and Area Agency on Aging (AAA) in Washington State is staffed or contracts with agencies who staff Registered Nurses (RNs) for nursing services. The role of this RN is to provide consultation services to the client, their family, and office staff. The case manager will make referrals to the nurses to help with care coordination and education for the newly diagnosed person with diabetes or a person with diabetes who is unstable.

#### **Private Duty Nursing**

Private Duty Nursing (PDN) is a program that provides skilled nursing care to clients with complex medical needs that cannot be met through other nursing services. This program primarily serves clients who are ventilator dependent and choose to stay in a home setting. The providers offer nursing judgment/expertise, assessments, and a skill set that can help identify when clients, especially those with co-morbidities such as diabetes, require more support. PDNs will assist clients in managing their diabetes by monitoring blood glucose, administering insulin and other prescriptions as prescribed, and monitoring and helping to prevent complications from diabetes, thus keeping clients in a home-based setting.

#### Skilled Nurse Waiver Program

The Skilled Nurse Waiver Program is offered to clients receiving Long Term Service and Supports (LTSS). In this program the Registered Nurse or Licensed Practical Nurse will provide the skill required to keep the client safe in the community. They can monitor glucose levels, administer insulin, and change wound dressings if necessary. With the care provided, clients will remain safe in their home of choice and also receive care, thus decreasing hospitalizations and further worsening of their condition.

#### Nurse Delegation

Nurse Delegation is a community-based program which enhances client choice and quality of care, and is cost effective. The Nurse Delegation program serves approximately 8,000 clients and contracts with approximately 200 independent nurses in the community. Registered Nurse Delegators delegate specific nursing care tasks, which are normally completed by a nurse to long-term care workers. Tasks may include blood glucose monitoring, insulin injections and diabetes education. The nurse performs assessments, teaches, verifies competency, and provides ongoing support and supervision, which allows clients to safely manage their diabetes in a setting of their choice with a provider of their choice.

#### Adult Day Service

Adult Day Service is a supervised daytime program which provides ongoing services and supports through an individualized plan of care. Adult Day programs employ a large range of staff, including Registered Nurses, Licensed Practical Nurses, master's prepared social workers, therapists, and personal care attendants. Adult Day Service supports clients, family members, and caregivers while managing a client's disease process, with the goal of improving or maintaining a client's diagnosis. Direct nursing care may include blood glucose monitoring, insulin injections, labs and assessments, and diabetes education and coaching, as well as creating a wraparound team approach with community providers.

#### Fostering Well-Being Care Coordination Unit

The Fostering Well-Being Care Coordination Unit (FWB CCU) provides services for children who are in DSHS or tribal care and custody, including extended foster care for those who are age 18-21, and are Medicaid eligible. Children in out-of-home placement frequently change doctors, social workers, and caregivers. These variables often result in fragmented and inconsistent healthcare. Additionally,

identification of chronic health concerns such as diabetes can be delayed, which can cause lifelong implications for health and well-being. In partnership with the Health Care Authority, the FWB CCU aims to ensure that these children's physical and behavioral health needs are identified and met. Anyone can make a referral including social workers, Child Health Education and Tracking Screeners, tribal Indian Child Welfare staff, Regional Medical Consultants, caregivers, and medical providers.<sup>62</sup>

### Health Care Authority

The Health Care Authority oversees the state's two largest purchasers of healthcare: the Public Employees Benefits Board (PEBB), and Washington Apple Health.

#### Public Employees Benefits Board

As an employer, Washington State government provides medical, dental, life, and long-term disability insurance coverage to over 360,000 eligible state and higher-education employees, retirees, and their dependents. The Public Employees Benefits Board (PEBB) manages this coverage, through private healthcare providers.

- *Uniform Medical Plan:* The Uniform Medical Plan is a self-insured, preferred provider health insurance plan available to PEBB enrollees worldwide.
- *Kaiser Permanente* (formerly Group Health Cooperative and Kaiser Permanente): These plans provide fully insured managed care health insurance coverage to PEBB enrollees in selected areas of Washington.
- Medicare eligible enrollees may also receive coverage through these health plans or may choose a Medicare Part F supplement through Premera Blue Cross.

For people with diabetes or prediabetes, commonly covered services include screening and diagnosis, routine testing and follow-up, medications, education, specialist care (such as endocrinologists, ophthalmologists, and surgeons), inpatient hospitalization, and rehabilitation or long-term care services. Preventive dental care is especially important for those with diabetes.

**SmartHealth:** In 2013, Governor Inslee issued *Executive Order 13-06: Improving the Health and Productivity of State Employees and Access to Healthy Foods in State Facilities*, directing the Health Care Authority to implement a comprehensive wellness program. This program, dubbed SmartHealth, is managed by PEBB. SmartHealth aims to make healthy choices easier for state employees, retirees, and their dependents, and thereby improve productivity and slow the rise of healthcare costs. Among many other things, eligible PEBB subscribers who complete three wellness activities can earn a \$125 financial incentive in the form of a reduced medical plan deductible or a contribution to their health savings account.

SmartHealth promotes diabetes screening and access to the Diabetes Prevention Program and Diabetes Control Program for eligible PEBB members.

**Diabetes Prevention Program:** PEBB is a leader in engaging their enrollees in the Diabetes Prevention Program. The program is described in more detail above, under the Department of Health. PEBB brings the CDC Risk Quiz and blood testing directly to state employee worksites, including higher education institutions and other public employers covered by PEBB.

PEBB is expanding the reach of the Diabetes Prevention Program to areas of lower concentration of state employees by collaborating across multiple agencies to hold joint testing events and classes. The next challenge is to collaborate more closely with providers of community classes and develop a promotional program for spouses and partners.

A significant number of PEBB enrollees tested receive a result in the diabetes range. These people are encouraged to see their medical provider and are given information regarding the Diabetes Control Program.

**Diabetes Control Program:** The Diabetes Control Program, launched in January 2014, provides enrolled PEBB members with access to a pharmacist with specific training in supporting diabetes self-management. Through one-on-one coaching, the goal is improved outcomes for glucose, blood pressure, lipids, and weight control. Currently, the program operates mostly through Safeway pharmacies.

For now, the DCP is offered to non-Medicare members 18 years and older who are enrolled in the Uniform Medical Plan and have been diagnosed with diabetes. In 2015, the DCP was promoted within the SmartHealth program, and Diabetes Control Program participants earned SmartHealth points that contributed toward the financial incentive.

#### Washington Apple Health and Medical Assistance Programs

Washington Apple Health provides healthcare coverage to approximately 1.9 million low-income residents.<sup>63</sup> Almost half of them are children covered by Apple Health for Kids. The cost of Apple Health is shared by the state and federal government.

The Apple Health fee-for-service program provides screening and diagnosis, routine testing and followup, medications, education, specialist care (such as endocrinologists, ophthalmologists, and surgeons), inpatient hospitalization, and rehabilitation or long-term care services for people who have diabetes. The adult dental benefit provides annual check-ups and certain x-rays, preventive services, basic restorative benefits and limited specialized services including dentures, oral surgery, and periodontal benefits. Clients may also receive six visits per year for diabetes education benefits, or more if medically necessary.

Most people who are eligible for Apple Health are enrolled in one of five MCOs contracted by the HCA for service delivery and care management: Amerigroup (AMG), Coordinated Care (CC), Community Health Plan of Washington (CHPW), Molina Health Care (MHC), and United Health Care (UHC). MCO

contracts for Apple Health require annual reporting of performance measures to HCA to monitor service quality, utilization and patient outcomes.

HCA requires MCOs to report the Healthcare Effectiveness Data and Information Set (HEDIS) standardized Comprehensive Diabetes Measures in their contract. These HEDIS measures are compiled in an annual report by an external quality review organization. The report documents individual MCO performance relative to other MCOs with Apple Health contracts and relative to the statewide average. In addition, it includes comparisons to the National Committee for Quality Assurance 90<sup>th</sup> percentile for all Medicaid MCOs in the United States. These annual comparative reports can be accessed online by Apple Health clients and the general public.

#### Performance Measure Reporting and MCO Monitoring

HCA's required set of Healthcare Effectiveness Data and Information Set (HEDIS) measures for diabetes care reveals significant variation by MCOs on certain outcomes, and over time. The previous report focused on single-year comparisons in CY 2013, since it was the first full year of measure reporting by all MCOs currently under contract with HCA. The current update has included multiple years of data to depict a richer picture of MCO performance.

Since the last report, multiple years of comprehensive diabetes clinical performance measure data has been collected and reported. For that reason, the 2013 state averages for the measures below differ from the averages reported earlier in the 2014 diabetes action report. The statewide averages in this report weight each MCO's influence on the statewide average by the size of its membership so that the statewide averages are reflective of the proportional impact of each MCO. In the previous report, the statewide averages were simple averages that treated each MCO contribution equally.

The Affordable Care Act (ACA) increased Washington Apple Health (Medicaid) eligibility limits, bringing healthcare coverage to hundreds of thousands of adults under 65 years old and earning less than 138 percent of the Federal Poverty Level (\$16,105/year for a single adult or \$27,310 for a family of 3). With the addition of the new adult group, the number of diabetic Apple Health clients reported by the managed care plans as part of their HEDIS performance reporting nearly doubled, from 14,265 in 2013 to 25,542 in 2014.

When the MCOs report their eligible populations to HCA, they follow the HEDIS methodology and report only those with 11 months or more of consecutive coverage. Therefore, the 2014 MCO reporting underestimates the true magnitude of new adults signed up. Our estimates using the HCA administrative data show that around 35,000 MCO clients with at least one month of coverage were diabetic in 2014.



Source: Washington Health Care Authority Medicaid Data; Non-disabled adults represent pre-Medicaid Expansion adult populations who continue to qualify for Medicaid under pre-Expansion eligibility rules: (1) CN Family Medical adults and (2) CN Pregnant Women.

In 2014, the percentage of new adults in the diabetic population was the lowest in Molina (37 percent) while Amerigroup had the highest (62 percent). In all other MCOs, the new adults constituted about 50 percent of their diabetic enrollees. In addition, based on the HCA administrative data in 2014, the newly eligible adults in general tend to be older and sicker than the classical non-disabled group. The new adults have an average age of 50 years and a diabetes rate of 4 percent vs. 40 years and 1 percent in the classic, non-disabled group. In general, the new adults do better than the disabled non-dual adult group, which has an average of 52 years and a diabetes rate of about 13 percent.

Below are the results for the calendar years 2013, 2014, and 2015 (reported in 2014, 2015, and 2016):



**A1c Test**: The percentage of adult patients (ages 18-75) with diabetes who received an A1c test performed during the measurement year.

This is a measure where all MCOs have consistently shown high performance. During the 2013-2015 measurement years, the statewide average remained stable around 88-90 percent, and the performance was above 80 percent for all MCOs despite the fact that these measurement years corresponded with the rapid expansion of the Medicaid population following the ACA in January 2014.

For example, with the addition of the newly eligible adults, the statewide diabetes population of Apple Health had a substantial increase between 2013 and 2015. Some MCOs, such as AMC, CCW, and MHW, had at least a three-fold increase in newly eligible enrollees during the same time period. While the HbA1c testing rates do not seem to be impacted by the addition of newly eligible enrollees, some of the fluctuations in the measures below could be explained by this rapid increase in the MCO populations during 2013-2015. A1c Poor Control (>9.0 percent): The percentage of adult patients (ages 18-75) with diabetes whose A1c levels are poorly controlled (the most recent A1c level is greater than 9.0 percent during the measurement year).



For this measure, the smaller the percentage, the better the performance. Therefore, seeing an increase in the statewide average from about 46.3 percent in measurement year 2013 to about 49.9 percent in 2015 indicates no improvement in the relative number of diabetes patients with poor A1c control. This statewide outcome might have been due to Community Health Plan's (CHPW) performance in 2015 relative to the earlier years, about 34 percent in 2013 vs. 65 percent in 2015.
A1c Good Control (<8.0 percent): The percentage of adult patients (ages 18-75) with diabetes whose A1c levels are well controlled (the most recent A1c level is less than 8.0 percent during the measurement year).



For the A1c control measure, the higher the percentage, the better the performance. Therefore, seeing a decline in the statewide average from about 45.7 percent in the measurement year 2013 to about 39.0 percent in 2015 indicates no improvement in the relative number of diabetes patients with good A1c control. Similar to the A1c poor control measure above, this statewide outcome might have been due to Community Health Plan's (CHPW) performance in 2015 relative to the earlier years and to other Medicaid managed care organizations in 2015.

**Blood Pressure Controlled for Diabetes Patients <140/90 mm Hg**: The percentage of adult patients (ages 18-75) with diabetes who had at least one blood pressure reading of less than 140/90 mm Hg during the measurement year.



The chart above indicates a slight improvement in the statewide average for blood pressure control for diabetes patients. It went up from about 59.7 percent to about 63.0 percent. During the measurement period, United Health Care showed the most significant performance improvement from about 11 percent in 2013 to about 59 percent in 2015.



**Diabetes Eye Exam**: The percent of people ages 18 to 75 with diabetes who had a dilated retinal eye exam during the measurement year.

This is the only measure that shows steady, yearly improvement in the statewide average during 2013-2015. United Health Care's performance in 2015 is especially notable. About 80 percent of its patients with diabetes in 2015 received a retinal eye exam compared to about 38 percent 2013.

### Other HCA Uses for Performance Measures

In recent years, HCA has started using these managed care performance measures in multiple ways to improve Apple Health:

- Starting in January 2017, HCA has committed, when feasible, to using standard measures of
  performance across its purchasing activity. A subset of performance measures are now
  deployed in the Apple Health Managed Care contract as part of new value-based purchasing
  arrangements with the MCOs. Several diabetes measures are included in a subset of 9 valuebased purchasing measures.
- In 2018, HCA will implement value-based purchasing arrangements in both the Fully Integrated Managed Care (FIMC) contract and the Apple Health Foster Care contract. Diabetes measures are featured in the FIMC contract; because of the differences in population characteristics of foster children, measures selected for this contract focus primarily on child-based measures with a significant emphasis on behavioral health.

- Since January 2015, HCA has awarded new enrollee assignments to MCOs for performance on one non-clinical and two clinical measures. Performance on retinal eye exams for diabetes patients is one of these three measures. It was chosen because the Apple Health state average for this measure was as low as 45.7 percent in measurement year 2014, and has presented an opportunity for improving care. After the implementation, the state average for this diabetes measure rose up to 61.3 percent in measurement year 2015.
- Also in January 2015, the HCA Apple Health Enrollee booklet for the first time included a MCO measure comparison chart. It included four measures important to parents of children and two measures important to those with diabetes. A similar report is also available to citizens signing up for Apple Health through the Insurance Exchange and is updated annually with refreshed data. The following table shows the health plan measure comparisons reported in the Apple Health Enrollee booklet for 2015. Higher percentages mean the MCO's performance is high; lower percentages mean the MCO's performance is low and needs improvement.

| Category   | Definition  | Amerigroup | Coordinated<br>Care | Community<br>Health Plan | Molina<br>Healthcare | United<br>Health Care |
|--|---|------------|---------------------|--------------------------|----------------------|-----------------------|
| Child<br>Vaccinations                                | The percentage of children 2<br>years of age who had all the<br>recommended vaccines by<br>their second birthday.   | 66%        | 80%                 | 73%                      | 69%                  | 69%                   |
| Teen<br>Vaccinations                                 | The percentage of adolescents<br>who had all the recommended<br>vaccines by their 13th birthday.  | 64%        | 61%                 | 75%                      | 76%                  | 66%                   |
| Nutrition<br>Counseling<br>for Children<br>and Teens | The percentage of children<br>ages 3 to 17 whose doctor or<br>nurse practitioner provided<br>help on proper nutrition or<br>referral for nutritional<br>education.                                | 56%        | 51%                 | 57%                      | 49%                  | 39%                   |
| Exercise<br>Counseling<br>for Children<br>and Teens  | The percentage of children<br>ages 3 to 17 whose doctor or<br>nurse practitioner encouraged<br>physical activity or referral for<br>physical activity.  | 52%        | 52%                 | 50%                      | 42%                  | 38%                   |
| Diabetes A1c<br>Blood Test                           | The percentage of people ages<br>18 to 75 with diabetes who<br>had their A1c tested. The A1c<br>is a blood test that shows the<br>average level of blood sugar<br>(glucose) in the last 3 months. | 91%        | 91%                 | 92%                      | 90%                  | 89%                   |
| Diabetes Eye<br>Exam                                 | The percentage of people ages<br>18 to 75 with diabetes who<br>had a dilated retinal eye exam.  | 57%        | 55%                 | 64%                      | 48%                  | 49%                   |

#### The Apple Health Enrollee Booklet – Managed Care Plan Comparison 2015 (Measurement Year 2014)

**Source:** Comparative Analysis Report: Washington Apple Health Enrollee Booklet, Washington Healthcare Authority

### Managed Care Organizations' Prevention and Health Promotion Activities

In addition to the HCA-driven healthcare value-based contracting activities, the Apple Health MCOs engage in various health promotion, disease prevention, and disease management activities. These improvement activities are either directed at clients, who are at-risk or currently diabetic, or their providers. These include:

- Written educational materials (such as newsletters, online resources, and targeted mailings) with general information on nutrition, exercise, and recommendations for routine screening.
- Outreach via interactive voice responses or live calls to members to remind enrollees about gaps in care (such as diabetic eye exams).
- Rewards to members for closing gaps in care.
- Outreach to providers to educate them about members who need specific services.
- Provider access to websites to look up member adherence to recommendations.
- Educational brochures and posters for distribution to clinics and provider offices.
- Outreach to at-risk populations (such as those diagnosed with behavioral health conditions or other chronic conditions) to offer disease prevention and management coaching. This may include home visits and certified diabetes educators, as necessary.

HCA has made significant progress in aligning performance with payment. Longstanding use of consistent performance measurement afforded by HEDIS measures provided a natural stepping stone to HCA's value-based purchasing efforts. Alignment of clinical performance measures with payment and desired agency (targeted clinical improvement), client (improved care) and health plan outcomes (financing and enrollment) are catalysts for achieving the Triple Aim. Actions to align agency goals, tied to financing, hold the greatest promise toward gaining the attention of both the MCO and healthcare service community in improving the care that Medicaid clients receive.

### Costs of Activities, Programs, and Services Addressing Diabetes

This subsection provides a summary table of funding sources and reach of the activities, services, and programs provided by the agencies that address diabetes in Washington.

| Agency | Funding                      | Annual       | Program/Service                             | Reach (WA residents) Suppor |           |
|--------|------------------------------|--------------|---|-----------------------------|-----------|
|        | Source                       | Amount       |   |                             | Agencies  |
|        | Federal CDC<br>Grant 1422    | \$1,760,000  | Diabetes prevention and<br>control programs | Statewide (7 million)       |           |
|        | 4 year grant,                |              | Diabetes Network                            | Statewide (7 million)       | DSHS, HCA |
|        | 2014-2018                    |              | Leadership Team                             |                             |           |
|        |                              |              | Diabetes Prevention                         | People with                 | HCA       |
|        |                              |              | Program                                     | prediabetes in              |           |
|        |                              |              |   | Washington – in 22          |           |
|        |                              |              |   | counties (1.7 million)      |           |
|        |                              |              | Community Health Worker<br>Training System  | Statewide (7 million)       |           |
|        |                              | \$191,906    | Surveillance & Evaluation                   | All people with             |           |
|        |                              |              |   | diabetes, and at risk of    |           |
|        |                              |              |   | developing diabetes in      |           |
|        |                              |              |   | WA (2.6 million)            |           |
| -c     | Federal CDC                  | \$694,062    | Diabetes prevention and                     | Statewide (7 million)       |           |
| alt    | Grant 1305                   |              | control programs                            |                             |           |
| He     | 5 year grant,                |              | Diabetes Self-Management                    | People with diabetes in     | HCA       |
| of     | 2013-2018                    |              | Education                                   | Washington (627,100)        |           |
| , ut   |                              |              | Diabetes Network                            | Statewide (7 million        | DSHS, HCA |
| me     |                              |              | Leadership Team                             | residents)                  |           |
| art    |                              |              | Diabeles Prevention                         | prodiabatos in              | пса       |
| ep     |                              |              | Program                                     | Washington - in 22          |           |
|        |                              |              |   | counties (1.7 million)      |           |
|        |                              | \$175.591    | Surveillance & Evaluation                   | All people with             |           |
|        |                              | +            |   | diabetes, and at risk of    |           |
|        |                              |              |   | developing diabetes in      |           |
|        |                              |              |   | WA (2.6 million)            |           |
|        |                              | \$142,208    | Community Health Worker<br>Training System  | Statewide (7 million)       |           |
|        | State General                | \$38,000     | Diabetes Epidemic and<br>Action Report      | Statewide (7 million)       | DSHS, HCA |
|        | No longer active             | due to       | Washington Healthcare                       | N/A                         |           |
|        | organizational s             | tructure and | Improvement Network                         |                             |           |
|        | system changes.              |              |   |                             |           |
|        | No longer active due to      |              | Washington Patient-                         | N/A                         |           |
|        | organizational structure and |              | Centered Medical Home                       |                             |           |
|        | system changes.              |              | Collaborative                               |                             |           |

| Agency        | Funding  | Annual   | Program/Service   | Reach (# of  | Supporting  |
|---------------|--|--|---|--|---|
|               | Source   | Amount   |   | individuals)   | Agencies  |
|               | Federal  | \$450,000  | Chronic Disease Self-<br>Management Education<br>Programs                                 | 2,000+   | DOH   |
| ices          | State and<br>Federal   | \$2.2 billion  | Long Term Services and<br>Supports Program  | 77,000   |   |
| d Health Serv | State and Federal<br>Current funding amount is<br>TBD due to organizational<br>reconstruction of the<br>program. |  | Fostering Well Being<br>Program   | Over 50 per<br>month assisted<br>with healthcare<br>coordination | HCA   |
| of Social an  | State and<br>Federal   | ~\$10<br>million   | Senior Information and<br>Assistance Services/Aging<br>and Disability Resource<br>Centers | 42,962   | 13 AAAs: and 17<br>subcontracted CLCs   |
| rtment (      | Funding for this program is<br>managed by Health Care<br>Authority.  |  | Medicaid Health Homes<br>Program  | 6,584  | HCA   |
| Depa          | Program still exist<br>longer funded or<br>through DSHS. Ar<br>on Aging continue<br>the program.                 | ts but is no<br>implemented<br>ea Agencies<br>e to support | Care Transitions Program  | 159  | Potential future<br>funding may come<br>to ACHs via the<br>Medicaid<br>Transformation<br>Demonstration. |

### Coordination between DOH, DSHS, and HCA

Between 2013 and 2017, collaboration and coordination between the agencies have increased. Staff from each agency met monthly to produce this report and, in doing so, have created more robust relationships and communication channels between the agencies. Beyond the report, other examples of enhanced coordination include:

### Healthier Washington Initiative

Diabetes has emerged as a focus at both the statewide and regional levels. The Healthier Washington Initiative has three overarching goals:

- Building healthier communities through a collaborative regional approach.
- Integrating how we meet physical and behavioral health needs so that healthcare focuses on the whole person.
- Improving how we pay for services by rewarding quality over quantity.

### Consideration of opportunities for funding and technical assistance.

Department of Health and Department of Social and Health Services jointly wrote a grant to the U.S. Administration for Community Living to enhance sustainability and spread of evidence-based Chronic Disease Self-Management Education, including the Diabetes Self-Management Program. Washington State received this two-year grant in August 2016. Funding will continue through July 2018, and provides a total of \$900,000 over two years. The majority of funding goes to external partners who coordinate with their region's Area Agency on Aging. Several other funding and technical assistance opportunities offered at the national level to states that require coordination between Health Care Authority and Department of Health have been explored by program staff and considered by leadership. The relationships formed by the Diabetes Epidemic and Action Report collaboration have facilitated timely communication so these opportunities can be considered.

### Medicaid Health Homes

The Health Home program is administered in partnership by Department of Social and Health Services and the Health Care Authority. The program serves clients of all ages who have one chronic condition and are at high risk of a second. Diabetes is one of the identified chronic conditions within the eligibility criteria. Health Home services promote person-centered health action planning to empower clients to take charge of their own healthcare. Department of Health has supported the Health Homes program with training on diabetes and hypertension, and plans to offer education on the upcoming availability of the Diabetes Prevention Program to Medicare enrollees (who may be dually enrolled in Medicaid).

### Diabetes Network Leadership Team

This group of volunteers from organizations serving people with diabetes and hypertension has been meeting since 2004. Since more robust connections have been established between the three agencies, the Department of Social and Health Services and Health Care Authority have been more involved in the Diabetes Network Leadership Team (DNLT) quarterly in-person meetings and on workgroups that meet monthly by phone. The DNLT currently has approximately 32 voting members representing organizations across the state.

### Medicaid Transformation Demonstration

All three agencies coordinate work around the Medicaid Transformation Demonstration at the state and regional levels. Staff from Department of Social and Health Services and Department of Health have developed and maintained connections with Healthier Washington staff internal to our agencies, as well as Healthier Washington staff housed at Health Care Authority. Our staff regularly participate in learning sessions held at the Health Care Authority to stay abreast of new developments and opportunities to support these efforts. The Diabetes Network Leadership Team and Chronic Disease Self-Management Grant partners have been kept informed of the growth, development, and recognition of Accountable Communities of Health (ACHs) so that these partners may engage with ACHs regionally. Staff working to address diabetes-related health at Department of Social and Health Services and Department of Health provided proposals to inform the development of the Medicaid Transformation Demonstration Toolkit. Staff are poised to provide information about evidence-based practices, share national guidelines, and provide studies with return-on-investment data with regional partners, and directly to ACHs across the state to support successful Medicaid Transformation efforts.

# APPENDIX 6: UPDATES ON 2014 GOALS AND RECOMMENDATIONS

This appendix includes specific updates pertaining to each of the 2014 DEAR goals.

## A. Ensure all appropriate populations have access to the Diabetes Prevention Program in Washington.

Between January 2014 and January 2017, access to the Diabetes Prevention Program (DPP) has grown overall. As of January 2017, there were 22 programs in Washington listed in the National Diabetes Prevention Recognition Program registry. Additional programs offered at tribal sites and locations that offer the program but are not enrolled in the national registry are also offered, as well as national organizations that offer the program in an online or virtual format. Medicare is scheduled to begin coverage of nationally-recognized Diabetes Prevention Programs beginning January 1, 2018, and this will greatly increase the state's population of adults eligible to participate in the program.

For the majority of adults with prediabetes in Washington, lack of insurance coverage of the DPP has been identified as the most significant barrier to availability. To address this barrier, the National Association of Chronic Disease Directors (NACDD), with support from the Centers for Disease Control and Prevention (CDC), was able to provide technical assistance to Washington in developing plans for scaling and sustaining diabetes prevention efforts through a framework used in other states.

On June 21 and 22, 2016, the Washington State Department of Health, a team of NACDD facilitators, and 66 key stakeholders participated in a state engagement meeting called "Working Together to Prevent Diabetes in Washington State." Background information about the National DPP was presented, including the national landscape of this work, and relevant work currently taking place in the state. Participants were led through a series of small group exercises to help them draft a State Action Plan that addresses coverage of the National DPP in four populations: Medicare, Employer Based Insurance (Public and Private), Medicaid, and the Uninsured/Underinsured. Through this process, participants also identified key action steps and resource needs, and made commitments to specific action steps their organizations can either support or lead. As a result of these meetings, the <u>Washington State Diabetes</u> Prevention Program Action Plan was created in June 2016 for the purpose of increasing coverage and access to the DPP by June 2018.

Regional efforts to expand DPP access have been supported through the Centers for Disease Control and Prevention (CDC) 1422 Grant. This grant is operating in 5 regions of the state, each with an assigned Community Lead Organization (CLO). The 1422 Grant directs the state and these regional entities to expand access to DPP. Expanding the availability of DPP is supported by the 1422 Grant until September 2018. Statewide work to expand DPP availability, as well as work to support other chronic disease prevention efforts, occurs through the CDC's 1305 Grant.



### 1422 Community Lead Organizations and Accountable Communities of Health Maps

(Note: These CLO regions were developed prior to the current alignment of Accountable Communities of Health, and as a result, the boundaries of the CLOs and ACHs are complementary but not identical.)

# B. Increase access to safe and affordable active living where people work, learn, play, and worship across their lifespan.

Between January 2014 and April 2017, progress has been made in improving access to active living in early learning, schools and communities. Although a complete picture is not possible, the following are outcomes that Department of Health has been involved in, by providing funding and/or technical assistance, or are aware of through partnerships.

### Early Learning

- 3,353 early learning providers received free, accredited online training on best practices to increase physical activity in early learning programs.
- 3,042 early learning providers received free, accredited online training on best practices to limit screen time in early learning programs.

### Schools

- Legislature funded \$5 million for schools to improve physical activity infrastructure and equipment, water bottle filling stations, and equipment related to healthy food.
- 7 school districts have adopted policies and procedures to create physical activity-friendly schools through the Coordinated School Physical Activity Program.
- Legislature approved school measurement of physical activity in the 2017 session.

### Communities

• 33 community venues, such as worksites, community organizations, or agencies are promoting physical activity through signage, worksite policies, and shared use agreements.

• 34 complete streets policies have been adopted in communities, which will make streets and neighborhoods safe for all users.

Department of Health continues to seek funding to support community- and state-level changes to improve nutrition and physical activity in the state through policy, systems and environmental changes-especially among populations experiencing health disparities. Communities are ready to do this work – they need consistent and adequate funding to continue to make strides in creating healthy communities.

### C. Increase access to healthy foods and beverages where people work,

### learn, live, play, and worship.

Between January 2014 and April 2017, progress has been made in improving access to healthy foods and beverages in early learning, schools, worksites and communities. Although a complete picture is not available, the following are outcomes that DOH has been involved in via funding, technical assistance, or partnerships.

### Early Learning

- 4,147 early learning providers received free, accredited, on-line training on best practices to increase healthy eating in early learning programs.
- 1,751 early learning providers received free, accredited, on-line training on best practices to support breastfeeding in early learning programs.

### Schools

- Legislature funded \$5 million for schools to improve physical activity, infrastructure/equipment, water bottle filling stations, and equipment related to healthy food.
- 7 school districts are receiving additional support for policies and procedures to follow USDA Nutrition Guidelines.

### Worksites

- 70 worksites adopted Healthy Nutrition Guidelines, 44 of which were the result of Executive Order 13-06, which required executive state agencies to adopt Healthy Nutrition Guidelines by December 31, 2016.
- 24 large worksites implemented changes to reduce sodium in cafeteria settings.

### Communities

- Washington State applied for and received the Food Insecurity Nutrition Incentives Grant from USDA, bringing in \$5.86 million of federal funds to support healthy eating among Supplemental Nutrition Assistance Program (SNAP formerly called Food Stamps) clients.
- Launched Breastfeeding Friendly Washington in hospitals and birthing clinics.

- 25 birthing facilities are meeting at least bronze designation of Breastfeeding Friendly Washington voluntary designation program.
- 77 farmers markets are implementing Fresh Bucks or similar programs to incentivize local fruit and vegetable purchases among SNAP customers (formerly called Food Stamps).
- 119 community venues, including grocery stores, food banks, and restaurants have been supported by various grants to provide affordable access to healthy foods and beverages.

DOH continues to seek funding to support community- and statelevel changes to improve nutrition and physical activity in the state through policy, systems and environmental changes, especially among populations experiencing health disparities. Communities are ready to do this work—they need consistent and adequate funding to continue to make strides in creating healthy communities.

# D. Ensure all people with diabetes receive self-management education from a Diabetes Education Program.

The 2014 Diabetes Epidemic and Action Report recommended for "Health Care Authority and the Department of Health to jointly develop a plan to increase appropriate use of the existing Diabetes Self-Management Education benefit in Apple Health and PEBB."

In 2015, Health Care Authority implemented the "diabetes bundle," a full set of Comprehensive Diabetes Care Clinical Performance Measures, in contracts with their Medicaid Managed Care Organizations. In 2017, financial incentives will begin to be tied to these measures. Payment is also tied to diabetes-related performance measures in the Accountable Care Organizations contracted by PEBB. Both of these contractual agreements are intended to drive improvement in diabetes-related care, which includes Diabetes Self-Management Education.

Department of Health's lead staff member for diabetes has continued to maintain listings of diabetes education programs approved to bill Medicaid in Washington, and as of January 2017, 131 clinics, hospitals and individual state-accredited/certified programs are able to bill Apple Health. At meetings sponsored by the Health Care Authority, Department of Health staff members have encouraged Managed Care Organizations to use this list to provide a network of access to Medicaid enrollees as well.

The Washington State Department of Health, through the Health System Transformation and Innovation (HSTI) Public Health Program Coordination Workgroup, provides recommendations to leadership on promoting public health partnerships, practices, policies, and value across the health system. The workgroup is currently developing a standardized process for partnering with Health Care Authority across public health programs to integrate and leverage public health services and resources through the Apple Health master contract development process.

More work needs to be done to strengthen interagency relationships and streamline partner communication. The Department of Health is investigating methods for coverage of the Diabetes Self-Management Program (previously known as the Stanford Model, now supported by the Self-

Management Resource Center) under Medicaid. The Department of Health is also educating current accredited and potential DSME providers on the use of this particular curriculum within their practice as an option for their patients.

Currently a pilot project is being offered through the SmartHealth Portal that gives PEBB enrollees access to the Better Choices Better Health Program, which is the digital version of the community-based Chronic Disease Self-Management Program. This in turn will reinforce the importance of covering these types of services as a benefit in the future.

All HCA-managed care contracts (PEBB and Medicaid) now require the full set of Comprehensive Diabetes Care Clinical Performance Measures reporting annually. Most value-based purchasing contract language includes diabetes measures. Value-based contract language was initially implemented in the PEB ACP Contracts (2016), followed by the Apple Health Managed Care contract in 2017.

In 2018, HCA will implement value-based payment arrangements in the Fully Integrated Managed Care (FIMC) contract. The Apple Health Foster Care contract, because it serves children and those with a greater likelihood of behavioral health conditions, will not include diabetes measures. By tying outcomes to payment, the healthcare delivery system will be incentivized to improve care for those with diabetes. In implementing value-based purchasing, HCA hopes to shine a spotlight on serious healthcare conditions such as diabetes and hypertension. If these conditions are managed well, the incidence of long-term complications can be reduced and optimal health and well-being can be achieved.

Through Medicaid Transformation efforts, newly formed Accountable Communities of Health (ACH) are encouraged to implement quality initiatives that address chronic disease, including diabetes. This significant activity and continued efforts to integrate care through the FIMC contract and promote whole-person care are intended to ensure better access to primary care for individuals with serious and persistent mental illness who often are at greater risk for chronic illness and early death from both physical and behavioral health conditions.

The Health Home program, which has demonstrated significant savings, will be expanded to King and Snohomish counties in 2017. This program supports individuals who have a high risk of future out-of-control healthcare costs with a case manager. The case manager focuses on the promotion of client self-management of chronic disease and serves as a coach and source of support to individuals seeking to improve their disease(s) self-management behaviors.

# E. Ensure people with diabetes and gum disease have access to guideline-based oral health treatment.

Since 2014, more coordination between oral health and diabetes sectors has taken place, thanks to the Diabetes Network Leadership Team and the first Diabetes Epidemic and Action Report. Oral Health stakeholders have actively promoted projects that pertain to oral health and diabetes/chronic disease,

and have worked to increase the capacity of Community Health Workers to reduce barriers to oral healthcare for their clients, including clients with diabetes.

Dental care is critical to maintaining health and well-being particularly in individuals with diabetes. Reinstatement of the dental benefit for adults in Medicaid is a significant step towards assuring care for patients with this disease. In the last few years, HCA has implemented a number of initiatives to improve the quality and efficiency of dental program administration. In 2016, HCA convened a workgroup composed of dental providers in private practice, dental providers in community health centers and oral health advocates to improve the agency business processes for managing the dental benefit. A number of recommendations were made to improve administration in the report to the Legislature, <u>Medicaid</u> <u>Dental Prior Authorization</u>. As a result, prior authorization processes were streamlined and simplified. For example, a number of dental services were removed from the prior authorization listing. Recommendations for increased dental provider reimbursement were made to promote better dental access for preventive activities and care for those with chronic illness, including diabetes.

# F. Enhance care coordination for people with both diabetes and mental illness.

As part of HCA's effort to implement value-based payment, healthcare entities such as MCOs, carriers and Accountable Care Programs can create the flexibility needed within a healthcare system to be able to invest in innovative and evidence-based approaches to care that improve outcomes and reduce costs. Improved management of chronic illness is strongly emphasized in value-based purchasing arrangements. Care management is one avenue used by health plans and carriers to facilitate client/member self-management and promote optimal health outcomes. All HCA MCOs/carriers deploy case managers, many using navigators or community health workers to facilitate the work of case management.

## G. Ensure all appropriate populations have access to Chronic Disease Self-Management Education programs in Washington.

Department of Social and Health Services (DSHS) is working with Department of Health (DOH) and the Health Care Authority (HCA) to expand Chronic Disease Self-Management Programs (CDSME) to enrollees in Apple Health and Public Employees Benefits Board (PEBB) Plans.

One main element to this work is the Prevention of Public Health Funds-2016 Empowering Older Adults with Disabilities through Chronic Disease Self-Management Education Programs grant. Washington State was awarded \$900,000 to significantly increase access to CDSME to underserved older adults and adults with disabilities, while implementing innovative funding arrangements to sustain an evidence-based prevention (EBP) and CDSME network. Anticipated outcomes of this grant include expanding the program reach to underserved populations and increasing partnerships that focus on sustaining CDSME program access through non-grant funding sources. Currently funded partners include: Canary Health

which is working to provide ongoing availability of Better Choices Better Health (online CDSMP) to state employees; five Area Agencies on Aging (AAAs) that are increasing the reach of the program (see below map); and Norwest Regional Council AAA which is expanding dissemination of the Wisdom Warrior program (wraparound CDSME program that addresses cultural considerations). DSHS strives to increase access to CDSME/EBP within Washington State's Long Term Services support by working with HCA and the Healthier Washington Initiative to embed the program with regional Accountable Communities of Health. As of May 2017, a pilot project is underway that gives some PEBB enrollees access to the Better Choices Better Health Program, which is the web-based version of the community-based Chronic Disease Self-Management Program (CDSMP). Data gathered from this pilot is expected to inform potential availability of this benefit in the future.

### **PPHF Grant Funded AAA Locations**



Percent with Arthritis, Diabetes, or Depressive Disorder by County

# H. Ensure involvement of Community Health Workers to address diabetes in populations with the greatest needs.

The activities recommended under this goal pertained to ensuring that payment for Community Health Workers (CHWs) was facilitated to ensure access to CHWs for people with and at high risk of developing diabetes. Health Care Authority and Department of Health have been working jointly and separately to support the recommendations that emerged from the Community Health Worker Task Force Recommendations Report for Healthier Washington in February 2016.<sup>64</sup> While some organizations, including Apple Health/Medicaid Managed Care Organizations, employ CHWs, insufficient progress in the health system as a whole has been made to date on payment for CHWs.

To enhance workforce development of CHWs, Department of Health continues to facilitate a robust CHW training system and network that provides core competency and health-specific training across all Accountable Communities of Health regions in the state. As of March 2017, over 1,400 CHWs and related staff have successfully completed the training. More details are available in the March 2016 report on Washington State Department of Health's Community Health Worker Training System.<sup>60</sup> Curricula available to CHWs who have completed the initial training include web-based modules on prediabetes and diabetes, tobacco cessation, oral health, health coaching and motivational interviewing, and health literacy and social determinants of health, among others. Spanish language versions of the web-based diabetes and oral health modules are planned to be available beginning summer 2017. In addition, in-person trainings for CHWs on supporting self-management of blood pressure have been implemented and a similar in-person training on prediabetes and diabetes is expected to be offered beginning summer of 2017. Both trainings will be offered in Spanish and English. CHWs were referenced in the Diabetes Prevention Program Medicaid Transformation Project proposal as the potential workforce for implementing DPP in a culturally and linguistically appropriate manner to hard-to-reach populations.

Additionally, the Heart Disease, Stroke, and Diabetes Prevention Unit, in partnership with the Community Health Worker Training System Unit, have hosted an annual Community Health Worker Conference. The 2017 conference, held in Pasco, Washington, was the third annual. It attracted nearly 350 attendees, which was an increase from the approximate 110 attendees in 2016. The conference was rated by attendees to be an engaging day of learning and connecting CHWs to better support their communities. The wide range of sessions included topics such as prediabetes and diabetes training, yoga and meditation, men's health, breastfeeding, rural health, and motivational interviewing. The conference gave Department of Health programs and partners the opportunity to share information with CHWs from across the state.

As part of the 2015 CHW task force recommendations<sup>64</sup>, DOH has partnered with the Foundation for Healthy Generations on the implementation of a clinical CHW pilot integration project with five sites across the state through September 2017: Community Health Care in Pierce County, SeaMar in Vancouver, Port Gamble S'Klallam Tribe in Port Gamble, Family Health Care Clinic in Omak, and CHAS in Spokane. Areas of focus include using CHWs for diabetes education and prevention with prioritized hard-to-reach population groups in each clinical service area. Other CHW workforce development efforts include the establishment of regional CHW networks aligned with each Accountable Community of Health, potentially leading to the development of a statewide CHW network to better address education, training and financial sustainability. Health Care Authority encourages the use of health extenders such as Community Health Workers or Health Navigators. A number of the Apple Health managed care organizations now routinely use these staff to support case management services. These services are typically funded through the administrative benefit afforded to each health plan to administer healthcare services and benefits.

# I. Increase stakeholder involvement in policymaking that pertains to diabetes.

The actions recommended to achieve this goal focused on the Diabetes Network Leadership Team (DNLT). Since 2014, the DNLT has changed the bylaws to accommodate larger membership, and as of June 2017 has 32 voting members. Along with this increase in both voting and non-voting members, a more diverse set of organizations are now represented. Some efforts to identify representation on the DNLT have not yielded intended results. For example, the DNLT hasn't been able to retain a stakeholder solely representing people with type 1 diabetes or parents of children with type 1 diabetes. However, there is representation from organizations on the team that serve people with type 1 diabetes and type 2 diabetes, such as the American Diabetes Association. To address youth with diabetes in schools, the DNLT recommended that Department of Health work with the Office of the Superintendent of Public Instruction to update the 2005 Guidelines for Students with Diabetes. Stakeholders participating in this revision have been invited to participate in the DNLT.

The goal of involvement of other state agencies aside from Health Care Authority and Department of Social and Health Services in the DNLT has not been realized. Collaboration with the Office of the Superintendent of Public Instruction (as described above) as well as connections with Department of Corrections present opportunity for potential membership from these agencies. However, diabetes alone has not emerged as a focus for other state agencies that would drive them to participate on the DNLT.

Additional members have been recruited to DNLT to represent gaps. New partners on the team include representation from pharmacy, University of Washington researchers, non-profit organizations, community-driven coalitions, managed care organizations, and various local health districts throughout Washington. New memberships continue to be encouraged.

The DNLT has been engaged in the process of producing this report. Data has been regularly presented to the DNLT, and members had an opportunity to review and provide feedback on an early draft of this report. DNLT members also continue to work on prevention of diabetes by implementing objectives crafted by the <u>Washington State DPP Action Plan: 2016-2018</u><sup>65</sup>, created as a result of a statewide engagement meeting in collaboration with the Centers for Disease Control and Prevention and the National Association of Chronic Disease Directors. The priorities in this action plan will be completed and reported on in June 2018. Workgroups of the DNLT, the disparities workgroup in particular, will continue to use a social determinants of health lens in order to identify and solve problems experienced by those who have diabetes of all types within our state. DNLT members are expected to continue to bring

attention to ways in which other chronic conditions, such as hypertension, may affect the management of diabetes and identify and promote actions that will produce lower costs, better care and better health for all Washingtonians.

# J. Support the Plan for a Healthier Washington's investment in Analytics, Interoperability, and Measurement.

Since the initial publication of DEAR, much progress has been made on the investment in analytics, interoperability, and measurement across agencies in Washington State. Many actions have been undertaken to improve health information technology and increase access to population health data to drive better policy and programmatic decisions around diabetes prevention and management. Below is a brief description of some of the major projects that have been undertaken to support this goal.

As part of this effort, epidemiologists and evaluators representing the Washington State Heart Disease, Stroke, and Diabetes Prevention Program continue to establish key partnerships with other data stewards across state agencies to determine how different data sources can be leveraged to specifically support surveillance and evaluation priorities around diabetes prevention and management. This work involves ongoing participation in workgroups, coordinating and planning potential uses for data when made available, and providing guidance on analytic methods.

Another crucial part of this effort is the establishment of the Analytics, Interoperability, and Measurement (AIM) Program at the Health Care Authority. The AIM program is part of the Healthier Washington initiative and will be carried forward in the Medicaid Transformation Demonstration. AIM's strategy is to work collaboratively across state agencies and public and private sectors to facilitate health data management solutions, services and tools and to serve as a key lever to implement population health improvement strategies across Washington State. Data are essential to achieving the Triple Aim. We need good data to drive better quality and consistency of healthcare services and assess how those strategies are working. AIM goals include:

- Developing new data and analytic capabilities and providing technical assistance to support community-based population health management and local public health needs;
- Creating a comprehensive data infrastructure across state agencies that provides the opportunity for shared analytics to address health inequities thorough smart, targeted initiatives; and
- Providing accurate and actionable data analysis for distribution to further delivery system transformation and payment reforms.

### Data Projects

**Link4Health Clinical Data Repository** (CDR): This is a major health information technology project at HCA. The CDR aggregates clinical data from practices, hospitals, labs, and other healthcare organizations

in one easily accessible location. Provider organizations join the OneHealthPort Health Information Exchange that connects different electronic health record (EHR) platforms and securely exchanges information. The CDR went live in early 2016, with the requirement that provider organizations with certified EHRs that see Apple Health Managed Care enrollees must participate no later than February 1, 2017. For more information visit https://www.hca.wa.gov/about-hca/health-information-technology.

**Healthier Washington Data Dashboards**: In June 2016, the HCA Analytics, Interoperability and Measurement (AIM) team rolled out the Healthier Washington Data Dashboard. The dashboard is a tool provided to all Accountable Communities of Health (ACHs) and local health jurisdictions across the state, giving them access to interactive information for community assessments. The dashboard includes a subset of measures from the Washington State Common Measure Set and population measures from the Department of Health, including several related to diabetes. More measures will be added over time. For more information visit <u>https://www.hca.wa.gov/about-hca/healthier-washington/data-dashboard</u>.

**All-Payers Claims Database** (APCD): Washington State's APCD is housed under the Office of Financial Management (OFM), which provides vital information, fiscal services and policy support that the Governor, Legislature, and state agencies need to serve the people of Washington State. The WA-APCD includes medical, dental, and pharmacy claims from public and private payers, including Medicaid and public employee plans. The WA-APCD is expected to launch in the Fall of 2017 with a public-facing database website available in January 2018. For more information visit <a href="http://www.ofm.wa.gov/healthcare/pricetransparency/">http://www.ofm.wa.gov/healthcare/pricetransparency/</a>.

**Washington State Tracking Network**: The Washington Tracking Network (WTN) is a public website where users can find data and information about environmental health hazards, population characteristics, and health outcomes at the county and local level. Users can view information on issues such as health disparities and socio-economic determinants of health, as well as detailed data on individual health topics. WTN continues to add topics, including information on diabetes. For more information visit

### http://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/WashingtonTrackingNetwork WTN.

**Rapid Health Information Network** (RHINO): This Department of Health program is responsible for syndromic surveillance data collection, analysis, and distribution. The data are collected in near realtime from hospitals and clinics from across the state. Key data elements reported include patient demographic information, chief complaint, and coded diagnoses. On May 5, 2017 Governor Inslee signed SSB 5514 into law. This legislation mandates emergency department syndromic surveillance reporting to the Washington State Department of Health. These data can be used to provide a comprehensive portrait of each patient encounter at emergency departments (EDs) and other urgent care locations across the state. Syndromic surveillance data has the potential to be linked with other

### data sources, such as vital statistics. For more information visit

http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/PublicHealthMeaningfulUse/SyndromicSurveillance/RHINO.

# APPENDIX 7: STAKEHOLDER INVOLVEMENT

### Background

Stakeholder input and feedback on the report was gathered through two main mechanisms. The Washington State Department of Health, Department of Social and Health Services, and Health Care Authority hosted the *Diabetes Epidemic and Action Report Stakeholder Policy Summit* on Tuesday, October 25, 2016, described below. Another opportunity for stakeholder involvement came through a review process of an early draft of the report. This draft was sent to nearly 300 stakeholders on April 20, 2017, and stakeholders were asked to submit feedback by the close of business on Friday, April 28, 2017. Additional feedback that was received after this deadline was also considered. The feedback received, and how it was addressed, is included after the description of the October summit, at the end of this appendix.

### Stakeholder Policy Summit

The purpose of the *Diabetes Epidemic and Action Report Stakeholder Policy Summit* was for stakeholders to participate in reviewing progress on goals in the <u>2014 DEAR</u>, and identify action steps for agencies, the Legislature, and partners to take to improve diabetes care and management. These action steps were intended to complement the recommendation that emerged in the Washington State Diabetes Prevention Program Action Plan, developed at a Stakeholder Engagement Meeting in June 2016. In contrast to the June Stakeholder Engagement Meeting, which focused on prediabetes, the October summit focused on actions to impact the populations of people in Washington who have diabetes.

| Time     | Description  | Presenter(s)  |  |  |
|----------|--|---|--|--|
| 8:30 AM  | Check-in   |   |  |  |
| 9:00 AM  | Diabetes Epidemic and Action Report<br>Where we've been, where we're at, and where<br>we're going  | Kathy Lofy, MD<br>Dan Lessler, MD, MHA, FFACP<br>Bea Rector   |  |  |
| 10:15 AM | Break  |   |  |  |
| 10:30 AM | Talking about Costs: A Discussion with Experts on the Costs of Diabetes in Washington  | Host: David Hudson<br>Guests: John Bauer, Ph.D,<br>Donna Sullivan, PharmD, MS   |  |  |
| 11:45 AM | Lunch on your own  | ır own  |  |  |
| 1:15 PM  | <ul> <li>Afternoon action planning sessions</li> <li>Introductions and Overview</li> <li>Identify Problem Statement</li> <li>Brainstorm Potential Policy Actions</li> <li>Review and Narrow Actions</li> </ul> | <ul> <li>Facilitated by:</li> <li>Lisa Packard, MS</li> <li>Colette Rush, RN, BSN, CCM</li> <li>Angela Nottage, RN, BSN</li> <li>Jamie Hunter-Mitchell</li> </ul> |  |  |

### Diabetes Epidemic and Action Report Stakeholder Policy Summit Agenda October 25, 2016

| 3:00 PM | Stretch Break  |
|---------|--|
| 3:10 PM | Complete Action Planning Grid & Designate spokesperson |
| 3:50 PM | Closing statements & Action Planning Group Report Out  |
| 4:00 PM | Adjourn  |

### Afternoon Action Planning Sessions

Below is a summary of the recommendations that emerged from the afternoon action planning sessions.

### Action Planning Group – Costs:

### Top recommendations:

- 1. Consistent benefit for Diabetes Self-Management Education across Medicaid alignment with Medicare benefit
- 2. Savings that come from diabetes-related improvements stay with diabetes-related prevention/treatment
- 3. Increase awareness of Diabetes Self-Management Education benefit to all insured people with diabetes
- 4. Incentivize patients/enrollees/members of health plans to use DSME and improve diabetesrelated outcomes

### Action Planning Group – Quality:

**Problem statement:** Lack of flexible infrastructure and care coordination impedes quality team-based patient-centered care across settings

### Top recommendations:

- Simplify process related to diabetes care delivery through two different tracks: 1- Patient and 2-Provider.
- 2. Create access to and use relevant data to inform priorities for specific populations and interventions.
- Through the vehicle of the ACH, continue to evaluate and identify community support services and linkages back to the health system—a partnership between community and health services made bi-directional through technology.

### Action Planning Group – Access for Populations:

**Problem statement:** Failure to recognize individuals as experts on their own health. Policy, systems, and environment change don't always consider impacts to populations and can lead to health inequalities. **Top recommendations:** 

- 1. Create efficient, culturally, linguistically-sensitive and competent diabetes education awareness program that includes human theory.
- 2. Focus funding and resources on populations experiencing inequities.

- 3. Require healthcare providers and legislators to take implicit bias course; thus, increasing cultural sensitivity, diversity of providers for populations they serve; iand patient-centered care.
- 4. Free cost of healthcare and barrier-free referrals (possibly self-referrals).
- 5. Host community focus groups and outreach in communities with inequities.

### Action Planning Group – Access in Settings:

**Problem statement:** Lack of flexible diabetes care infrastructure impedes patient care in and between clinics and communities.

### Top recommendations:

- 1. Funding services where, when, and how the PATIENT wants them.
- 2. Providing a standardized, flexible care coordination system.
- 3. Improving electronic medical record interfaces to optimize care.

### *Questions raised by Summit attendees included:*

- How can shared savings from health reform efforts be applied to improve care for diabetes, and prevention of diabetes?
- How can we sustainably fund our work in Chronic Disease Self-Management and Diabetes Self-Management Education?
- How can we increase access for people who currently lack health insurance (immigrants, seasonal workers, people who can't afford current products but don't qualify for Medicaid)?
   How do we ensure people with diabetes who lack access to care get the care they need?
- What are the biggest drivers of costs of diabetes?
- What messages around cost are most likely to resonate with legislators?
- What are the greatest challenges our state is facing when it comes to diabetes? What solutions are available to address these challenges?
- What efforts are underway to promote self-education and awareness to people with diabetes? What efforts are available for healthcare providers and community health workers? How do we fund not only state employees' participation in the Diabetes Prevention Program, but also Medicaid? Where will the funding come from?
- How do we bring together health systems, payers, and other stakeholders to address these issues?

### Additional reading and resources pertaining to discussions at the Summit

- Dan Lessler, Kathy Lofy, and Bea Rector opening presentation slides
- Washington State Institute for Public Policy Benefit-Cost Results: <u>Lifestyle interventions to</u> prevent diabetes: Long-term, intensive, individual counseling programs
- Washington State Institute for Public Policy Benefit-Cost Results: Lifestyle interventions to prevent diabetes: Shorter-term, programs with group-based counseling
- Washington State Institute for Public Policy: <u>Diabetes Prevention Program: A Review of the</u> <u>Evidence</u>

- Harvard's Project Implicit
- Dan Lessler's whiteboard presentation on Healthier Washington's Theory of Change
- <u>DPP Action Plan</u> developed in June 2016
- Washington State Diabetes Connection website
- Health Care Authority's Medicaid Transformation webpage

### Attendee Demographics

| Number of People | Number of Organizations |
|------------------|-------------------------|
| 66               | 37                      |

| Organizations in attendance       |                                 |                                 |
|-----------------------------------|---------------------------------|---------------------------------|
| Amerigroup                        | Kitsap Public Health District   | WA Department of Health         |
| Center for Multicultural Health   | Neighborcare Health             | WA Department of Social and     |
| Chelan-Douglas Health District    | Nooksack School District        | Health Services                 |
| Community Choice                  | Northshore School District      | WA Health Care Authority        |
| Confluence Health                 | Northwest Kidney Centers        | Washington State House          |
| Cowlitz Indian Tribe              | Novo Nordisk                    | Washington State Institute for  |
| Educational Service District 113  | People for People               | Public Policy                   |
| Franciscan                        | Public Health Seattle and King  | Washington State Pharmacy       |
| Governor's Interagency Council on | County                          | Association                     |
| Health Disparities                | Puget Sound Educational Service | Washington State Senate         |
| Governor's Office                 | District                        | Washington State University     |
| Grant County Health District      | Qualis                          | Washington State University     |
| Group Health Cooperative of Puget | Sanofi                          | Extension                       |
| Sound                             | Tacoma Pierce County Health     | Yakima Valley Memorial Hospital |
| Healthy Living Collaborative      | Department                      |                                 |
| Inland Northwest Health Services  | Washington Dental Service       |                                 |
| Issaquah School District          | Foundation                      |                                 |
|                                   |                                 |                                 |

#### Summit Evaluation Results

Number of Evaluations

32

|               | Please Rate the    |                  |                  | How well do you      |                    |
|---------------|--------------------|------------------|------------------|----------------------|--------------------|
| Was This      | Appropriateness    | How Valuable Was | Please rate the  | think your input and |                    |
| Event a       | of the content for | this meeting for | effectiveness of | your organizations   | Overall, how would |
| Valuable use  | the amount of      | action planning  | your action      | voice was heard and  | you rate this      |
| of your time? | time allowed.      | and networking?  | planning session | valued?              | summit?            |
| 4.38          | 4.13               | 4.45             | 4.28             | 4.13                 | 4.42               |

| Before this | summit, |                   |    |  |
|-------------|---------|-------------------|----|--|
| were you av | ware of | Have you read the |    |  |
| the DEARep  | ort?    | DEAReport?        |    |  |
| Yes No      |         | Yes               | No |  |
| 24          | 8       | 25                | 6  |  |

### Major themes from the open ended evaluation questions include:

- Participants would like an opportunity to review the DEAR before it's published.
- The DEAR team should gather input from people affected by diabetes, and other organizations that couldn't attend the Summit before finalizing agency action plans.
- Participants would welcome more information about the diabetes epidemic in Washington and what's being done about it, including training opportunities.

Of those who filled out an evaluation form, most people were familiar with and have read the 2014 *Diabetes Epidemic and Action Report* 

### Stakeholder feedback on draft report

On Thursday, April 20, 2017, a draft of this report was sent to stakeholders who were invited to the Diabetes Epidemic and Action Report Stakeholder Policy Summit. The initial email was sent to 281 recipients. These recipients in turn forwarded the draft report to other colleagues and associates, so feedback was received by individuals and organizations who were not on the original list.

Stakeholders were asked to provide feedback using a standardized form by close of business Friday, April 28, 2017. Written feedback was received from 10 individuals. Feedback was also delivered by phone from numerous individuals. Department of Health advised these individuals to follow up with written correspondence so it could be tracked for inclusion.

A summary of the stakeholder feedback is available upon request.

### How stakeholder feedback was used

Where possible, stakeholder feedback was incorporated into the structure and content of the final report. Stakeholders who provided feedback were informed that their feedback was received, and would be taken into the greatest possible consideration.

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