

Eden Hospice at Snohomish County, LLC

Certificate of Need Application

**Proposing to Operate a Medicare Certified and
Medicaid Eligible Hospice Agency in
Snohomish County**

January 2021

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EDEN HOSPICE AT SNOHOMISH COUNTY, LLC CON EXECUTIVE SUMMARY

Eden Hospice at Snohomish County, LLC requests certificate of need (CoN) approval to establish a Medicare certified and Medicaid hospice agency in Snohomish County to meet Department of Health findings on Need posted in the department's October 2020 hospice need methodology. A Need for three new agencies were identified.¹ There are currently 9 hospice agencies that have received approval to serve Snohomish County residents. Each hospice agency has designed its program and outreach efforts to address current and future hospice need in Snohomish County. Future hospice need is projected to be 63 patients in 2020, 338 patients in 2021, and 613 patients in 2022 (as calculated in Step 5 of the State methodology).

Despite ongoing efforts by existing Snohomish hospice providers, admission rates are 5% below the nationwide rate for non-dual (Medicare only) eligible hospice patients and over 18% below the nationwide rate for dual-eligible (Medicare and Medicaid) hospice patients. Addressing the large disparity in access and utilization of hospice services in Snohomish County among low income, dual-eligible Medicare patients would add nearly 200 Snohomish County hospice patients and add a 33 patient average daily census using 2020 hospice data.

Eden has a plan and a strategy to address current unmet need as well as increasing hospice service access through outreach to the dual-eligible Medicare population through collaborative and augmented, culturally competent services to hospice patients, along with their families and friends, who are currently underserved. Reducing the disparity for the dual-eligible population will require outreach through the existing agencies, providers, and other cohorts that face significant access barriers for the following groups:

- Medicaid population
- Dual-eligible and low income, Medicare population,
- Black and African American populations
- Hispanic populations
- Veterans
- LGBTQ population
- Native Americans

Each of these population cohorts have socio-economic characteristics that lead to health disparity and access barriers resulting in lower utilization of hospice services. Additionally, each target population cohort is entitled to hospice services that are culturally sensitive, respectful, and competent.

This strategy of increasing hospice utilization to underserved Snohomish County residents will not only improve the quality of life for patients facing death and for their families and friends who will grieve their loss, but it will:

- Reduce healthcare costs

¹ The hospice rules were recently updated in October 2018 in a response to requests from existing hospice agencies as well as new applicants. During the course of the rulemaking, the Department modeled the numeric methodology for stakeholders, including the capacity adjustments. Newly revised WAC 246-310-290 had a number of organizational and structural changes. However, the language that is now in WAC 246-310-290(7)(b) was not newly added in 2018, but already existed in former WAC 246-310-290(1)(c)(ii). Nor did newly revised WAC 246-310-290 fundamentally change the calculation of the numeric need methodology. The updated rule merely creates additional steps out of the existing process in the old rule, providing greater transparency to the process. The department's use of default values in calculating current capacity is not an error or miscalculation. The department concluded that adopting a new interpretation of WAC 246-310-290 without any change in rule or other directive, is inconsistent with the department's past practices, its modeling of the methodology during rulemaking, and the language of the rule itself.

- Meet the DSHS LTSS Dual-Eligibility service goals and Washington’s Triple Aim for healthcare services
- Minimize or eliminate any short-term adverse financial impact on existing hospice agencies with the addition of Eden Hospice at Snohomish County

Eden Hospice at Snohomish County will continue its hospice commitment in the CoN approved Eden Hospice at Whatcom County – eliminate critical end-of-life obstacles to hospice care for Snohomish County residents who wish to exercise control over their end-of-life options through providing hospice services that are consistent with the Washington State Death with Dignity statute.

Eden Hospice at Snohomish County, LLC is wholly owned by EmpRes Healthcare Group, Inc. EmpRes is a 100% employee-owned organization with well-established roots in Snohomish County. It currently has approximately 79 operating units in Washington State and regionally including nursing homes, assisted living facilities, home health agencies, home care agencies and Medicare certified hospice agencies. In 2019, Eden Home Health of Snohomish County, LLC, EmpRes was certified to serve Medicare and Medicaid home health patients. EmpRes also operates a skilled nursing home within Snohomish County and was approved this year to operate its first community hospice agency in Washington State in Whatcom County joining the 3 other hospices operated by EmpRes in Arizona and Nevada.

Returning to the salient barriers to hospice care for Snohomish County residents, Eden first acknowledges the ongoing efforts by all hospices serving Snohomish County that have increased the percentage of non-dual, conventional Medicare hospice admission rate per 1,000 Medicare deaths to over 95% of the national average for this hospice cohort. However, much work is needed to mitigate the growing hospice need for the dual-eligible Medicare hospice. Presently, dual-eligible Medicare hospice utilization is only 87% of the national rate. In addition, in Snohomish County the dual eligible admission rate per 1,000 Medicare deaths is *less than 86% on the non-dual, conventional Medicare rate*.

Barriers to hospice care that cause healthcare access disparity and unmet need are many and range from complex medical conditions with very short life expectancies to medical conditions with much longer terminal prognoses. The resistance by healthcare providers, patients, and family members to address the myriad end-of-life complications - particularly moving from active medical treatment to accepting the terminal prognosis - and accept hospice care, is significant. Eden’s approach to increase hospice utilization in terms of both admission rates and the length of care to national rates (as a minimum) will be addressed by its dedicated leadership. Eden will reach out to providers that serve the (afore mentioned) marginalized patients that face access to hospice. Outreach will be followed up by culturally sensitive and respectful service delivery plans for these population cohorts as well as recruitment, training and support of the Eden hospice staff to achieve the goals that we have for this project. Finally, Eden will measure its results using OASIS data set. OASIS reports:

- Outcome-Based Quality Monitoring (OBQM) Potentially Avoidable Events Report and Patient Listing.
- Outcome-Based Quality Improvement (OBQI) Outcome Report.
- Error Summary Report.
- Utilizes the results of Quality Assurance Performance Improvement (QAPI), patient safety and risk reduction activities.

- Management of change and Quality Assurance Performance Improvement (QAPI) supports both safety and quality through the Agency.

In short, current healthcare disparity has led to lower utilization by persons of color, low income, veterans, children and persons who self-identify as being LGBTQ population. If Eden Hospice at Snohomish County is unsuccessful in garnering approval, Snohomish County will lose an opportunity to meet the Washington State Healthcare Triple Aim of Better Health, Better Healthcare and Improved Healthcare Cost Control. In addition, it will lose the opportunity to achieve “health equity” committed to by King County Hospitals for a Healthier Community Collaborative of 11 hospital systems and Public Health – Seattle and King County.

Need: Eden Hospice at Snohomish County, LLC will serve Medicare and Medicaid patients and employs a charity care policy that is consistent with most Washington State hospitals to serve indigent patients. The State methodology shows a baseline need for 2 additional hospices based on an unmet need for 613 admissions at or 38,394 days of care at an average length of stay of 62.66 days of care. As noted before, attaining health equity of access in Snohomish County through targeted outreach would add an additional 33-patient census. Correcting the substantial overstatement of hospice capacity for Wesley Homes of a 29-patient census in 2018 (See Appendix 20) results in a need for 3 additional hospices rather than 2 new hospices.

Financial Feasibility: EmpRes Home Health of Bellingham has been operating in Snohomish County since 2014. Co-location with EmpRes Home Health of King County will minimize start-up and continuing overhead associated with independent solo startups thus reducing breakeven levels. For example, there is no capital expenditure associated with the project because there is a sufficient supply of desk phone/computer setups and the field clinicians have company-issued cell phone and table from our equipment inventory. That inventory is sufficient to support the addition of Snohomish hospice staff. The co-shared office location is already wired with secure IT infrastructure. Thus, there is no need for an additional capital expenditure. The COVID-19 pandemic has accelerated the evolution in office space as noted by McKinsey resulting in a 30% reduction in required space for commercial (hospice, home health) offices.² Provision of working capital is provided through no-interest capital contributions from EmpRes with the source of capital contributions being cash generated from operations backed up by a \$40 million line of credit commitment. Eden Hospice at Snohomish County will also initiate supportive ancillary care relationships with vendors currently under contract with Eden Home Health of King County and EmpRes Home Health of Bellingham, as well as with vendor relationships being developed for the Eden Hospice at Whatcom County agency.

Structure and Process of Care: As an established provider in the community, Eden hospice will carry out targeted outreach with federally qualified health centers, lead agencies in the DSHS health come project, community agencies focused on serving Veterans, Hispanic communities and the LGBTQ population and with local hospital, physicians, skilled nursing facilities and other providers that EmpRes Home Health of Bellingham is current working with to ensure continuity of care while avoiding fragmentation of care. Eden Hospice will leverage its existing community relationships, within Snohomish County and add respite options and other relationships necessary to support the hospice patient and family members throughout the course of care and during the period of bereavement following death of the patient.

² Brodie Boland, Aaron De Smet, Rob Palter, and Aditya Sanghvi Reimagining the office and work life after COVID-19, JMcKinsey and Company June 2020. Pg. 5

Cost Containment: Hospice care reduces health care expenditures. Appendix 27 provides the most recent quarterly report of the Washington Department of Social & Health Services (DSHA) Fee for Service Dual Eligible project that seeks to reduce overall Washington Medicaid costs. As of September 2020, 37% of the state dual eligible program is enrolled in the State Health Home program. In the fourth Demonstration Year (2017) that included King County and Snohomish County, Medicare savings were over \$55 million with total Medicare savings over the 4-year period of \$166.8 million (Appendix 27).³ Medicaid savings have not yet been calculated by the Centers for Medicaid and Medicare Services.

Reducing disparity in utilization through outreach to special populations, primarily the dual eligible Medicare and Medicaid population will increase the number of Snohomish County hospice patients receiving hospice care and minimize or eliminate any adverse financial impact on existing providers. In fact, as disparity is reduced through targeted outreach efforts by Eden, other hospice providers and DSHS's health home demonstration project, utilization will increase for all hospices beyond the current hospice admissions per 1,000 death rate. At the same time, hospice patients average-length-of-stay will increase.

Regardless of whether the average daily census need is 30, 35 or 40, there are internal cost containment opportunities related with co-location of services. First, in this co-location, minor equipment and remodeling costs can be eliminated as previously noted. Co-location with the home health agency also optimizes the existing relationships between physicians in the community and the hospice service. External cost containment can also be achieved with higher hospice utilization levels due to reduced hospital related costs. As noted in Table 15, a Providence Hospice study showed that Washington State could save over \$99 million annually if patients received 5 weeks of hospice care versus no hospice care.⁴ Several additional analyses specific to Snohomish County (Table 14) , further document the national studies showing the importance of early intervention to achieve the Triple Aim.

³ Edith G. Walsh, PhD. REPORT FOR WASHINGTON MANAGED FEE-FOR-SERVICE (MFFS) FINAL DEMONSTRATION YEAR 3 AND PRELIMINARY DEMONSTRATION YEAR 4 MEDICARE SAVINGS ESTIMATES: MEDICARE-MEDICAID FINANCIAL ALIGNMENT INITIATIVE, ES-2

⁴ CN 19-44. Providence Health and Services Hospice Application. Page 53

APPLICANT DESCRIPTION

1. Provide the legal name(s) of applicant(s).

Note: The term "applicant" for this purpose is defined as any person or individual with a ten percent or greater financial interest in a partnership or corporation or other comparable legal entity that engage in any undertaking which is subject to review under provisions of [WAC 246-310-010\(6\)](#).

This application is submitted by EmpRes Healthcare Group, Inc which owns s 100% of EmpRes Home Health and Hospice, LLC, which in turn owns 100% of Eden Hospice at Snohomish County. If a Certificate of Need is issued for this project, the department will issue an In Home Service license to Eden Hospice at Snohomish County, LLC. For this review, references to the applicant will identify “Eden Hospice at Snohomish County, LLC” as the applicant.

2. Identify the type of ownership (public, private, corporation, non-profit, etc.).

The applicant recognized by the Program is EmpRes Healthcare Group, Inc. The UBI for EmpRes Healthcare Group, Inc. is 26-3018337. Eden Hospice at Snohomish County will be a limited liability company and an application for this designation is in process. The UBI for Eden Hospice at Snohomish County, LLC is 604 684 777.

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

Jamie Brown, Vice President of Home Services
EmpRes Healthcare Group, Inc.
4601 NE 77th Ave., Ste. 300
Vancouver, WA 98662
360-798-8298
jbrown3@eden-health.com

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

Robert McGuirk, Principal
RMC Consulting
1606 NE 60th Ave.
Portland, OR 97213
503-287-4045
rmconsulting1@qwestoffice.net

5. Identify the corporate structure and related parties. Attach a chart showing organizational relationship to related parties.

Please see Appendix 4 for an organization chart showing the organization relationship to related parties.

- 6. Provide a general description and address of each facility owned and/or operated by applicant (include out-of-state facilities, if any).**

Please see Appendix 8 for a list of the existing organizations.

PROJECT DESCRIPTION

1. Provide the name and address of the existing facility

Eden Home Health of Snohomish County, LLC
733 7th Ave, Suite 110
Kirkland, WA 98033

2. If an existing Medicare and Medicaid certified hospice agency, explain if/how this proposed project will be operated in conjunction with the existing agency.

Not Applicable

3. Provide the name and address of the proposed facility

Eden Hospice at Snohomish County, LLC will be co-located with Eden Hospice at King County and Eden Home Health of King County.

Eden Home Hospice at Snohomish County, LLC
733 7th Ave, Suite 110
Kirkland, WA 98033

4. Provide a detailed description of the project

Overview

As noted by rule, a hospice must be primarily engaged in providing the following care and services and must do so in a manner that is consistent with accepted standards of practice:

- Nursing services.
- Medical social services.
- Physician services.
- Counseling services, including spiritual counseling, dietary counseling, and bereavement counseling
- Hospice aide, volunteer, and homemaker services.
- Physical therapy, occupational therapy, and speech-language pathology services.
- Short-term inpatient care.
- Medical supplies (including drugs and biologicals) and medical appliances.

a. General description of types of patients to be served by the project.

The proposed hospice will serve Snohomish County patients requiring end-of-life care and support and those who have elected to avail themselves of the Medicare hospice, Medicaid or private plans that are similar in organization, benefits, and payment arrangement.

b. List the equipment proposed for the project:

No additional equipment is proposed for the project.

c. Provide drawings of proposed project

Please see Appendix 11 for a single line drawing that shows the current configuration of the office space of the Eden Home Health of King County, LLC and Eden Hospice at King County (if approved). This facility will also house the Eden Hospice at Snohomish County central administrative staff (see Appendix 12 for shared positions), which will be shared with the Eden Hospice at King County, LLC agency (if approved). Shared office space for the proposed hospice is 788 net square feet. If both applications are approved then 394 square feet would be allocated to each hospice. Otherwise, Eden Hospice at Snohomish County will use the entire square footage allocation. The net and gross area are the same for the proposed office space. See memorandum of understanding regarding allocations of office space and lease costs in Appendix 3.

Patient care

The care of the hospice patient does not take place in the hospital setting but in the patient's home. Since EmpRes Home Health of Bellingham, LLC already cares for a large number of hospice- eligible patients in Snohomish County, it is expected that some initial relationships with EmpRes/Eden staff will be developed through visits by EmpRes Home Health of Bellingham, LLC staff who are currently working with the same terminally ill patients in their homes before they elect the Medicare hospice option.

Construction

No new construction is required.

Project Completion

Based on WAC 246-310- 010(13) Initiation of hospice services will represent project completion on or before January 1, 2022.

Planning Horizon

The first full of operation will be 2022 and the third full year of operation will be 2024.

d. Relationship of this project to the long-range business plan and long- range financial plan (if any).

Our Values and Beliefs

Hospice is medical care with an emphasis on pain management and symptom relief for patients with life-limiting illnesses, as well as emotional and spiritual support for patients and those who love and care for them. Eden believes that choosing hospice does not mean that patients or their families and caregivers give up on life. Our Eden multidisciplinary team understands the complexity of issues and feelings that surround hospice care and end of life. Our care process is

designed to *maximize* our patient's quality of life and support the patient's and caregivers' ability to be in control of end-of-life decision making. Our caregivers can provide 24-7 on-call support, clinical and skilled care, as well as spiritual and emotional counseling continuing through the bereavement process. Eden believes that through effective and compassionate care our patients can approach the end of life with dignity and comfort.

Symptom Management

Eden Hospice understands that the experience of someone diagnosed with end stage cardiac disease is very different than that of someone with cancer or pulmonary disease. *Therefore*, Eden offers symptom management to control symptoms and promote comfort. No matter what the disease or diagnosis, Eden believes in improving the quality of life when quantity is limited. Eden will also provide supportive therapies such as music therapy and animal-assisted therapy to improve the quality of life for our patients. These services are provided through the Volunteer component of the Eden hospice programs.

Our medical directors focus on symptom management and will work with the patients' attending physicians to order appropriate medications. Our philosophy embraces the idea of relieving pain and other symptoms so that patients are in control of their own comfort. Our goal is to make a patient as comfortable as possible.

Supplies & Equipment

Hospice home care medical equipment can dramatically improve the quality of life of those with life-limiting illnesses. Eden Hospice will manage the ordering and delivery process of the necessary equipment. Medical equipment can:

- Improve Mobility
- Make breathing easier
- Improve quality of sleep and help reduce pain

Eden Hospice will provide patients with the supplies and medical equipment related to the hospice diagnosis, including:

- Respiratory equipment including oxygen and CPAP, BIPAP and nebulizers
- Walkers
- Crutches
- Wheelchairs

Respite Care

Eden believes in supporting both the patient and the caregiver team. Respite care is provided to the patient when family/caregivers need time away. Patients are placed in a contracted facility for a length of time in accordance with plan benefits (typically up to 5 days). The contracted facility will provide care with the hospice interdisciplinary members to continue making visits and maintain emergency/crisis availability.

Respite care for your caregiver may help prevent:

- Burn-out
- Depression
- Stress, Illness, and Reduced Immunity due to Lack of Sleep

Bereavement Services

Bereavement care is an essential component of hospice care that includes anticipating grief reactions and providing ongoing support for the bereaved for a year or more after the patient has passed. Grieving and mourning are normal. Patients, families and caregivers may experience grief as a mental, physical, social, or emotional reaction. Mental reactions can include anger, guilt, anxiety, sadness, and despair. Physical reactions can include sleeping problems, changes in appetite, physical problems, or illness. Eden Hospice is committed to providing information, counseling, and resources for any reaction that may be experienced.

Eden believes that each person takes their own journey through grief and healing. Eden embraces the principle that each person involved with the loss of a loved one will experience and react differently. Eden is also acutely aware of the many different cultural, philosophical, and religious practices that support those facing loss. Eden embraces the fact that all end-of-life situations must be handled with an open-mind, balanced professionalism, and sensitivity. *The “One-way” or “One-Plan” does NOT, in any way apply to Eden’s philosophy.*

Hospice bereavement programs focus on:

- Helping family members understand and move forward in the grief process by enabling their expression of thoughts and feelings and helping them identify or develop healthy coping strategies.
- Helping families problem-solve around adjustment issues.
- Providing guidance about decision-making.
- Addressing social and spiritual concerns.
- Assisting survivors to adapt to an environment without the deceased.

Volunteers

Eden Hospice recognizes that employees, patients, family members and caregivers live in a web of community-based relationships and one choice that most hospice patients elect is to remain in that community. Eden Hospice volunteers facilitate that supportive network of community relationships. Eden Hospice volunteers are drawn to volunteer work for a variety of reasons. Our volunteers have various ages, professions, and life experiences. They have a true desire to give their time to individuals dealing with a life-limiting illness. Volunteers are fully vetted through a background check.

Hospice volunteers assist with a number of helpful and meaningful activities and support the overall outreach to the community about the benefits of hospice. See below for a complete list of what volunteers can and cannot do. Our volunteers are never asked to do something they are not comfortable doing.

Hospice volunteers can:

- Play cards and games.
- Watch movies or television.
- Help with light errands.
- Help with light housekeeping and meal preparation.
- Support patient interests, such as music or crafting.
- Provide animal therapy.
- Provide music therapy.
- Read aloud.

- Write letters.
- Do office work, such as data entry, mailings, answer phone calls, etc.
- Provide respite care to family members and/or caregivers.
- Offer companionship and support.
- Offer a calm and peaceful presence by being comforting and supportive.

Volunteers do not substitute for the needed specialized services provided by an experienced, trained and often licensed professional staff. Per the rules of Medicare participation, hospice volunteers may not:

- Offer feeding assistance.
- Transfer or transport patients.
- Give medications.
- Assist with personal care.
- Provide counseling services or offer advice.

At Eden Hospice, is committed to providing information, counseling, and resources. [Eden's](#) support groups can help manage the everyday care and emotional challenges of caring for a dying loved one. Our team of professionals and volunteers address the emotional, social, and spiritual needs of patients and those who love and care for them.

Our Plan for Snohomish County

As noted in the Executive Summary and throughout the application, Snohomish County residents have experienced limited access to hospice services. Of particular importance in Snohomish County is that several of the hospices operating in Snohomish County have institutional constraints in addressing the Death with Dignity statute in Washington or effectively restrict access based on health plan coverage. The national literature and local experience or perceptions create barriers to access among terminally ill patients and their families concerned about a loss of control in how a patient and family will address dying. Choice also includes many other aspects such as acceptance of differing lifestyles and life experiences. Eden Hospice will be co-located with EmpRes Home Health and its referral sources that offer new pathways of outreach to inform patients and families about the benefits of hospice and to facilitate their decisions to select the hospice option when it can provide the most benefit.

Eden Hospice at Snohomish County has four goals tailored to the unique needs and circumstances in the Snohomish County service area to address barriers and resulting access disparity to support increasing hospice admissions and ALOS in hospice care.

1. Eden will develop hospice services to ensure integration of hospice services with general healthcare and social services that will result in increased admissions and ALOS of hospice stay; and an improved care experience for the dying patient and all caregivers involved. Eden will carry out these efforts with physicians and their clinics, hospitals, skilled nursing facilities, home health agencies and a variety of community agencies that work with specialty populations such as Veterans or LGBTQ adults. A special outreach effort to federally qualified health clinics will focus on dual-eligible, Medicaid and low-income individuals.

In regard to the outreach effort, the Department of Social and Health Services (DSHS) Long Term Services Support Dual Eligible Demonstration Project, the Medicaid Apple Program and the Bi-Partisan Policy Center's Integrating Care for Medicare and Medicaid eligible beneficiaries has demonstrated that patient satisfaction and patient outcomes have

improved by using this model of care. Eden will work with these state entities to provide hospice services for patients when patients select that Medicare and Medicaid benefit. Eden's enhanced charity care policy which provides a 100% discount in out-of-pocket hospice costs at 200% of federal poverty levels (FPL), 75% discount at 300% of FPL levels and 50% discount at 400% of the FPL was designed to support this effort.

2. Eden will target outreach activities to dual-eligible Medicare-Medicaid beneficiaries to reduce disparity in low-income populations access by direct outreach to federally qualified health centers such as Sea Mar, Community Health Center(s) of Snohomish, Apple's fee-for-service program, the DSHS integration project, and other Medical Care Organizations serving Snohomish County including United Health Care Community Plan and Molina.

In 2018, approximately 85% of the nearly 60 million Medicare beneficiaries qualified for Medicare on the basis of age. The remaining 15% were eligible based on disability. Dual-eligible individuals tend to have poorer health and functional status than those eligible for Medicare only. According to the Medicare-Medicaid Coordination Office (MMCO), 41% have at least one mental health diagnosis, 49% receive LTSS and 60% have multiple chronic conditions.⁵ The average dual-eligible individual has six chronic conditions, while all other Medicare beneficiaries average only four. Dual-eligible individuals have greater limitations in ADLs than non-dual eligible individuals. In 2016, 26% of dual-eligible individuals had limitations in one to two ADLs, compared to 18% of non-dual eligible individuals and 28% had limitations in three to six ADLs, compared to 9% of non-dual-eligible individuals.⁵

Given the severity of illness and disabilities, per-capita spending on dual-eligible individuals is more than three times higher than for Medicare-only beneficiaries. The average annual spending per dual-eligible individual in 2013 was approximately \$29,238.43 The average annual spending for those covered only by Medicare came in significantly lower, at \$8,593 per person. As a result, dual-eligible individuals are among the most medically complex individuals and often have wide-ranging health care needs that require additional services and supports. (pages 8 – 10 Integrating Care for Beneficiaries Eligible for Medicare and Medicaid: An Update, April 2020 Bipartisan Policy Institute).⁶

Overall, in Washington State, in September 2020, there were over 28,000 fee-for-service, Medicare dual eligible beneficiaries for the LTSS integration demonstration project. The LTSS target population in Snohomish County, the most seriously ill – 1,524 beneficiaries representing 25% of the Snohomish County dual eligible population, which means there were over 6,000 total beneficiaries – all of whom are potentially hospice eligible. Dual-eligible Medicare-Medicaid patients have tremendous needs as they age and those needs continue when patients become eligible and can benefit from hospice services. There are other Medicaid and low-income Snohomish County residents. Planned outreach should increase access to these residents and the Eden Hospice charity care policy is designed to eliminate access barriers for low-income residents needing hospice services. The pro forma assumes that approximately 2% of total days of care would be included in the charity care budget allocation.⁷

⁵ Integrating Care for Beneficiaries of Medicare and Medicaid: A White Paper. Bipartisan Policy Center. April 2020. pp. 8-9

⁶ *Ibid.* Page 10

⁷ Mathew R Paul, DSHS. Washington State's Fee-For-Service Dual Eligible Demonstration Quarterly Report. Oct. 2020. Pg 4

3. Assure that all residents considering hospice are offered informed choice as required by CMS: actively address and overcome any general negative views of Medicare hospice related to real and perceived loss of control about a loss of control in how a patient and family will address dying and (b) provide a secular hospice choice that directly addresses concerns related to religious affiliation of available hospice services in Snohomish County.

Washington ranks as the sixth-least-religious state, in a tie with Alaska with 47% of respondents in a 2017 Gallup poll saying that they are not religious, and seldom or never attend services. Younger residents are more likely to stating that they are not religious. (Appendix 30).⁸ Still, hospice chaplaincy services are vital because many Snohomish County residents are religious. Eden Hospice understands that it must welcome, engage with, and actively support all patients who value their religion (regardless of their beliefs), yet also equally support those who wish to understand and/or pursue their “death with dignity” options as available under Washington law. As part of this effort, Eden will reach out to End of Life Washington for their advice and support in policy development, staff training and in locating needed resources within Snohomish County.

4. Implement outreach activities in urban and rural areas of Snohomish County to inform residents about the benefits of hospice in a respectful, culturally competent approach based on collaborating with community agency representatives responsible for serving ethnically diverse populations, disease-specific populations, agencies serving low-income individuals and organizations serving Veterans, African American, Hispanic and Native American populations.

In addition to collaborating with community agencies and healthcare providers who support a population that is eligible for hospice services, Eden is mindful of the geographic location of areas where poverty leads to higher levels of health disparity as measured by years of life lost and differential death rates among the population. These areas include North and South Everett and the Tulalip Bay and North Cost areas.

Based on the Department of Health’s 2019/2020 Hospice Need Methodology and allowed revisions for Snohomish County, Eden Hospice at Snohomish County will provide needed services to new populations that are financially feasible, meet all structure and process requirements and are cost effective.

⁸ Gene Balk. Washingtonians are less religious than ever, Gallup poll finds, Seattle Times April 2018

5. Confirm that this agency will be available and accessible to the entire geography of the county proposed to be served.

The agency will be available and accessible to the entire geography of Snohomish County. In addition to collaborating with community agencies and healthcare providers who support a population that is eligible for hospice services, Eden is mindful of the geographic location of areas where poverty leads to higher levels of health disparity as measured by years of life lost and differential death rates among the population. These areas include North and South Everett and the Tulalip Bay and North Coast areas (See Exhibit 2).

6. With the understanding that the review of a Certificate of Need application typically takes at least six to nine months, provide an estimated timeline for project implementation, below:

Table 2 represents the project schedule if each stage of the regulatory review is completed in a timely fashion.

Table 2
Estimated Eden Hospice at Snohomish County CoN Schedule.

| Event | Anticipated Month/Year |
|---|-------------------------------|
| CN Approval | September 2021 |
| Design Complete (if applicable) | Not Applicable |
| Construction Commenced (if applicable) | Not Applicable |
| Construction Completed (if applicable) | Not Applicable |
| Agency Prepared for Survey | December 2021 |
| Agency Providing Medicare and Medicaid hospice services in the Snohomish County | January 2022 |

7. Identify the hospice services to be provided by this agency.

Table 3 lists the scope of services comprising Medicare hospice and indicates which will be provided directly or will be contracted.

Table 3
Eden Hospice Agency Direct Provided Services or Contracted

| New Services | Medicare Hospice | Provided directly | Contracted |
|---------------------------------------|-------------------------|--------------------------|-------------------|
| Skilled Nursing care | Required | x | |
| Medical social worker | Required | x | |
| Speech-language pathology services | Required | x | |
| Physical and occupational therapies | Required | x | |
| Respiratory services ⁹ | Required | | x |
| Dietary – Nutritional Counseling | Required | | x |
| Pastoral care – Spiritual Counselling | Required | | x |
| Home care aide | Required | x | |
| Interdisciplinary team | Required | x | x |

⁹ Note in the pro forma that Respiratory Services do not have a separate line item in the budget because costs are estimated to be below \$0.01 per Day of Care because nurses normally can address most respiratory conditions. Costs are included in physical and occupational therapies.

| | | | |
|---|------------|---|---|
| Pharmacy | Required | | x |
| I.V. Services | Required | x | |
| Case management | Required | x | |
| Medical Director | Required | | x |
| Medical appliances and supplies, including drugs and biologicals | Required | x | |
| Inpatient hospital care for procedures necessary for pain control and acute and chronic system management | Required | | x |
| Palliative Care | Required | x | |
| Durable Medical Equipment | Required | x | |
| Inpatient (nursing home) respite care to relieve home caregiver as necessary | Required | x | |
| 24-hour continuous care in the home at critical periods | Required | x | |
| Bereavement service for the family for 13 months | Required | x | |
| Available to nursing home residents | Yes | x | |
| Music Therapy-- Additional | On Request | | x |
| Animal Therapy -- Additional | On Request | | x |

The hospice interdisciplinary group will include, but is not limited to, individuals who are qualified and competent to practice in the following professional roles:

- A Doctor of Medicine or Osteopathy (who is an employee or under contract with the hospice).
- A registered nurse.
- A social worker.
- A pastoral or other counselor.
- Physical therapy services, occupational therapy services, and speech-language pathology services must be available, and when provided, offered in a manner consistent with accepted standards of practice.
- Volunteers must provide day-to-day administrative and/or direct patient care services in an amount that, at a minimum, equals 5 percent of the total patient care hours of all paid hospice employees and contract staff. The hospice must maintain records on the use of volunteers for patient care and administrative services, including the type of services and time worked.
- The team will include both employees and independent contractors (e.g., Medical Director)

As noted by rule, a hospice must be primarily engaged in providing the following care and services and must do so in a manner that is consistent with accepted standards of practice:

- Nursing services.
- Medical social services.
- Physician services.
- Counseling services, including spiritual counseling, dietary counseling, and bereavement counseling
- Hospice aide, volunteer, and homemaker services.
- Physical therapy, occupational therapy, and speech-language pathology services.

- Short-term inpatient care.
- Medical supplies (including drugs and biologicals) and medical appliances.

8. If this application proposes expanding an existing hospice agency, provide the county(ies) already served by the applicant and identify whether Medicare and Medicaid services are provided in the existing county(ies).

Not Applicable.

9. If this application proposes expanding the service area of an existing hospice agency, clarify if the proposed services identified above are consistent with the existing services provided by the agency in other planning areas.

Not Applicable.

10. Provide a general description of the types of patients to be served by the agency at project completion (e.g. age range, diagnoses, special populations, etc).

Eden Hospice at Snohomish County has carried out the DOH hospice need methodology (initial), as a starting point to identify populations. This initial numerical analysis resulted in the following findings:

Method 1:

Application of the Department of Health Hospice Need Methodology

STEP 1: Calculate the following two statewide predicted hospice use rates using department of health survey and vital statistics data:

- a. The percentage of patients age sixty-five and over who will use hospice services. This percentage is calculated by dividing the average number of unduplicated admissions during the last three years for patients 65 and over by the average number of past three years statewide total deaths age 65 and over.
- b. The percentage of patients under sixty-five who will use hospice services. This percentage is calculated by dividing the average number of unduplicated admissions during the last three years for patients under age 65 by the average number of past three years statewide total of deaths under age 65.

Table 4 provides the 3-year averages.

**Table 4
Snohomish County Average Hospice Admissions and Deaths By Age Group**

| | 2017 | 2018 | 2019 | 3-Year Average |
|--|-------------|-------------|-------------|-----------------------|
| Average number of unduplicated admissions for patients 65 and older | 26,365 | 26,207 | 26,017 | 26,196 |
| Average number of statewide total deaths age 65 and older | 42,918 | 42,773 | 44,159 | 43,283 |
| Percentage of patients age 65 and older who will use hospice services. | 61.43% | 61.27% | 60.52% | 60.52% |
| Average number of unduplicated admissions for patients under age 65 | 3,757 | 4,114 | 3,699 | 3,857 |
| Average number of statewide total deaths under age 65 | 14,113 | 14,055 | 14,047 | 14,072 |
| Percentage of patients under age 65 who will use hospice services. | 26.62% | 29.27% | 26.33% | 27.41% |

STEP 2:

Calculate the average number of total resident deaths over the last three years for each planning area by age cohort:

Calculate the average number of total resident deaths over the last three years for each Snohomish County age cohort for 2016, 2017 and 2018.

**Table 5
Deaths in Snohomish County By Age Cohort and 3-Year Average**

| | 2017 | 2018 | 2019 | 3-Year Average |
|---|-------------|-------------|-------------|-----------------------|
| Average number Snohomish County of total resident deaths of patients age 65 and older | 4,118 | 4,055 | 4,081 | 4,085 |
| Average number Snohomish County of total resident deaths of patients under age 65 | 1,483 | 1,533 | 1,533 | 1,516 |

STEP 3: Multiply each hospice use rate determined in Step 1 by the planning areas' average total resident deaths determined in Step 2, separated by age cohort:

Table 6 provides the Planning Area's average and projected resident deaths by age cohort.

Table 6
Snohomish County Average and Projected Deaths by Age Cohort

| | 2017 - 2019 Average | 3 Year Statewide Avg. Death Rate | Projected Hospice Patients |
|--|------------------------------------|---|---|
| Population age 65 and older for Snohomish County | 4,085 | 60.52% | 2,472 |
| Population under age 65 for Snohomish County | 1,516 | 27.41% | 416 |

STEP 4: Using the projected patients calculated in Step 3, calculate a use rate by dividing projected patients by the three-year historical average population by county. Use this use rate to determine the potential volume of hospice use by the projected population by the two age cohorts identified in Step 1, (a)(i) and (ii) of this subsection using OEM data:

Please see Table 7, which provides the potential volume of hospice use by age cohort.

Table 7
Potential Snohomish County Hospice Volume, 2019-2021 By Age Group

| Projected Hospice Patients | 2017-2019 Average Population | 2020 Population | 2021 Population | 2022 Population | 2020 Projected Patients | 2021 Projected Patients | 2022 Projected Patients |
|---|-------------------------------------|------------------------|------------------------|------------------------|--------------------------------|--------------------------------|--------------------------------|
| Snohomish County Population age 65 and Older | | | | | | | |
| 2,472 | 113,447 | 125,219 | 131,978 | 138,737 | 2729 | 2876 | 3023 |
| Snohomish County Population Under Age 65 | | | | | | | |
| 416 | 694,793 | 716,781 | 721,527 | 726,273 | 429 | 432 | 434 |

STEP 5: Combine the two age cohorts. Subtract the average of the most recent three years hospice capacity in each planning area from the projected volumes calculated in Step 4 to determine the number of projected admissions beyond the planning area capacity:

Please see Table 8, which provides the number of projected admissions beyond the planning area's existing capacity.

**Table 8
Snohomish County Admissions & Patient Days Unmet Need, 2019-2022**

| 2020 | 2021 | 2022 | Current Capacity Admits | | 2020 | 2021 | 2022 |
|-----------------|-----------------|-----------------|-------------------------|--|-------------------|-------------------|-------------------|
| Forecast Admits | Forecast Admits | Forecast Admits | | | Unmet Need Admits | Unmet Need Admits | Unmet Need Admits |
| 3157 | 3,308 | 3,458 | 2,950.87 | | 207 | 357 | 507 |

STEP 6: Multiply the unmet need from Step 5 by the statewide average length of stay as determined by CMS to determine unmet need patient days in the projection years:

Please see Table 9, which provides the unmet need for both admissions and patient days in Snohomish County.

**Table 9
Snohomish County Unmet Need Based on Patient Days, 2020 - 2022**

| 2020 Unmet Need Admits | 2021 Unmet Need Admits | 2022 Unmet Need Admits | Multiply Admits by 62.66 Days (ALOS) to Calculate Days | 2019 Unmet Need Days | 2021 Unmet Need Days | 2022 Unmet Need Days |
|------------------------|------------------------|------------------------|--|----------------------|----------------------|----------------------|
| 207 | 357 | 507 | 62.66 | 12,944 | 22,350 | 31,757 |

STEP 7: Divide the unmet patient days from Step 6 by 365 to determine the unmet need ADC:

Please see Table 10, which provides the unmet need based on Average Daily Census in Snohomish County. As noted below, absent additional hospice capacity, the Planning Area will experience *unmet* ADC of 87 by the target year 2022.

**Table 10
Snohomish County Unmet Need Based on ADC, 2020-2022**

| 2020 Unmet Need Days | 2021 Unmet Need Days | 2022 Unmet Need Days | Divide Unmet Need Days by 365 Days to Calculate Average Daily Census | 2020 Unmet Need ADC | 2021 Unmet Need Days ADC | 2022 Unmet Need Days ADC |
|----------------------|----------------------|----------------------|--|---------------------|--------------------------|--------------------------|
| 12,944 | 22,350 | 31,757 | 365 | 35 | 61 | 87 |

STEP 8: Determine the number of hospice agencies in the planning area that could support the unmet need with an ADC of thirty-five:

Please see Table 11, which provides the unmet need for Hospice Agencies in Snohomish County. As noted, absent additional hospice capacity, the Planning Area will experience numeric need for 3 agencies by the target year of 2022.

Table 11
Snohomish County Unmet Need for Hospice Agencies, 2022

| 2022 ADC (Unmet) | Agencies Needed in 2022 |
|-----------------------------|--|
| 87 | 2 |

Source: DOH 2020-2021 Hospice Need Methodology

b. Identify the negative impact and consequences of unmet hospice needs and deficiencies.

Hospice provides care, comfort, and support for people nearing the end of life, wherever they reside. With a focus on quality of life, hospice addresses the needs of the whole person, from managing pain and symptoms to providing emotional, social, and spiritual support. Given hospice care is primarily provided in a home setting, proximity to local hospice providers is an important factor. The Department’s hospice need methodology establishes that, without an expansion of services in the Planning Area, Snohomish County residents will have insufficient access to hospice care and the associated benefits.

Eden has adopted a commitment to Health Equity as the new “quadruple aim” of the former Triple Aim of Better Health, Better Healthcare and Control of Healthcare Costs. Disparity in access to hospice service adversely affects all three of the traditional aims and the project proposed by Eden Hospice at Snohomish County directly targets inequity in access. 10 Eden’s hospice outreach will concentrate on the dual eligible Medicare population – low-income Medicaid and Medicare eligible members. From an access basis, there is an alarming lower admission rate for Snohomish County dual eligible hospice admission rate when compared to the national hospice admission rate as well as the non-dual hospice admission local to national percent difference. Table 12 shows this difference.

Table 12

| Snohomish County Hospice Percent of National Hospice Admission Rates | | | |
|---|-----------------------------|-----------------|---|
| | Snohomish County | National | Snohomish County as % of National Rate |
| Dual Eligible Admissions per 1,000 Beneficiary Deaths | 527 | 574 | 92% |
| Non-Dual Eligible Admissions per 1,000 Beneficiary Deaths | 544 | 613 | 89% |
| Dual Eligible Admissions per 1,000 Beneficiary Deaths as a % of Non Dual Eligible Admissions per 1,000 Beneficiary Deaths | 97% | 94% | |

Berg Data Solutions: Medicare Fee For Service Data Base 2019

The dual eligible Medicare patients have a much higher acuity of ongoing conditions with fewer resources to address this higher need. As noted in a previous section, Dual-eligible individuals tend to have poorer health and functional status than those eligible for Medicare only. According to the (MMCO), 41% have at least one mental health diagnosis, 49% receive LTSS and 60% have multiple chronic

¹⁰ Snohomish County Health District has generated a comprehensive study of health disparity in Snohomish County in 2016

conditions. The average dual-eligible individual has six chronic conditions, while all other Medicare beneficiaries average only four. Dual-eligible individuals have greater limitations in ADLs than non-dual eligible individuals. In 2016, 26% of dual-eligible individuals had limitations in one to two ADLs, compared to 18% of non-dual eligible individuals and 28% had limitations in three to six ADLs, compared to 9% of non-dual-eligible individuals. Table 13 provides an example of how this higher acuity level contributes to healthcare expenditures for Medicare and Medicaid and patients as well.¹¹

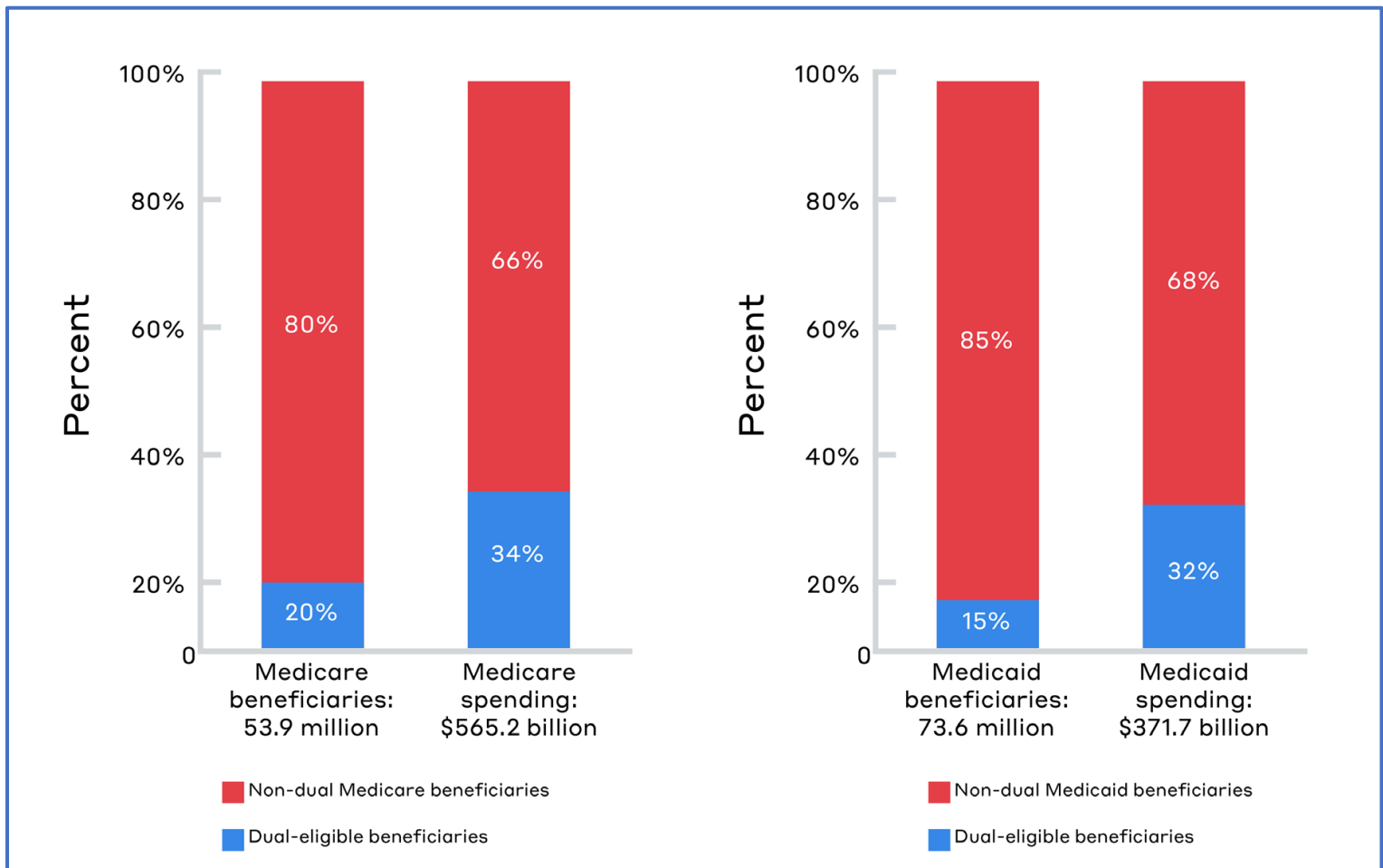
Given the severity of illness and disabilities, per-capita spending on dual-eligible individuals is more than three times higher than for Medicare-only beneficiaries:

- Average annual spending per dual-eligible individual in 2013 was approximately \$29,238.
- Average annual spending for those covered only by Medicare was approximately \$8,593 per person.

While dual-eligible individuals comprise 20% of the Medicare population, they account for 34% of total Medicare expenditures. Similarly, dual-eligible individuals comprise only 15% of the Medicaid population, account for 32% of total Medicaid expenditures. Table 13 provides an example of how this higher acuity level contributes to healthcare expenditures for Medicare and Medicaid and patients as well.¹²

Table 13¹³

Dual-Eligible Beneficiaries as a Share of Medicare & Medicaid Enrollment and Spending, CY 2013



¹¹ *Op. cit.* At Appendix 29. Pp. 8 - 9

¹² *Ibid.* Page 10

¹³ *Ibid.* Page 10

This disparity in use of hospice services reduces life expectancy and quality of life for the patient after a terminal diagnosis and places greater stress on caregivers while the patient is dying. Disparity in use of hospice services creates a more complex and stressful grieving process after death as described in the Better Health Section. Hospice patients also have a better care experience (as described in the Better Healthcare section) with enhanced coordination of care, a reduction in need for expensive emergency room and hospital care, and support for caregivers with respite care and bereavement services.

Better Health

Longer lives

Hospice care prolongs the life of the patient, compared with those who do not choose it. Terminal patients live from 20 days to more than 2 months longer in hospice, according to studies from 2004 through 2010 noted by the National Hospice and Palliative Care Organization. They also have less pain and suffering.

Hospice care available at home

Being in hospice care may allow seniors to stay in their home versus going into long-term care or assisted living. Nearly 90% of people over 65 want to stay in their home for as long as possible, according a 2011 survey by the AARP Public Policy Institute.

There are respite options for caregivers

Hospice care provides free respite options for caregivers in 2 ways: Respite volunteers can provide patient-sitting services. If the caregiver needs a break for a short time (a few hours at most), they can do so without having to pay. Hospice also provides a longer-term respite care option – up to 5 consecutive days for the patient in a hospice-approved nursing facility.

Social work and bereavement support

Hospice care also includes a social worker on the hospice team. The social worker can help patients and families find additional care and caregiver support services through local and federal programs. They can also help with finalizing burial plans. In conjunction with a spiritual counselor, social workers may also address the emotional needs of the patient and the family regarding the patient's eventual death. The patient and the family decide whether to use these services. Hospice care does not end when the patient dies. Bereavement support for up to 1 year after the patient's death is available to immediate family members.

Better Healthcare

Personalized and coordinated care plan

End-of-life care can be overwhelming, with a patient often seeing multiple health care professionals. Hospice provides each patient a doctor, nurse, home health aide and social worker, who coordinate the patient's daily care. Other provided health care professionals include a dietitian, and physical, occupational and speech therapists.

Reduced hospitalizations and fewer emergency room services

Hospice care also can be provided to those in a nursing home or assisted living facility, though the cost of nursing homes or assisted living facilities is not covered by hospice. A 2010 study of cancer patients in hospice by the Mount Sinai School of Medicine found that continuous hospice use leads to a reduction of hospital-based services, including fewer emergency and urgent care visits, and a greater likelihood that a patient will die at home, not in a hospital.¹⁴

Reduced rehospitalization from skilled nursing facilities

Hospice care reduces re-hospitalization. A study of terminally ill residents in nursing homes showed that residents enrolled in hospice are much less likely to be hospitalized in the final 30 days of life than those not enrolled in hospice (24% vs. 44%). Coordination of care can affect the patient and bereaved family members experience of the hospice patients care experience.

The need to control pain appropriately and address bereavement issues early are two aspects of caring for the terminal patient wherein family members experience significant stress . But under the direction of the Medicare hospice interdisciplinary team, these are required aspects of care included in every patient's plan of care. A 2007 study assessing length of stay and a perception that hospice care referral was too late found that bereaved family members reported that the hospice patient was referred too late when they perceived the patient had insufficient pain control and bereavement issues were not satisfactorily addressed.¹⁵

Washington State, with one of the lowest lengths of stay nationally, was one of the 5 states with the highest response that hospice referral was too late! Appendix 25 documents the high use of emergency room services for pain control for patients who are not receiving hospice services.¹⁶

Control of Healthcare Costs

Reduced out of pocket expense for patients and their families

Prescription medications are one of the biggest areas of cost savings for hospice patients. Hospice covers the cost of all medications for pain and comfort management related to the terminal illness. Rental costs of durable medical equipment – hospital beds, wheelchairs, walkers, wound dressings, and catheters – are included as part of the paid-by-hospice coverage. Without hospice, the patient would need to pay for this equipment or would need to pay a Medicare rental copayment after submitting a doctor's approval for the equipment.

A previously cited study provides an example of total costs which are partially borne by the patient and health plan. The Survival and Cost-Effectiveness of Hospice Care for Metastatic Melanoma Patients study focused on patients 65 years of age and older with metastatic melanoma who died between 2000 and 2009. The study found that patients with four or more days of hospice care had longer survival rates and incurred lower end-of-life costs. Patients with four or more days of hospice care incurred average costs of \$14,594, compared to the groups who received one to three days of care, and no hospice care at all (\$22,647 and \$28,923 respectively).¹⁷

Reduced total costs of care.

Table 14-A provides an example of 2019 Medicare costs for beneficiaries hospitalized in the final 30 days of life by King County hospitals and by the actual expected level of hospice utilization. Table 14-A

¹⁴

¹⁵ Erica R. Schockett, Joan M. Teno, Susan C. Miller, Brad Stuart.. Timing of referral to hospice and quality of care PubMed 17583469. 2007

¹⁶ Smith AK, McCarthy E, Weber E, Cenzer IS, Boscardin J, Fisher J, Covinsky K. “Half of older Americans seen in emergency department in last month of life; most admitted to hospital, and many die there”

¹⁷ *Op cit.* Jinhai Huo, PhD, MD, MP *et al* “Survival and Cost-Effectiveness of Hospice Care for Metastatic Melanoma Patients”, Am Journal Managed Care.

when compared to 14-B shows that the costs were significantly mediated due to more use of hospice services by Providence Everett (note that the actual use of hospice is higher than expected in Snohomish County hospitals while the opposite is true for King County. Looking at the King County data in Table 14-A, our estimate of expenditure differences would be approximately \$4,556 per patient (\$4,746 X 96%). In Table 14-B, the median/average for the two Snohomish hospitals with high hospital use yields a patient savings of \$2,362. The difference between King County expenditures and Snohomish expenditures per discharge can be attributed to higher hospice use. While this is obviously an imprecise estimate subject to diagnostic and age mix as well as percentage of hospice penetration, the lower expenditures are conservative – compared to the national study cited in the previous section and the narrative and analysis of the example of the Providence CN 19-44 analysis presented in Table 15 which calculated savings per Medicare beneficiary of \$3,945 for patients enrolled in hospice during the final 5 weeks of their lives.

Table 14-A¹⁸

| Comparison of Average Payment of King County Hospital Patients with Hospitalization in the Final 30 Days of Life With the National Average and the National Average When Discharged to Hospice | | | |
|---|--|---|--|
| | Average Medicare Payment - Patients With a Hospitalization in the Final 30 Days of Life | % of Discharges Coded to Hospice | Expected % of Discharges Coded to Hospice |
| HARBORVIEW MEDICAL CENTER - 500064 (SEATTLE, WA) | 32,121 | 1.1% | 3.2% |
| UNIVERSITY OF WASHINGTON MEDICAL CTR - 500008 (SEATTLE, WA) | 25,589 | 2.1% | 2.6% |
| SWEDISH MEDICAL CENTER / CHERRY HILL - 500025 (SEATTLE, WA) | 21,585 | 2.3% | 2.8% |
| VIRGINIA MASON MEDICAL CENTER - 500005 (SEATTLE, WA) | 20,239 | 1.6% | 3.0% |
| VALLEY MEDICAL CENTER - 500088 (RENTON, WA) | 18,989 | 3.3% | 4.0% |
| SWEDISH MEDICAL CENTER - 500027 (SEATTLE, WA) | 18,660 | 2.2% | 3.0% |
| SWEDISH ISSAQUAH - 500152 (ISSAQUAH, WA) | 17,947 | 4.8% | 3.6% |
| MULTICARE AUBURN MEDICAL CENTER - 500015 (AUBURN, WA) | 17,617 | 2.9% | 4.0% |
| ST FRANCIS COMMUNITY HOSPITAL - 500141 (FEDERAL WAY, WA) | 17,560 | 3.6% | 4.0% |
| HIGHLINE MEDICAL CENTER - 500011 (BURIEN, WA) | 17,362 | 4.5% | 4.3% |
| NORTHWEST HOSPITAL & MEDICAL CENTER - 500001 (SEATTLE, WA) | 16,871 | 3.8% | 3.4% |
| EVERGREENHEALTH MEDICAL CENTER - 500124 (KIRKLAND, WA) | 15,874 | 4.8% | 3.7% |
| OVERLAKE HOSPITAL MEDICAL CENTER - 500051 (BELLEVUE, WA) | 15,141 | 4.0% | 3.0% |
| | | | |
| Median Average Payment of 13 Hospitals for King County Patients with a Hospitalization in the Final 30 Days of Life | 17,947 | 3.3% | 3.4% |
| National Average | 18,756 | | |
| National Average When Discharged to Hospice | 14,010 | | |

¹⁸ Berg Data Solutions. Medicare Fee for Service Data Set 2019

Table 14-B

| Comparison of Average Payment of Snohomish County Hospital Patients with Hospitalization in the Final 30 Days of Life With the National Average and the National Average When Discharged to Hospice | | | | |
|---|---|------------|----------------------------------|---|
| | Average Medicare Payment - Patients With a Hospitalization in the Final 30 Days of Life | Discharges | % of Discharges Coded to Hospice | Expected % of Discharges Coded to Hospice |
| SWEDISH EDMONDS HOSPITAL 500026 (EDMONDS, WA) | 16,635 | 144 | 5.5% | 4.0% |
| PROVIDENCE REGIONAL MEDICAL CENTER 500014 (EVERETT, WA) | 16,109 | 309 | 4.1% | 3.3% |
| | | | | |
| Snohomish County Patients with a Hospitalization in the Final 30 Days of Life (w/o suppressed data due to volume) | 16,372 | | 4.8% | 3.7% |
| National Average | 18,756 | | | |
| National Average When Discharged to Hospice | 14,010 | | | |

In regard to total costs of care as they relate to managing healthcare costs as part of Washington's Triple Aim, Providence Health and Services dba Providence Hospice in its recently approved hospice application in Clark County (CN19-44) calculated that based on Medicare claims data, a savings of over \$99 million across Washington State. Payers could have saved nearly \$99 million annually if all Medicare beneficiaries who died in 2017 without hospice, instead benefited from five weeks of hospice (35 days ALOS). Of course, the savings would be *much greater* if Washington hospice patients received 88.6 days of hospice care¹⁰, which was the 2017 national ALOS.

Table 15

| Exhibit 7: Providence CN 19-44 Hospice Cost Savings Analysis From CN 9-44 Table 26. 2017 WA State Hospice Analysis | | | |
|--|------------------------|-------------------------------|----------------------------|
| Estimated Patients without Hospice | | | |
| Resident Deaths | 46,324 | | |
| Hospice Deaths | 21,071 | | |
| Deaths without Hospice | 25,253 | | |
| Payment Reduction Estimate | | | |
| Weeks with Hospice | Average Payment | Deaths without Hospice | Est. Total Payments |
| 0 | \$36,944 | 25,253 | \$932,951,942 |
| 5 | \$32,999 | 25,253 | \$833,330,793 |
| Reduced Payments if patients had 5 weeks of hospice | | | \$99,621,149 |

Source: CMS Hospice State Profile -- Washington State 2017

Definition of the types of patients that are expected to be served by the project. The types of patients expected to be served can be defined according to specific needs and circumstances of patients (i.e., culturally diverse, limited English speaking, etc.) or by the number of persons who prefer to receive the services of a particular recognized school or theory of medical care.

Eden has been providing home health services in Snohomish County since 2014 and operates a skilled nursing facility (SNF), EmpRes home health services and EmpRes home care. With this experience has local knowledge for developing referral relationships within Snohomish County. Eden understands each patient and family is special. For this reason, Eden tailors its team approach to the specific needs of each patient and family. Hospice services are provided in the patient's home, no matter where that home is located. It may be a private residence, an assisted living community, an adult care home, or a residential or intermediate care community. The proposed hospice will provide care to Medicare and Medicaid eligible patients as well as all other patients, regardless of the source or availability of payment for care.

The National Academy of Science, delves into cultural issues in the article "*Dying in America Improving Quality and Honoring Individual Preferences Near the End of Life*":

"Patients' backgrounds, culture, ethnicity, and race influence their perceptions about life, illness, suffering, dying, and death and the meaning they ascribe to these events. These perceptions in turn affect preferences for the kinds of care people want, how much they want to know about their situation and choices, whether and how they want to make treatment choices, whom they want to make those choices if they cannot, and the role of the family in the entire process. In the coming years, rapid growth in the proportion of U.S. elderly that are members of racial/ethnic minority groups will challenge clinicians to communicate more effectively with people of many cultural traditions. It is vital, that clinicians be aware of common differences in perception among racial, ethnic, and cultural groups so that at the very least, they can ask the right probing questions and have a firmer basis for individualized understanding of patients and their families. As noted above, although there are many differences among individual perspectives and actions within groups, the *general* pattern in minority populations is one of a lack of advance care planning and a preference for more intensive treatments; poorer communication with clinicians is part of this pattern. Although patients and families may not follow clinicians' advice and recommendations, "avoiding such communication increases the likelihood of poor end-of life decision making."¹⁹

There are at least nine special populations that Eden will focus on developing a culturally competent outreach capability. These populations include the following: (1) Dual eligible Medicare-Medicaid patients; (2) Hispanic patients; (3) Veterans; (4) Black/African American, non-Hispanic patients (5) Residents seeking a non-religiously affiliated, secular hospice provider; (6) LGBTQ patients; (7) Federally Qualified Health Center and other low-income patients; (8) Home Health patients and (9) SNF patients.

Dual Eligible Patients:

Despite efforts by existing Snohomish hospice providers, Snohomish hospice admission rates are *at least 8% below* the nationwide rate for dual-eligible hospice patients. Furthermore, Snohomish (hospice) admission rates are *at least 14% below* the nationwide rate for non-dual-eligible hospice patients. Correcting these admission rate disparities will increase hospice referrals by at least 3%. Rectifying this voluminous disparity in access and utilization among the low-income, dual-eligible Medicare patients, and non-dual eligible patients will **add 91 Medicare hospice admissions**. Adding

¹⁹ Committee on Approaching Death: Addressing Key End-of-Life Issues, Institute of Medicine of the National Academies, pg 142

91 additional admissions will result in a 16-patient average daily census (using 2020 hospice data via Berg Data). And, when adding the 16-patient average daily census to the calculated need census in 2022, the result is a 103 average daily census need – which means a net need for nearly THREE hospices.

Eden has a plan to succeed in addressing current and future needs. Eden will increase access to hospice service through outreach to the dual-eligible Medicare population; provide information about Eden’s acceptance to groups who have specific needs and require sensitive and culturally competent hospice services; collaborate with all outreach services which assist the *chronically* under-served; and provide timely and sensitive attention and information to anyone in the underserved community (such as family members, partners, and friends) who assist in the care of a loved one during this critical time of need. To reduce disparity for the dual-eligible population Eden will reach out to existing agencies such as federally qualified health centers and healthcare providers who disproportionately serve the following cohorts:

- Medicaid population
- Dual-eligible and low income, Medicare population
- Hispanic populations
- Native Americans
- African Americans
- LGBTQ population and community support sources

Each of these population cohorts have socio-economic characteristics that lead to health disparity and access barriers resulting in lower utilization of hospice services. Additionally, each target population cohort is entitled to hospice services that are culturally sensitive, respectful, and competent.

This strategy of increasing hospice utilization to underserved Snohomish County residents will not only improve the quality of life for patients facing death and for their families and friends who will grieve their loss, but it will:

- Reduce healthcare costs
- Meet the DSHS LTSS Dual-Eligibility service goals and Washington’s Triple Aim for healthcare services

Hispanic Patients:

As noted in our discussion of dual-eligible patients our overall outreach strategy of working with federally qualified health centers, particularly those serving the North and South Everett areas will reach a large portion of the Hispanic population that needs hospice services. Eden will supplement its language and cultural competence capabilities through working with the federally qualified health centers and the National Hospice and Palliative Care Organization (NHPCO) as well as recruiting Hispanic team members for this population cohort.

Veterans:

American Fact Finder reports that Snohomish County recorded 52,681 veterans in 2018, which made up 8.3% of the adult population ages 19 and older. Eden is a member of the NHPCO and participates in the We Honor Veterans Program. Eden is also part of the TriWest Healthcare Alliance (TriWest) which is an honored third-party administrator for the U.S. Department of Veterans Affairs (VA). TriWest works with high-performing, credentialed community providers that partner with VA to provide health care to Veterans in their local community. Eden Hospice at Snohomish County will also achieve “partner” standing with “We Honor Veterans Program” with CoN approval.

Native American Patients:

According to the American Bar Association, “By any measure, health care for Native Americans lags behind other groups despite a legal obligation on part of the US to provide health care to American Indians and Alaska Natives. Health outcomes for Native Americans are adversely impacted by wholly inadequate access to comprehensive health service” which includes hospice. Due to decades long of under funding healthcare for Native Americans, generations of poor health and short life spans plague many Native communities, including the communities in Snohomish County. “Native Americans continue to die at a higher rate than other American in many categories of preventable illness.” Nationally, the average life expectancy for a Native American person born today is 5.5 years below that for all other races. 1 in 4 Native Americans live in poverty, the health rate compare to all other races – and there is a massive gap in medical resources available to the Native population.

The Snohomish County Health Department has documented this disparity identifying the Tulalip Bay and North Coast as the area of most significant health disparity in the county.²⁰ Several Native communities have concentrated populations in this geographic area. Eden plans a comprehensive outreach to hospice healthcare to the Native communities in Snohomish and believes that culturally competent outreach is imperative. To ignore this critical situation is adds insult to injury. Because Eden’s charity care policy is far more robust than others, Eden will not turn it’s back on a population that has been largely ignored as it relates to healthcare.

According to CMS, “Decisions about end-of-life care, such as location of death and levels of care, are important considerations for American Indians and Alaska Natives. However, tribal citizens often lack ACCESS to hospice services that would inform them about their OPTIONS. Those who can access these services may feel prevented from doing so due to a lack of culturally sensitive hospice care options and health policies.”

Life, death, and dignity are uniquely defined by one’s own culture. Cultural perspectives about dying in an AI/AN are noted as a common barrier to seeking hospice care. Culturally sensitive care can increase AI/AN access by making services responsive to values, beliefs, and traditions. AI/AN traditional values and beliefs are often sacred and personal. It is critical that medical professionals in hospice care respect and support. Because of the substantial heterogeneity in Native communities, Eden recognizes that there is never a ‘one size fits all’ approach to the local Snohomish Tribes. As such, Eden believes in fluid culturally sensitive care, that the care is unique and individually based.

Eden will reach out to the various Native Tribes with the goal of building positive partnerships based on developing trust, awareness and respect to all involved during end-of-life care. Eden will

- Gain support from tribal leadership, program staff and community on end-of-life care;
- Create partnerships with national and local entities;
- Embed tribal consultation into our educational programs for staff to allow for more smoother integration;
- Educate care givers about the purpose and benefits of hospice care;
- Develop a cultural sensitivity training curriculum for the hospice workers in Snohomish and any other hospice county Eden is licensed a hospice CoN.

Black/African American Patients

3.8% of Snohomish County’s roughly 820,00 residents identify as black and 4.9% are mixed race.

²⁰ 2016 Health Profiles: Comparing Snohomish Health Reporting Areas; Snohomish Health District, 2016

21% of Black/African American residents also report unmet Medical need.

According to research, black Americans tend to not choose hospice in end-of-life situations. In fact, they choose life support over hospice, and are the most likely to die in a hospital. This is due to a complex history related to trust in healthcare, low-income etc. ²¹ See Appendix 37. Eden has reached out to Black Snohomish County (Black SnoCo), a group that connects all residents of Snohomish County to local Black leaders, entrepreneurs and assists the community in many issues including healthcare. Black SnoCo referred us The Snohomish Ebony Pac; Snohomish County Equity Alliance; NAACP Snohomish County; and Communities of Color Commission. Should Eden be granted CoN approval, they will take the opportunity to develop strong and lasting relationships with these important groups.

LGBTQ Patients

Ethnically diverse populations require culturally competent and respectful outreach to increase the knowledge and acceptance of hospice services that are designed to meet each ethnic cohorts' expectations. As noted, the Black/African American population cohort poverty level is at 50% and the reported unmet medical need is 21%. Ethnic diversity contributes to disparity in health status and healthcare outcomes, which will be discussed in a later section. Even 32% of the Asian population cohort that has high life expectancy and the lowest unmet medical need rate of 9% reports difficulty with the English language. Eden Hospice at Snohomish County will build on its 7 years of relationships in the community to establish effective outreach and as noted in the previous section on dual-eligible residents will partner with FQHCs such as the International Community Health Services that maintains a language bank of healthcare interpreters and providers. The Demographic Profile of Snohomish in Table 16 provides the 2018 Demographic profile for King County prepared by the Employment Security Department for Washington State.

Secular Hospice:

As noted throughout the CoN application, the residents of Snohomish County who face terminal illness and need hospice, also have the right to be informed and have access to Washington State's Death with Dignity end-of-life option. Eden will provide an additional resource for patients and healthcare providers for supporting the Death with Dignity end-of-life statute.

LGBTQ Population

Seattle and Snohomish County are home to a growing lesbian, gay, bisexual, transgender, and queer (LGBTQ) community. Recent estimates (2011-2015) show that 4% of Snohomish County adults identified as lesbian, gay, or bisexual (LGB). It is important to note that in 2019 more than half of Washington's same-sex couples live in King County, which has not only the largest number of these couples, but also the highest percentage — there are 12.1 same-sex couples for every 1,000 households in the county (or 1.2 percent of all households). Given the adjacency Snohomish County to the county with the 19th highest percentage of same-sex couples of all counties in the United States, rapid growth of this community is expected in Snohomish County.

Given that three hospice providers in Snohomish County are restricted or are perceived to be restricted by religious directives, the LGBTQ patients and their support community need and want hospice options that have no overarching religious affiliation. It is important to first briefly

²¹ Christophe Adrien; 5 Reasons Why African Americans Are Less Likely to Choose Hospice. Hospice Blog, May 2017

review the spectrum of health status disparity and the health disparity access and treatment facing the LGBTQ adult population.

“LGBT older adults are less likely than their heterosexual peers to reach out to providers, senior centers, meal programs, and other entitlement programs because they fear sexual orientation- or gender- based discrimination and harassment. LGBT older adults experience mental and physical illness more frequently than their heterosexual counterparts:

- Nearly one-third of transgender people do not have a regular doctor and report poor general health
- LGB older adults have higher rates of poor physical health and mental distress 41 percent of LGBT older adults report having a disability, compared to 35 percent of heterosexual older adults
- 9 percent of lesbian, gay, bisexual and queer people report that a doctor or other health care provider used harsh or abusive language while treating them; among transgender people, the number was 21 percent.”²²

The special challenges facing many LGBTQ older adults must be kept in mind and adequately addressed when designing and providing hospice services to the aging – Eden is eager to participate in the special needs of the LGBTQ community. Should Eden be granted the CoN, we will become involved with organizations in Snohomish County and the State of Washington that support the healthcare/hospice needs of the LGBTQ community. For example, Eden will carry out outreach to the Northwest LGBT Senior Care Providers Network, an informal coalition of Senior Care Providers working together to provide advocacy and quality care for the LGBTQ seniors of Washington State. To assure culturally competent and sensitive outreach services, Eden will also affiliate and become involved with SAGE, the country’s largest and oldest organization dedicated to improving the lives of lesbian, gay, bisexual, and transgender (LGBTQ) older adults. Eden will also work with local and national resources that specifically support healthcare providers that serve the LBGTQ community.

Table 16
Snohomish County Population Mix by Age, Gender and Ethnicity

| | Snohomish County | Washington state |
|--|------------------|------------------|
| Population by age, 2018 | | |
| Under 5 years old | 6.4% | 6.1% |
| Under 18 years old | 22.6% | 22.1% |
| 65 years and older | 13.5% | 15.4% |
| Females, 2018 | 49.8% | 50.0% |
| Race/ethnicity, 2018 | | |
| White | 77.6% | 78.9% |
| Black | 3.7% | 4.3% |
| American Indian, Alaskan Native | 1.6% | 1.9% |
| Asian, Native Hawaiian, other Pacific Islander | 12.3% | 10.1% |
| Hispanic or Latino, any race | 10.4% | 12.9% |

Source: Snohomish County Profile January 2020 Employment Security Department

Home Health: EmpRes (Eden) Home Health of Whatcom County has served in Snohomish

²² The Facts on LGBT Aging. sage Advocacy and Services for LGBT Elders. Info SageUSA.org

County since 2014. The nine home health agencies that are established refer approximately 6% of their patients to hospice. As the Eden Snohomish County hospice matures, approximately 40 hospice patients could be referred annually to hospice services by the Eden hospice.

SNF: Eden operates one SNF in Snohomish County. Administration of Snohomish and Rehab reports 24 – 36 hospice referrals per year for its patients.

11. Provide a copy of the letter of intent that was already submitted according to WAC 246-310-080 and WAC 246-310-290(3).

A copy of the letter of intent is provided in Appendix 2.

12. Confirm that the agency will be licensed and certified by Medicare and Medicaid. If this application proposes the expansion of an existing agency, provide the existing agency’s license number and Medicare and Medicaid numbers.

Eden Hospice at Snohomish County, LLC confirms that the agency will be licensed by Washington State and certified by Medicare and Medicaid. It is not an existing agency.

13. Identify whether this agency will seek accreditation. If yes, identify the accrediting body.

Eden Hospice at Snohomish County, LLC confirms that the agency will seek accreditation by the Accreditation Commission for Health Care (ACHC).

CERTIFICATE OF NEED REVIEW CRITERIA

A. Need (WAC 246-310-210)

WAC 246-310-210 provides general criteria for an applicant to demonstrate need for healthcare facilities or services in the planning area. WAC 246-310-290 provides specific criteria for hospice agency applications. Documentation provided in this section must demonstrate that the proposed agency will be needed, available, and accessible to the community it proposes to serve. Some of the questions below only apply to existing agencies proposing to expand. For any questions that are not applicable to your project, explain why.

1. For existing agencies, using the table below, provide the hospice agency’s historical utilization broken down by county for the last three full calendar years. Add additional tables as needed.

Not applicable.

2. Provide the projected utilization for the proposed agency for the first three full years of operation. For existing agencies, also provide the intervening years between historical and projected. Include all assumptions used to make these projections.

**Table 17
Eden Hospice at Snohomish County Projected Utilization**

| Snohomish County | 2022 | 2023 | 2024 |
|----------------------------|-------------|-------------|-------------|
| Total number of admissions | 81 | 180 | 276 |
| Total number of Days | 4,875 | 11,019 | 16,888 |
| Average Daily Census | 13.36 | 30.19 | 46.27 |

Assumptions

- Given the high unmet need (ADC of 87) for two hospice agencies projected by 2022 in Snohomish County, the project-related utilization is projected to reach capacity (ADC) by the third full year of operation (2024). A moderate ramp-up is assumed in prior years.
- Disparity in hospice admission rates within Snohomish County particularly for low-income Medicare dual-eligible beneficiaries as well as Medicaid eligible patients (lower hospice use due to age of the Medicaid population that does not qualify for Medicare) at 86% of the non-dual-eligible Medicare beneficiaries within Snohomish County. Appendix 21 provides the market share assumptions for patients served in 2022 – 2024 by Eden Hospice at Snohomish County.
- 45% of the Medicare hospice population are in Medicare Advantage plans and Eden expects its various outreach programs described in the application will garner a share of those patients equivalent to the share of non-dual and dual eligible hospice patients.
- Outreach strategy to Federally Qualified Health Centers to reach special populations experiencing health disparity (e.g., Community Health Center of Snohomish – Everett, Community Health Center of Snohomish – Arlington Clinic).

- Disparity in access particularly for Hispanic Snohomish County residents where 34% report unmet medical need and 19% (Puget Sound Region) report a language barrier. 19% report English language difficulty Puget Sound 2016.
- 21% of Black/African American residents also report unmet Medical need.
- Capability to refer home health agency patients from Eden Home Health of Snohomish County as well as other home health agencies and Snohomish County skilled nursing facilities – one operated by EmpRes.
- Patient days are calculated by multiplying admissions by Length of Stay.
- Average length of stay (ALOS) is set to start at below the Washington statewide average of 62.66 days -- 60.2 days ramping up to 61.2 days.
- Average daily census is calculated by dividing patient days for each year by 365 days.

Appendix 21 provides the market analysis summary of patient admissions, length of stay, patient days and average daily census that foots to the Utilization Summary that is included in Table 17, which are volumes used in the pro forma. Small differences are due to rounding in multiple calculations.

3. Identify any factors in the planning area that could restrict patient access to hospice services.

The state methodology identifies a need for an additional 3 hospices in 2022. Each operating at an average daily census of 35 patients (13,140 patient days. Eden Hospice at Snohomish County projects a patient census of 13.4 patients (4,875 days) in 2022 increasing to average daily census of 46.3 patients (16,888 days) in 2024.

Eden Hospice is using the NHPCO reported mix of hospice patients in 2018 (Appendix 7). The Washington percentages show wide variance with Cancer making up over 44% and other diagnoses making up 56% (Washington State 2017 – 2018 Methodology). Eden works to improve access for all diagnostic cohorts to reduce access disparity for Snohomish County patients with diagnoses other than Cancer. Table 18 below reflects the 2020 (National Hospice and Palliative Care Organization) NHPCO Facts and Figures findings of diagnostic mix in 2017 and 2018.

Table 18
Eden Hospice at Snohomish County Provisional Diagnostic Mix , 2021 – 2024

| Diagnosis | Percent |
|---------------------------|---------|
| Cancer | 30 |
| Heart/Cardiac/Circulatory | 17 |
| Dementia | 16 |
| Lung/Respiratory | 11 |
| Stroke/Coma | 10 |
| Other | 15 |
| Total | 100% |

Snohomish County is served by nine approved agencies with five agencies operating in Snohomish County during 2019. Table 19 shows that five agencies are based primarily in Snohomish County while two are based in King County Four approved hospices were not operational during 2019.

Table 19

| Total Admissions and Length of Stay for CoN Approved Hospices in Snohomish County | | | |
|--|-------------|------------------|--------------|
| Hospice Agency | Average LOS | Total Admissions | Market Share |
| Alpha Home Health | 0.0 | 0 | 0% |
| Continuum | 0.0 | 0 | 0% |
| Envision | 0.0 | 0 | 0% |
| Inspiring | 0.0 | 0 | 0% |
| Providence Hospice and Home Care | 58.5 | 1,885 | 62% |
| Snohomish County Admissions Only for Multi-County Hospices | | | |
| Evergreen Health Hospice Care | 62.1 | 524 | 28% |
| Hospice of Northwest | 70.4 | 63 | 2% |
| Kaiser Foundation Health Plan | 59.2 | 69 | 4% |
| Providence Seattle | 80.0 | 15 | 3% |
| Admissions from DOH Survey; Length of Stay from Fee for Service Estimate of Principal County (Berg Data) | | | |

Table 19 shows that two of the operational hospices had length of stay that exceeded the Washington State length of stay average of 62.66 days, while the two hospices that account for 90% of the market share had lengths of stay that were below 62.66 days.

4. Explain why this application is not considered an unnecessary duplication of services for the proposed planning area. Provide any documentation to support the response.

a. Existing Providers of Hospice

Table 19 provided the list of nine hospice agencies approved to serve Snohomish County. Evergreen Health Hospice Care is located in King County where 81% of its patients reside. Kaiser Health Plan and Providence Seattle are also based in King County with Kaiser Health Plan focusing primarily on its members.

While three of the nine operating hospices serve more limited Snohomish County Medicare, Medicaid and commercial insurance population cohorts; the actual utilization of hospice services in Snohomish County is below national averages for the dual eligible and non-dual-eligible (low income) Medicare population. If the dual-eligible population is underserved, then the Medicaid population is underserved because both populations need outreach just to reach national average rates of utilization. On the commercial insurance side, it is also safe to assume that if the non-dual (higher income) Medicare population is underserved then outreach is also needed in the commercial population.

Washington State has adopted the Triple Aim of Better Health, Better Healthcare and Better Control of Healthcare costs. Striving to move Snohomish County from below average utilization of hospice services is a critically important first step to achieving the Triple Aim (as it applies to hospice care). Table 13 shows what “average” healthcare expenditures are for the dual eligible

population. In relating to the control of healthcare costs arm of the Triple Aim, Table 14-A, and Table 14-B show what verging on average achieves, in a comparison to Snohomish County and King County healthcare costs in the last 30 days of life. Table 14-A shows that as the percentage of actual discharge ratio to hospice approaches the expected discharge rate to hospice, overall Medicare healthcare costs decline dramatically. Table 14-B shows that this trend continues with overall higher rates of discharges to hospice when compared to expected discharge rates. Still, Table 14-B shows that hospitals still must achieve even greater discharge rates that are higher than “average” or expected rates because there are still \$2,362 (13%) higher healthcare expenditures than the national average of Medicare healthcare expenditures for patients discharged to a hospice.

Examining the impact of improved access to hospice care is complicated—interpreting healthcare **cost data** is more evolved in comparison to data that measures “Better Health” and “Better Healthcare”. As such, healthcare costs become the focus, this is unfortunate. For example, we know from several patient studies that patients live longer when discharged to hospice, compared to patients that remain in the hospital. Families who have experienced hospice often regret not engaging in its services earlier. Hospice providers should provide extensive outreach and support to patients and their families. More studies about the positive impact of outreach and support are needed, but Eden is keenly aware of the positive effects and strives to be the best in an under researched area of hospice care.

In summarizing the response to the question of unnecessary duplication; Eden cannot attest that each approved hospice will provide nonduplicative service, but we can attest to the fact that the Eden project represents expansion of hospice services that is not duplicative. Appendix 21 summarizes Eden’s plan to raise hospice utilization levels to the national average by reducing healthcare disparity in access for the dual-eligible Medicare population, Medicaid population, LGBTQ population, Hispanic population and individuals who want to control their life’s end that in addition to hospice care may include Death with Dignity. Many of the population cohorts identified face financial barriers and Eden has addressed this problem through its Charity Care policy that is consistent with most Washington hospitals, e.g., 100% discount of out-of-pocket hospice service costs for FPL of 200% or lower with substantial discounts up to of 400% FPL (Appendix 16).

b. Existing Services are not Available and Accessible Due to a Variety of Barriers

The 2016 Snohomish County Health Needs Assessment identified many areas of health care utilization and outcome disparity based on geographic, education level and economic barriers to healthcare access. The analysis of death rates across 11 geographic subdivisions reveals that large areas of the population are below the poverty level and have a higher percentage of Hispanics and Blacks. Unfortunately, these large areas also have greater health disparities. For Snohomish County, there are no current studies that directly relate access to health care as varying by race, LGBTQ status or Veterans’ status.

In terms of longevity of life, the Tulalip Bay and North Coast demonstrates significant disparity which also flows through to death rates per 100,000 persons from heart disease and cancer. North Everett and South Everett also exhibit age longevity disparity and moderately higher death rates.

In terms of the poverty level, North and South Everett and the Tulalip Bay and North Coast areas have similar poverty rates that are higher than the rest of Snohomish County.

The Hispanic population makes up approximately 10% of the Snohomish County population and is concentrated in North Everett, 14% and South Everett, nearly 15% of the overall population. 19% - 24% of Hispanic respondents do not speak English very well indicating a need for Spanish

language in brochures and materials as well as bilingual staff. This survey also shows that the concentrated area of Snohomish County for respondents who do not speak English well is in South Snohomish County where over 13% of respondents do not speak English well.²³ Exhibit 1 summarizes this data.

Exhibit 1

| | | King County | | Snohomish County | | |
|---|-------------------------------------|--|---------|------------------|--------|-------|
| | | Estimate | MoE | Estimate | MoE | |
| Total Population 5 years and over | | 1,952,500 | * | 710,600 | * | |
| Speak only English | | 1,435,100 | 5,890 | 572,500 | 3,325 | |
| Speak a language at home other than English | Speak English "very well" | 312,700 | 5,277 | 84,000 | 2,827 | |
| | Speak English less than "very well" | Total, Speak English less than "very well" | 204,800 | 4,223 | 54,100 | 2,247 |
| | | Spanish | 53,000 | 2,038 | 17,000 | 1,282 |
| | | Russian, Polish, or other Slavic languages | 15,700 | 1,380 | 5,800 | 723 |
| | | Other Indo-European languages | 19,100 | 1,539 | 4,200 | 585 |
| | | Korean | 10,500 | 935 | 5,500 | 698 |
| | | Chinese (incl. Mandarin, Cantonese) | 36,100 | 1,522 | 4,600 | 580 |
| | | Vietnamese | 19,400 | 1,225 | 5,200 | 751 |
| | | Tagalog (incl. Filipino) | 9,400 | 1,025 | 2,600 | 506 |
| | | Other Asian and Pacific Island languages | 23,500 | 1,336 | 5,800 | 706 |
| | | Other and unspecified languages | 18,200 | 1,371 | 3,600 | 629 |
| Speak only English | | 73.5% | 0.3% | 80.6% | 0.5% | |
| Speak a language at home other than English | Speak English "very well" | 16.0% | 0.3% | 11.8% | 0.4% | |
| | Speak English less than "very well" | Total, Speak English less than "very well" | 10.5% | 0.2% | 7.6% | 0.3% |
| | | Spanish | 2.7% | 0.1% | 2.4% | 0.2% |
| | | Russian, Polish, or other Slavic languages | 0.8% | 0.1% | 0.8% | 0.1% |
| | | Other Indo-European languages | 1.0% | 0.1% | 0.6% | 0.1% |
| | | Korean | 0.5% | 0.0% | 0.8% | 0.1% |
| | | Chinese (incl. Mandarin, Cantonese) | 1.8% | 0.1% | 0.6% | 0.1% |
| | | Vietnamese | 1.0% | 0.1% | 0.7% | 0.1% |
| | | Tagalog (incl. Filipino) | 0.5% | 0.1% | 0.4% | 0.1% |
| | | Other Asian and Pacific Island languages | 1.2% | 0.1% | 0.8% | 0.1% |
| | | Other and unspecified languages | 0.9% | 0.1% | 0.5% | 0.1% |

Source: 2012-2016 American Community Survey 5-Year Estimates

Exhibit 2 provides an analysis of cause of death and death rates by ethnic group for the overall population and top two causes of death for Snohomish County residents.²⁴ These causes of death account for approximately one half of the hospice population. The data does not show significantly higher death rates for North and South Everett but does show significantly higher death rates for Tulalip Bay and the North Coast indicating a need for outreach to this geographic area and to the American Indian population that resides in this area.

²³ Central Puget Sound Demographic Profile; Puget Sound Regional Council, 2018. Page 18

²⁴ 2016 Health Profiles: Comparing Snohomish Health Reporting Areas; Snohomish Health District, 2016. Pg. 4

Exhibit 2

Cardiovascular disease mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Fir | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|-------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 216.8 | 156.9 | 166.7 | 211 | 185 | 162.8 | 195.6 | 189.2 | 190.5 | 217.6 | 192.1 | 259.3 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Cancer mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Fir | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|-------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 148.6 | 146.4 | 138.4 | 172.2 | 154.7 | 195.1 | 168 | 161.2 | 157.8 | 155.5 | 130.6 | 241 |

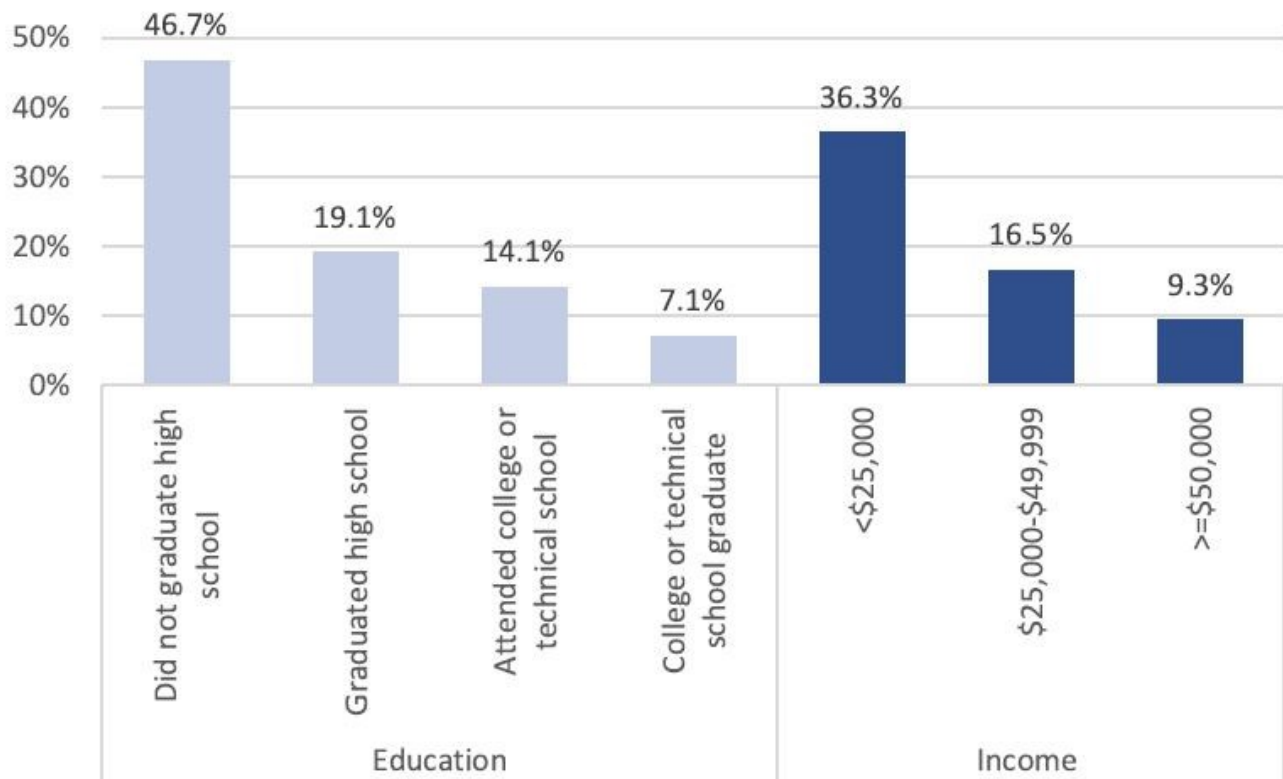
Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Exhibit 3 identifies the self-reported health status by education and income levels for the Snohomish County geographic area.²⁵ The shortcoming of this Exhibit is that the data is for the 2011 – 2014 period; and only indirect associations can be made about the impact of education and income on special populations. For example, other studies show that the Hispanic and Black populations attain lower education levels and lower income levels than the countywide average and therefore probably self-report fair or poor health more frequently than the majority White (78% of total) population.

²⁵ Elizabeth Parker, Ph.D., MHS; Health Disparities in Snohomish County: Snohomish Health District, Oct. 2016. Page 11

Exhibit 3²⁶

Fair or Poor Self-Reported Health by Education-Level and Income



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Table 20 shows that outreach by existing hospices in Snohomish County is insufficient to overcome geographic, ethnic, and economic barriers to hospice services described in Exhibits 1 – 3 in Snohomish County.

Table 20 shows that outreach to the dual diagnosis Medicare cohort that counters the various barriers to care such as language, income and geography can by itself nearly result in Snohomish County equalizing its overall hospice admission rate per 1,000 beneficiary deaths by equalizing the dual eligible admissions per 1,000 beneficiary deaths. Equalizing the two rates, dual-eligible and non-dual results in increasing the overall Medicare admission rate per 1,000 beneficiaries to approximately 90% of the overall national rate.

Outreach to federally qualified health clinics will also reach dual-eligible patients. Outreach will also positively influence the non-dual eligible patients and increase their admission rate per 1,000 beneficiaries – this effect has not yet been calculated. The younger, Medicaid-only population, as well as the Hispanic population LGBTQ population cohorts will also be positively affected by this outreach strategy – their hospice utilization rates will also increase for Eden and other hospices serving Snohomish County.

Table 20

| Snohomish County Hospice Percent of National Hospice Admission Rates | | | |
|--|-------------------------|-----------------|---|
| | Snohomish County | National | Snohomish County as % of National Rate |
| Estimated Calculated Blended Rate Dual Eligible (20%) & non-Dual Admissions (80%) per 1,000 Beneficiary Deaths | 540 | 604 | 89% |
| Dual Eligible Admissions per 1,000 Beneficiary Deaths | 527 | 574 | 92% |
| Non-Dual Eligible Admissions per 1,000 Beneficiary Deaths | 544 | 613 | 89% |
| Dual Eligible Admissions per 1,000 Beneficiary Deaths as a % of Non Dual Eligible Admissions per 1,000 Beneficiary Deaths | 97% | 94% | |
| Blended Hospice Admissions per 1,000 Beneficiary Deaths if Dual Eligible Admissions Per 1,000 Beneficiary Deaths was the same rate as the Snohomish County Non Dual Admissions Rate | 544 | 604 | 90% |

Berg Data Solutions: CMS 2019

The results of these various barriers to healthcare in general and specifically to hospice care are shown by the following metrics: (Snohomish County is referred to as “Snohomish”)

- 1) Snohomish hospice admissions per 1,000 deaths at 540 admissions, is below the national average of 604 admissions (per 1,000 deaths).
- 2) Of the five reporting Snohomish hospices’, an analysis of the hospice patient “length of stay” shows the median Average Length of Stay (ALOS) at 61 days – lower than the statewide ALOS of 62.66 days. Three (of the five) hospices have a *lower* ALOS than the statewide average.
- 3) The percentage of Snohomish hospice-eligible patients receiving hospice services is 4% below the expected statewide average.
- 4) Table 21 shows that Snohomish hospice dual-eligible admissions per 1,000 deaths at 527 admissions, is below the Snohomish non dual-eligible rate of 544 admissions per 1,000 (Deaths for the Medicare population as calculated by Berg Data Solutions, LLC.)
- 5) Only 3 of 5 operating hospices serving Snohomish County serve the entire population needing hospice services.
- 6) None of the currently operating hospices in Snohomish County serve only Snohomish County patients.

The obvious conclusion is that Snohomish County needs additional hospices with an exclusive interest in serving Snohomish County residents, particularly low-income, Medicaid-eligible residents and low income, dual-eligible Medicare patients. Since there is future net need for 3 hospice agencies, there is no duplication of services. This application has documented the following:

- There is disparity for the Snohomish County total Medicare population as measured by Snohomish County admissions per 1,000 deaths by beneficiaries compared to the national population.
- There is disparity for the Snohomish County non dual-eligible population as measured by admissions per 1,000 deaths by beneficiaries in the dual-eligible national population.
- There is disparity for the Snohomish County dual eligible population as measured by admissions per 1,000 deaths by Snohomish County beneficiaries in the dual-eligible population.
- By extension, there is disparity in admissions per 1,000 deaths by low income, Black and Hispanic Snohomish County beneficiaries as measured by unmet medical need.
- Three of the hospices approved to operate in Snohomish County have their principal location sites in Pierce County and King County, while the only hospice located within Snohomish County serve multiple counties.
- Two of the nine approved hospices restrict their access to member populations – Kaiser Foundation Health Plan and Wesley Homes Hospice, which may have limited community outreach.

c. If existing services are available and accessible, justify why the proposed project does not constitute an unnecessary duplication of services.

The proposed Eden Hospice project will reach an average daily count (ADC) of 13 patients in 2022, expanding to 46 patients in the third year of operation. While 7 of the existing hospice agencies in Snohomish County are large and well-established, they are not able to meet hospice need as described in previous metrics involving disparity for low-income Snohomish County residents (see Table 19).

Table 21 presents the potential dual-eligible and non-dual Medicare Patients that in 2019 would generate a potential 159 non-duplicative hospice admissions. This patient volume would increase with population increases through the 2022 – 2024 forecast period. While Eden would not convert all these potential patients to actual hospice admits, the assumption in Appendix 21 is that by 2024, Eden would increase non-duplicative admissions through outreach in this single category by 55 patients, which represents 20% of expected admission volume.

Other major categories will increase admissions in the Medicare Advantage population. In Snohomish County, the Medicare Advantage population constitutes 45% of the *Medicare* population. As such, the Medicare Advantage population will generate an additional 55 admits (20% of total admits). Other direct outreach efforts to the LGBTQ and Federally Qualified Health Centers serving Medicaid patients along with the general population growth will add another 55 admits – meaning, an additional 20% of forecast admissions. Together these three efforts would easily generate over 60% non-duplicative admissions. Given the projected Need for 2 additional agencies by 2022, this clearly demonstrates that there is no unnecessary duplication.

Table 21

| Additional Potential Non-Duplicative Dual and Non-Dual Eligible Medicare Patients | |
|--|------------|
| 2019 Snohomish Deaths on Hospice | 560 |
| County Hospice Adm / 1,000 Deaths | 527 |
| National Hospice Adm / 1,000 Deaths | 574 |
| County Rate / National Rate | 91.8% |
| Additional Hospice Admissions at National Dual Rate | 50 |
| County Non-Dual Rate of Hospice Admissions | 544 |
| County Dual Rate / County Non-Dual Rate | 96.9% |
| Additional Hospice Admissions at County Non-Dual Rate | 18 |
| National Non-Dual Rate of Hospice Admissions | 613 |
| County Dual Rate / County Non-Dual Rate | 86.0% |
| Additional Hospice Admissions at County Non-Dual Rate | 91 |
| Total Hospice Admissions to Bring Rates to National Levels | 159 |

Other cohorts have general unmet medical need. Exhibit 3 presents dramatic, self-reported “fair-or-poor-health” by education and income level. Responses from the low education and low-income populace reported a high “fair-or-poor-health-status”. The demographic analysis shows that Black and Hispanic populations have lower education and income levels when compared to the average levels in Snohomish County. In King County 20% of Black, and 30% of Hispanic respondents’ self-reported unmet medical need. In a separate study 34% of Hispanic respondents reported that they could not see a physician due to cost.²⁷ This incontrovertibly shows that both populations have significant access problems which leads to poor health.

Hospice services are the logical extension of acute healthcare services. Eden expects the Black and Hispanic population will experience access barriers to hospice services. Attention to outreach to these two population cohorts will include attention to Spanish language-based services (see Exhibit 1), and outreach to South and East Snohomish County federally qualified health centers. Reaching this marginalized population will require massive efforts by all hospice providers, and Eden has a plan to help reverse this problem.

²⁷ Elizabeth Parker, Ph.D., MHS; Health Disparities in Snohomish County: Snohomish Health District, Oct. 2016. Page 17

5. Confirm the proposed agency will be available and accessible to the entire planning area.

The Eden Hospice at Snohomish County, LLC will be available and accessible to the entire population. Eden Hospice at Snohomish County, LLC will admit pediatric patients in collaboration with other hospices. The Market and Utilization analysis provides a complete analysis of population cohorts that Eden will reach out to that includes all geographic areas of Snohomish County.

6. Identify how this project will be available and accessible to under-served groups.

EmpRes has been a Snohomish County healthcare provider for 23 years. Its Whatcom County home-health agency commenced in 2014, and its Whatcom homecare agency in 2016. Eden’s skilled nursing facilities in Snohomish County were established in 1997. Eden understands each patient and family is special. For this reason, Eden tailors its approach to the specific needs of each patient and family. Hospice services are provided in the patient’s home, no matter where that home is located. It may be a private residence, an assisted living community, an adult care home, or a residential or intermediate care community. The proposed hospice will provide care to Medicare and Medicaid eligible patients as well as all other patients, regardless of the source or availability of payment for care.

Dual Eligible Patients:

Despite ongoing efforts by existing Snohomish hospice providers, Snohomish County hospice admission rates are 5% below the nationwide rate for non-dual (Medicare only) eligible hospice patients, and over 18% below the nationwide rate for dual-eligible (Medicare and Medicaid). Addressing the large disparity in access and utilization of hospice services in Snohomish County among low income, dual-eligible Medicare patients would add nearly 200 Snohomish County hospice patients and add a 33- patient average daily census using 2020 hospice data.

Eden has a plan to address current unmet need – increase hospice service access through consistent, culturally competent outreach to the dual-eligible Medicare population, and their families and friends. To reduce disparity for the dual-eligible population requires outreach through existing agencies such as federally qualified health centers and healthcare providers who disproportionately serve the following cohorts:

- Medicaid population
- Dual-eligible and low income, Medicare population
- Black/African American populations
- Hispanic populations
- Pediatric patients

Each of these population cohorts have socio-economic characteristics that lead to health disparity and access barriers resulting in lower utilization of hospice services. Additionally, each target population cohort is entitled to hospice services that are culturally sensitive, respectful, and competent. This strategy of increasing hospice utilization to underserved Snohomish County residents will improve the quality of life for patient, their family, and friends.

If Eden is granted the CoN patients, family, and friends can expect:

- Excellent medical patient care, a reduction in emotional and physical stress, compassion, empathy, cultural sensitivity, consistency, and quality professionalism.

Washington State can expect:

- Reduce healthcare costs,
- Meet the DSHS LTSS Dual-Eligibility service goals and Washington’s Triple Aim for healthcare services.

Hispanic Patients:

Table 16 shows that the Hispanic or Latino population (any race) comprised 9.8% of the Snohomish County population. Poverty (below 200% of the Federal Poverty Rate) affects 31% of residents in South Snohomish County compared to 26% in Seattle. Poverty among the Hispanic population is at 48%, second only to the 50% poverty level among the Black/African American non-Hispanic population. Regarding access to healthcare, 28% of Hispanic respondents reported unmet health need (Exhibit 3). 26% of Hispanic respondents to a language survey confirmed that they had difficulty understanding English.²⁸ As noted in our discussion of dual-eligible patients and Eden’s outreach strategy, a large portion of the Hispanic population needs hospice services. Eden will supplement its language and cultural competence capabilities through working with the federally qualified health centers and the National Hospice and Palliative Care Organization (NHPCO) as well as recruiting Hispanic team members for this population cohort.

Veterans:

American Fact Finder reports that Snohomish County had over 104,000 veterans during the 2014 – 2018 time period. Eden Hospice in Nevada is a member of the NHPCO and is a “partner” participating in the “We Honor Veterans Program”. As mentioned earlier, Eden is part of the TriWest Healthcare Alliance (TriWest) which is an honored third-party administrator for the U.S. Department of Veterans Affairs (VA). TriWest works with high-performing, credentialed community providers that partner with VA to provide health care to Veterans in their local community. Eden Hospice at Snohomish will also achieve “partner” standing with “We Honor Veterans Program” with a CoN approval.

All Ethnic Diversity Patients:

Ethnically diverse populations require culturally competent and respectful outreach to increase the knowledge and acceptance of hospice services that are designed to meet each ethnic cohorts’ expectations. As noted, the Black/African American population cohort poverty level is at 50% and the reported unmet medical need is 21%. Ethnic diversity contributes to disparity in health status and healthcare outcomes, which will be discussed in a later section. Even 29% of the Asian population cohort that has high life expectancy and the lowest unmet medical need rate of 9% reports difficulty with the English language. Eden Hospice at Snohomish County will build on its 7 years of relationships in the community to establish effective outreach and as noted in the previous section on dual-eligible residents will partner with FQHCs such as the International Community Health Services that maintains a language bank of healthcare interpreters and providers. Table 16 provides the 2018 demographic profile for Snohomish County prepared by the Employment Security

²⁸ Using data from Exhibit 1, 24% of Hispanic residents and 29% of Asian residents in Snohomish County reported English language difficulties.

Department for Washington State.

Secular Hospice:

As noted throughout the CoN application, the residents of Snohomish County who face terminal illness and need hospice, also have the right to be informed and have access to Washington State’s Death with Dignity end-of-life option. Eden will provide an additional resource for patients and healthcare providers for supporting the Death with Dignity end-of-life statute.

LGBTQ Population

Approximately 4% of the Snohomish County adult population identifies as being in the LGBT population using the 4% statewide estimate. It is estimated that there are nearly 3 million LGBT people age 50 and older. By 2030 these estimates rise to nearly 7 million. And while no precise data exists on the number of transgender older people nationwide, it is estimated that there are hundreds of thousands of older adults who are transgender—and many more over the next few decades.²⁹

In 2019 more than half of Washington’s same-sex couples live in King County, which has not only the largest number of these couples, but also the highest percentage — there are 12.1 same-sex couples for every 1,000 households in the county (or 1.2 percent of all households). That ranks King as the county with the 19th highest percentage of same-sex couples of all counties in the United States. Three other Washington counties rank in the top 100 nationally: Jefferson, San Juan, and Thurston, in that order. In Seattle alone, at least 2.3 percent of households being same-sex partners. That ranks Seattle as 38th nationally, but it should be noted that among America’s large cities (250,000+ population), Seattle ranks 2nd only to San Francisco. Of course, many LGBTQ live outside of Seattle but reside in Snohomish County, which is adjacent to King County.

In a 2018 AARP study, entitled *Maintaining Dignity, Understanding and Responding to Challenges Facing Older LGBT[Q] Americans – An AARP survey of LGBT adults age 45 – plus*, noted that “Black and Latino Americans are more concerned about multiple forms of discrimination and negative outcomes in healthcare as they age. See Appendix 31. The most important concerns by race/ethnicity were fears of discrimination and bad health outcomes. In particular, the black LGBT older adult community faces many barriers. For LGBT people of color, concern about discrimination due to their sexual orientation or gender identity is not disentangled from concern about discrimination due to their race or ethnicity.”³⁰

“There is significant concern within the LGBTQ community regarding healthcare and discrimination or prejudice. The greatest concern is healthcare providers who are not sensitive to LGBTQ patient needs, followed by discrimination or prejudice affecting quality of care.” Of course, for patients and their supporters facing end-of-life issues, it is extremely important they have unbiased, non-religious, non-judgmental and quality in-home hospice care readily available. Eden is acutely aware of the complex multilayered discrimination issues the LGBTQ patients may face in healthcare and hospice will embrace Snohomish County LGBTQ community.

²⁹ *Op cit.* at sage. Page 2

³⁰ *Maintaining Dignity: Understanding and Responding to the Challenges Facing Older LGBT Americans*, AARP Research; February 2020. Pg. 45

Given that a large hospice provider in Snohomish County is restricted by religious directives, the LGBTQ patients and their support community need and want hospice options that have no overarching religious affiliation. The special challenges facing many LGBTQ older adults must be kept in mind and adequately addressed when designing and providing hospice services to the aging – **Eden is eager to participate in the special needs of the LGBTQ community.** Should Eden be granted the CoN, and as mentioned earlier, Eden will become involved with organizations in Snohomish County and the State of Washington that support the healthcare/hospice needs of the LGBTQ community.

Pediatric Population: Eden Hospice at Snohomish County will collaborate with other hospices and admit pediatric patients when appropriate.

7. Provide a copy of the following policies:

- **Admissions Criteria Process (Intake Policy & Non-discrimination) – See Appendix 14**
- **Admissions and Charity care or financial assistance policy, and patient discharge - See Appendix 15 & 16**
- **Any other policies directly related with patient access (example, involuntary discharge)**

The requested policies are provided as listed below:

- Admissions Criteria Process (Intake Policy & Non-discrimination) – See Appendix 14
- Admissions and Charity care or financial assistance policy and patient discharge – See Appendix 15 & 16
- Patient Discharges Policies and Patient Grievance Policy – See Appendix 15

8. If there is not sufficient numeric need to support approval of this project, provide documentation supporting the project's applicability under WAC 246-310-290(12). This section allows the department to approve a hospice agency in a planning area absent numeric need if it meets the following review criteria:

- **All applicable review criteria and standards with the exception of numeric need have been met;**
- **The applicant commits to serving Medicare and Medicaid patients; and**
- **A specific population is underserved; or**
- **The population of the county is low enough that the methodology has not projected need in five years, and the population of the county is not sufficient to meet an ADC of thirty-five.**

Note: The department has sole discretion to grant or deny application(s) submitted under this subsection.

Not Applicable, there is a need for 2 hospice agencies in 2022.

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

WAC 246-310-990(2) defines “total capital expenditure” to mean the total project costs to be capitalized according to generally accepted accounting principles. These costs include, but are not limited to, the following: legal fees; feasibility studies; site development; soil survey and investigation; consulting fees; interest expenses during construction; temporary relocation; architect and engineering fees; construction, renovation, or alteration; total costs of leases of capital assets; labor; materials; fixed or movable equipment; sales taxes; equipment delivery; and equipment installation.

Financial feasibility of a hospice project is based on the criteria in [WAC 246-310-220](#).

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

Eden Hospice at Snohomish County, LLC

Eden Hospice at Snohomish County, LLC is a new agency. Therefore, the Pro Forma revenue and expense projections cover the first three calendar years of operation, 2022 - 2024, and include all assumptions that are consistent with the representations in the application itself. A 2022 – 2024 Balance Sheet is also provided for the first three, full calendar years of operation include all assumptions. Please see Appendix 12 which includes a pro forma forecast showing operating revenue and expenses for the first three full years of operations. There is no impact on capital costs, as no capital is required for this project. All assumptions are included in this section.

EmpRes Healthcare Group, Inc.

While Eden Hospice at Snohomish County, LLC is the applicant, it is wholly owned by EmpRes Healthcare Group Inc. EmpRes Healthcare Group, Inc. owns 4 hospices. Consistent with the program-approved Eden Hospice at Whatcom County certificate of need, a combined revenue and expense statement has been prepared for all EmpRes hospices with a historical period of 2017 – 2019, current year 2020 (annualized based on 10 months actual operations information) and is projected for the years 2021 through 2024. The pro forma from the approved Eden Whatcom Hospice is included in the “Hospice Without Eden Hospice at Snohomish County” analysis. This Revenue and Expense Pro Forma along with the Pro Forma Balance Sheet for the existing, approved operations is then

compared with the Existing approved programs AND the Eden Hospice at Snohomish County project as well as the Eden Hospice at King County to show the financial impact of starting two new hospices in the same time period. **The “With and Without” Analysis including all assumptions is included in Appendix 13.**

2. Provide the following agreements/contracts:

- **Management agreement.**
- **Operating agreement**
- **Medical director agreement**
- **Joint Venture agreement**

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

Appendix 3 provides the management agreement and operating agreements. Appendix 9 provides the medical director agreement and the agreement to execute the document upon CoN approval.

There is no joint venture agreement.

3. Provide documentation of site control. This could include either a deed to the site or a lease agreement for the site.

If this is an existing hospice agency and the proposed services would be provided from an existing main or branch office, provide a copy of the deed or lease agreement for the site. If a lease agreement is provided, the agreement must extend through at least the projection year. Provide any amendments, addendums, or substitute agreements to be created as a result of this project to demonstrate site control.

If this is a new hospice agency at a new site, documentation of site control includes one of the following:

- a. **An executed purchase agreement or deed for the site.**
- b. **A draft purchase agreement for the site. The draft agreement must include a document signed by both entities committing to execute the agreement as submitted following CN approval.**
- c. **An executed lease agreement for at least three years with options to renew for not less than a total of two years.**
- d. **A draft lease agreement. For Certificate of Need purposes, draft agreements are acceptable if the draft identifies all entities entering into the agreement, outlines all roles and responsibilities of the entities, identifies all costs associated with the agreement, includes all exhibits referenced in the agreement. The draft agreement must include a document signed by both entities committing to execute the agreement as submitted following CN approval.**

Eden Hospice at Snohomish County, LLC is co-locating with Eden Home Health of King County, LLC. Appendix 6 provides a signed lease dated January 2019 with options covering the first three years of operations through renewal options through February 2025.

4. **Complete the table with the estimated capital expenditure associated with this project. Capital expenditure is defined under WAC 246-310- 010(10). If you have other line items not listed in the table, include the definition of the line item. Include all assumptions used to create the capital expenditure estimate.**

Table 22a provides the estimated capital expenditure associated with the project. Eden Hospice at Snohomish County, LLC is co-locating with the Eden Home Health of King County, LLC so there is no building remodel, fixed equipment or moveable equipment costs associated with the project. Minor equipment such as laptops and cell phones are expected to be supported by current inventory. Even if some minor equipment had to be purchased that was not expensed, it would be well below \$50,000 threshold for minimum capital expenditures, but no expenditure is anticipated.

Table 22a

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

5. **Identify the entity responsible for the estimated capital costs identified above. If more than one entity is responsible, provide breakdown of percentages and amounts for each.**

EmpRes Healthcare Group Inc.

- 6. Identify the amount of start-up costs expected to be needed for this project. Include any assumptions that went into determining the start-up costs. Start-up costs should include any non-capital expenditure expenses incurred prior to the facility opening or initiating the proposed service. If no start-up costs are expected, explain why.**

Start-up costs are estimated to be less than \$100,000 to cover working capital requirements. Co-location will reduce the costs of outreach and administration during the certification process.

- 7. Identify the entity responsible for the estimated start-up costs identified above. If more than one entity is responsible, provide breakdown of percentages and amounts for each.**

EmpRes Healthcare Group Inc.

- 8. Explain how the project would or would not impact costs and charges for healthcare services in the planning area.**

As noted in this application, Snohomish County hospices are under capacity stress, a current need for three new hospices; resulting in shorter lengths of stay and limited outreach as shown by admissions. Eden being co-located with a one or two- county home health agency can operate with great economies of scale without large patient volumes that could affect new Snohomish County hospices and additional staffing is minimized due to the economies of scale. This addition of capacity should reduce future capacity stress for Snohomish County hospices while not reducing current volumes. This will give other newly approved hospices an opportunity to catch up with the current volume of patients.

- 9. Explain how the costs of the project, including any construction costs, will not result in an unreasonable impact on the costs and charges for health services in the planning area.**

The literature points to an ideal ALOS of 6 months. Studies cited in this application document that patients with terminal diagnoses with a longer progression of illness (the ALOS is 88 days but the median ALOS is 18 days), live longer with reduced hospitalizations and use of the emergency room if they are enrolled in hospice. A Providence Hospice financial analysis in the approved CN 19-44 calculated a potential statewide savings of \$99 million or \$3,945 per patient if all hospice eligible patients received 35 days of hospice care in short if admits and ALOS increased.¹⁹ Table 14, estimated that expenditures for Snohomish County hospice patients during the last 30 days of their lives would be \$4,556 per patient lower when compared to national hospice data. A melanoma study found that patients who received 4 or more hospice days had average costs of \$14,594, compared to the groups who received one to three days of care, or no hospice care at all (\$22,647 and \$28,923 respectively).²⁰

- 10. Provide the projected payer mix by revenue and by patients by county as well as for the entire agency using the example table below. Medicare and Medicaid managed care plans should be included within the Medicare and Medicaid lines, respectively. If “other” is a category, define what is included in “other.”**

As was noted in the Need section and executive summary, the Eden strategy is to conduct outreach among the Medicare dual-diagnosis program. Through this approach, Eden expects

to admit Medicaid patients as well because of the emphasis on outreach to federally qualified health centers. Medicare and Medicaid reimbursement are nearly identical in our strategy and that represents 95% of the patient population. Even though commercial insurance will pay at about 80% of the rate of Medicare and Medicaid, since the cohort is only 5%, it has little effect on the Percent of payer by patient as presented in Table 22b.

Table 22b
Payer Mix

| Payer Mix | Percentage of Gross Revenue | Percentage by Patient |
|--|-----------------------------|-----------------------|
| Medicare | 90% | 90% |
| Medicaid – CHPW, Molina etc. | 5% | 5% |
| Other Payers – All Commercial, Tri-Care, CHAMPUS, VA etc.) | 5% | 5% |
| Total | 100% | 100% |

- 11. If this project proposes the addition of a county for an existing agency, provide the historical payer mix by revenue and patients for the existing agency. The table format should be consistent with the table shown above.**

Not applicable.

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

There is no additional equipment expected to be purchased since Eden has laptops and other equipment in inventory. Any unanticipated equipment purchases would be considerably below the \$50,000 threshold requiring an amendment to the application.

- 13. Identify the source(s) of financing (loan, grant, gifts, etc.) and provide supporting documentation from the source. Examples of supporting documentation include: a letter from the applicant’s CFO committing to pay for the project or draft terms from a financial institution.**

As represented by EmpRes Healthcare Management, LLC, the members of Eden Hospice at Snohomish County, LLC will make capital contributions sufficient to support the start-up cash flow requirements of the expansion into Snohomish County. Appendix 5 provides a letter of financial commitment from the CFO of EmpRes Healthcare Management, LLC. The source of the funds is from cash generated through operations of the members of EmpRes Healthcare Management, LLC backed up by a \$40 million line of credit commitment, secured by accounts receivable, with MidCap Financial.

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

Not Applicable.

15. Provide the most recent audited financial statements for:

- **The applicant, and**
- **Any parent entity responsible for financing the project.**

Appendix 28 provides the most recent audited financial statement for EmpRes Healthcare Group and subsidiaries.

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

1. Please provide the current and projected number of employees for the proposed project

Please see Appendix 12 for the Eden Hospice at Snohomish County projected number of FTEs for the proposed project.

2. If this application proposes the expansion of an existing agency into another county, provide an FTE table for the entire agency, including at least the most recent three full years of operation, the current year, and the first three full years of operation following project completion. There should be no gaps in years. All staff categories should be defined.

Not Applicable

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

Table 23 provides Eden Hospice at Snohomish County staff to patient ratios

**Table 23
Eden Hospice at Snohomish County Staff / Patient Ratio**

| Type of Staff | Eden Hospice at Snohomish County Staff / Patient Ratio |
|----------------------------|--|
| Skilled Nursing (RN & LPN) | 1:10 |
| Physical Therapist | Contract only |
| Occupational Therapist | Contract only |
| Medical Social Worker | 1.30 |
| Speech Therapist | Contract only |
| Home Health / Hospice Aide | 1:10 |
| Chaplain | 1:40 |

Provide a detailed explanation of why the staffing for the agency is adequate for the number of patients and visits projected.

Eden evaluated applications that had been approved in the 2018 and 2019 cycles in preparing staffing ratios as well as its own experience. Table 24 provides comparative data based on a review of staffing tables and assumptions in the certificate of need applications that were evaluated.

**Table 24
Comparative Staff : Patient Ratios on Recently Approved Hospice Agencies**

| Type of Staff | Olympic Medical Center 2019 CoN | Providence 2018 CoN | Envision 2019 Snohomish | Inspiring 2019 Snohomish |
|----------------------------|---------------------------------|-----------------------|-------------------------|--------------------------|
| | Staff / Patient Ratio | Staff / Patient Ratio | Staff / Patient Ratio | Staff / Patient Ratio |
| Skilled Nursing (RN & LPN) | 1: 10 | 1:11 | 1:10 | 1:8 |
| Physical Therapist | Contract only | Contract only | Contract only | Contract only |
| Occupational Therapist | Contract only | Contract only | Contract only | Contract only |
| Medical Social Worker | 1:35 | 1:25 | 1:35 | 1:03 |
| Speech Therapist | Contract only | Contract only | Contract only | Contract only |
| Home Health / Hospice Aide | 1:10 | 1:15 | 1:10 | 1:8 |
| Chaplain | Contract per Visit | 1:50 | 1:37 | 1:30 |

- 4. Provide the name and professional license number of the current or proposed medical director. If not already disclosed under 210(1) identify if the medical director is an employee or under contract.**

The medical director for the proposed hospice is Gilson R. Giroto, DO, license #OP00002078, NPI 1083690333. The medical director will be under contract.

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

While Dr. Giroto will be under contract, the position description is included in Appendix 10.

- 6. Identify key staff by name and professional license number, if known. (nurse manager, clinical director, etc.)**

Administrator and Director of Nursing: Lisa Belal, RN. License #RN60815128.

- 7. For existing agencies, provide names and professional license numbers for current credentialed staff.**

Not applicable.

8. Describe your methods for staff recruitment and retention. If any barriers to staff recruitment exist in the planning area, provide a detailed description of your plan to staff this project.

Hospice services have been proven to reduce the demand for inpatient hospital services and the nursing and other ancillary staff needed to support hospital inpatients. As a result, hospice in general reduces the demand for hospital-based nursing staff by reducing hospital length of stay and reducing readmissions to acute care hospitals.

As a large multi-state organization, EmpRes and Eden have employees, visibility, and contacts across numerous job markets. Specific to Snohomish County, EmpRes currently operates both a home health agency and a skilled nursing facility in Snohomish County so it has local knowledge and established relationships within Snohomish County for recruiting staff.

Eden Hospice at Snohomish County is an employee-owned agency. This is an added recruitment advantage in several important aspects of staffing, recruitment, and retention:

- EmpRes maintains a recruitment office to systematically recruit for employees (see Appendix 18).
- Staff mobility within and between labor markets supports recruitment and enhances overall retention efforts for employees stay in the EmpRes and Eden organizations (see Appendix 18).
- As an employee-owned organization, EmpRes and Eden experience lower turn-over rates than many other health care providers.
- Co-location of Eden Hospice with EmpRes Home Health Snohomish County, LLC will reduce the need for new employees particularly in the start-up years.
- The EmpRes commitment to Employees/Residents reflected in the company name is also reflected in management efforts to prioritize employees and residents as core to any success again reducing turnover and making EmpRes an attractive employer.
- EmpRes maintains an Employee Referral bonus program (see Appendix 18).

9. Identify your intended hours of operation and explain how patients will have access to services outside the intended hours of operation.

The intended hours of operation will be from 8:00 a.m.-5:00 p.m. daily for regular office hours, with 24/7 access to nursing, including nursing visits.

10. For existing agencies, clarify whether the applicant currently has a method for assessing customer satisfaction and quality improvement for the hospice agency.

While this is a new hospice agency, Eden does have a methodology for assessing customer satisfaction and quality improvement. Please see Appendix 19 for the Eden Hospice at Snohomish County Quality Assurance Performance Improvement (QAPI) Policy and Plan. Strategic Healthcare Partners conducts the CHAP Community Health Assessment plan. The primary goals of the organizational Quality Assurance Performance Improvement (QAPI) Plan are to continually and systematically plan, design, measure, assess, and improve performance of organization-wide key functions and processes relative to patient care, treatment, and services.

Element 1. D. vii. Addresses the methods for assessing customer satisfaction and quality improvement.

CAHPS and Quality Results

2. To achieve this goal, the plan strives to:
 - a. Incorporate quality planning throughout the organization.
 - b. Collect data to monitor performance.
 - c. Provide a systematic mechanism for the organization's appropriate individuals, departments, and professions to function collaboratively in their Quality Assurance Performance Improvement (QAPI) efforts providing feedback and learning throughout the Agency.
 - d. Provide for an organization-wide program that assures the Agency designs processes (with special emphasis on design of new or revisions in established services) well and systematically measures, assesses, and improves its performance to achieve optimal patient health outcomes in a collaborative, cross-departmental, interdisciplinary approach. These processes include mechanisms to assess the needs and expectations of patients and their families, staff, and others. Process design contains the following focus elements:
 - i. Consistency with the organization's mission, vision, values, goals, and objectives and plans.
 - ii. Meets the needs of individuals served, staff, and others.
 - iii. Fosters the safety of patients and the quality of care, treatment, and services.
 - iv. Supports a culture of safety and quality.
 - v. Use of clinically sound and current data sources (e.g., use of practice/clinical guidelines, information from relevant literature and clinical standards).
 - vi. Is based upon best practices as evidenced by accrediting bodies.
 - vii. Incorporates available information from internal sources and other organizations about the occurrence of medical errors and sentinel events to reduce the risk of similar events in this organization.
 - viii. Utilizes reports generated from OASIS data, including the following OASIS reports:
 - Outcome-Based Quality Monitoring (OBQM) Potentially Avoidable Events Report and Patient Listing.
 - Outcome-Based Quality Improvement (OBQI) Outcome Report.
 - Error Summary Report.
 - Utilizes the results of Quality Assurance Performance Improvement (QAPI), patient safety and risk reduction activities.
 - Management of change and Quality Assurance Performance Improvement (QAPI) supports both safety and quality through the Agency.

11. For existing agencies, provide a listing of ancillary and support service vendors already in place.

Not Applicable, however Appendix 36 provides a current list of vendors in place.

12. Identify whether any of the existing ancillary or support agreements are expected to change as a result of this project.

Not Applicable

13. For new agencies, provide a listing of ancillary and support services that will be established.

EmpRes has been a Snohomish County healthcare provider for 23 years. Its Whatcom County home-health agency commenced in 2014, and its Whatcom homecare agency in 2016 and skilled nursing facilities in Snohomish County were established in 1997 and provide ancillary and support services. The existing ancillary and support services include but are not limited to the following:

- **Hospital:** Eden Hospice will establish agreements with Evergreen Hospice Center to make available inpatient services and local hospitals.
- **Respite Care:** Eden Hospice will work with Evergreen at Kirkland, LLC for hospice center services and with its SNFs in Snohomish County.
- **Long Term Care facilities:** Eden Hospice will work with EmpRes SNFs located in Snohomish County – Canterbury House, Seattle Medical and Rehabilitation Center and Enumclaw Health and Rehabilitation
- **Pharmacy Benefit Manager:** EmpRes has an agreement with Enclara Pharmacia.
- **Home Medical Equipment and Specialty Pharmacy Services:** Bellevue Healthcare II., Inc.
- **Occupational Therapy, Physical Therapy, and Speech Therapy:** EmpRes Home Health agency currently have these resources in place through its home health agency and SNFs within Snohomish County.
- **Oncology Cancer Center:** Eden Hospice will develop working relationships with cancer programs in Snohomish County.
- **Primary Care Clinics:** Eden Hospice will focus on developing working relationships with federally qualified health care clinics such as Sea Mar, Healthpoint, International Community Health Services and County Doctor Clinics and as part of its outreach to dual eligibility Medicare beneficiaries. It will also use its regular outreach activities with primary care clinics throughout Seattle and the rest of Snohomish County, initially relying on relationships developed with physicians in its home health and SNF operations.

The relationships demonstrate that Eden Hospice at Snohomish County has the capabilities to meet the service demands for the project. Once the project is approved, Eden Hospice will work to make any necessary adjustments or amendments to the agreements in order to provide the full spectrum of hospice services in Snohomish County.

14. For existing agencies, provide a listing of healthcare facilities with which the hospice agency has working relationships.

Not Applicable.

15. Clarify whether any of the existing working relationships would change as a result of this project.

Eden Hospice at Snohomish County , LLC would not expect existing working relationships to change as a result of this project.

16. For a new agency, provide a listing of healthcare facilities with which the hospice agency would establish working relationships.

EmpRes through its newly approved Snohomish County home health agency and its local SNFs has already developed relationships with area healthcare facilities. As noted in the response to question 16, Eden will work with EmpRes skilled nursing facilities as well as area hospitals including Evergreen Medical Center and Evergreen Hospice Center.

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

There are no such convictions or denial or revocation of licenses, so this question is not applicable.

18. Provide a discussion explaining how the proposed project will promote continuity in the provision of health care services in the planning area, and not result in an unwarranted fragmentation of services. WAC 246-310-230

As an established provider in the community, Eden Hospice has identified critical disparity barriers and has developed a targeted outreach strategy to work with federally qualified health centers, lead agencies in the DSHS health come project, community agencies focused on serving Veterans, Hispanic communities and the LGBTQ population and with local hospital, physicians, skilled nursing facilities and other providers. Eden Hospice at Snohomish County will co-locate with Eden Home Health of Snohomish County and will jointly work with that agency in outreach and planning efforts to ensure continuity of care, while avoiding fragmentation of care. Eden Hospice will leverage EmpRes/Eden's existing community relationships, within Snohomish County and add respite options and other relationships necessary to support the hospice patient and family members throughout the course of care and during the period of bereavement following death of the patient.

19. Provide a discussion explaining how the proposed project will have an appropriate relationship to the service area's existing health care system as required in WAC 246-310-230.

This standard asks for assurance that the staffing plan is consistent with requirements and community standards. Eden provided this assurance as noted in Table and Table regarding staffing. This standard expects that sufficient ancillary services and support services will be provided. Our affirmative response is included in response to question 14 in this section and is based on 23 years of Snohomish County experience. Finally, Eden provided a summary of its approach to continuity of care in its response to question 19 in this section. Eden also notes that its assessment of Need provides thorough documentation of its understanding of how disparity affects the public health of Snohomish County.

- 20. The department will complete a quality of care analysis using publicly available information from CMS. If any facilities or agencies owned or operated by the applicant reflect a pattern of condition-level findings, provide applicable plans of correction identifying the facility's current compliance status.**

There has been no history of condition-level findings related to information provided as requested by the Program. The Program has previously requested copies of surveys and accreditation reports on Eden Home Health and Eden Hospice agencies. The new information requirements do not request submission of these forms. They are available upon request.

- 21. If information provided in response to the question above shows a history of condition-level findings, provide clear, cogent and convincing evidence that the applicant can and will operate the proposed project in a manner that ensures safe and adequate care, and conforms to applicable federal and state requirements.**

There has been no history of condition-level findings related to information provided as requested by the Program.

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

1. Identify all alternatives considered prior to submitting this project. At a minimum include a brief discussion of this project versus no project.

- **Decision making criteria (*cost limits, availability, quality of care, legal restriction, etc.*):**
- **Advantages and disadvantages, and whether the sum of either the advantages or the disadvantages outweigh each other by application of the decision-making criteria;**
- **Capital costs;**
- **Staffing impact**

Eden Hospice at Snohomish County, LLC is requesting CN approval to operate a Medicare certified and Medicaid eligible hospice agency in Snohomish County. The hospice agency will be co-located with the EmpRes Home Health of Snohomish County, LLC agency.

As a certificate of need rules requirement, Eden Hospice evaluated the following alternatives: (1) status quo: “do nothing or postpone action,” (2) develop the proposed project, co-located with an existing Eden Home Health or EmpRes SNF and (3) Establish a new, single-purpose hospice agency location.

The three alternatives were evaluated using the following decision criteria: (1) access to hospice services; (2) health outcomes, (3) quality of care; (4) health care cost control for patients and for payers (5) operating efficiency; and (5) Impact on the existing hospice agency. Each alternative identifies advantages and disadvantages. Based on the above decision criteria and the analyses of each criteria covered in Tables 25 - 30, the requested project — seek CN approval to operate a Medicare certified and Medicaid eligible, hospice that is co-located with an existing Eden home health agency — is the best option.

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

**Table 25
Alternative Analysis: Access to Hospice Services**

| Advantages/Disadvantages | |
|--|--|
| <p>The Unmet Need in the 2020 methodology identified a 2022 unmet need of an 87 patient ADC requiring two new hospices that meet all of the other provisions of the four criteria if there is a population that is not receiving hospice services.</p> <p>An analysis of seven hospice capacity related metrics, documents that the Snohomish Hospice is unable to provide sufficient capacity that are barriers to access and can lead to increased healthcare costs for patients and payers.</p> | |
| <p>1) Status Quo: Do nothing or postpone action</p> | <p>There is no advantage to maintaining the status quo in terms of improving access. In 2020, the State methodology yielded an 87 ADC 2022 unmet need that that identified a Need for three additional hospices. No hospice was approved within Snohomish County.</p> |
| <p>2) Requested Project: CN approval – to operate a hospice agency co-located with the Eden Snohomish County home health agency</p> | <p>The requested project reduces current and future access barriers identified in Snohomish County. It adds choice as well as taking new steps to reach low-income Medicaid eligible residents and low-income Medicare dual eligible beneficiaries by reaching out through federally qualified health centers. Overall Snohomish County access in terms of admits per 1,000 Medicare deaths is 7% below the national rate, while the dual-eligible (low income) rate in Snohomish County is 14% lower than the non-dual Snohomish County admission rate (Table 21). In addition, there are disparity rates due to language barriers among the Hispanic population (Exhibit 1) and high unmet medical need in the Hispanic population (34%) and the Black population (21%) (Exhibit 3). Eden addresses disparity in utilization due to language barriers and will take special steps in outreach recruitment and supporting materials for the Hispanic community to improve access.</p> |
| <p>3) Develop an independent location to operate a separate Snohomish County hospice operation</p> | <p>In regard to access, Eden's goal is to reach out to community members where they live and where they seek medical care. Co-locating with a Snohomish County home health agency maximizes the outreach resources that can be employed, improves continuity of care between home health, hospice and SNF care and reduces financial overhead. As volume increases for both hospice and home health services, the economies of scale diminish in importance and allow the administrative teams to move closer to residents throughout Snohomish County.</p> |
| <p>Conclusion: The status quo is clearly not advantageous for the community from an access standpoint since the new home health and hospice agencies reach out to patients where they live and receive healthcare in the community and there is a methodology-based need for three hospices and seven metrics showing that capacity limits access to hospice services in Snohomish County</p> | |

Table 26
Alternative Analysis: Improved Health Outcome Hospice

| Advantages/Disadvantages | |
|---|---|
| <p>The literature points to an ideal ALOS of 6 months. Studies cited in this application document that patients with terminal diagnoses with a longer progression of illness (the ALOS is 88 days but the median ALOS is 18 days), live longer with reduced hospitalizations and use of the emergency room if they are enrolled in hospice. Nationally, ALOS is approximately 90 days while the median ALOS in Snohomish County hospices is only 61 days (5 reporting agencies) indicating a need for more capacity. Referenced research studies show that patient families routinely respond that they wished that they had accessed hospice services earlier during the patient’s terminal illness (Appendix 26).</p> | |
| <p>1) Status Quo: Do nothing or postpone action</p> | <p>There is no advantage to maintaining the status quo in terms of improving health outcomes. As noted in the application, there is substantial disparity in access for low-income Medicaid eligible residents and low income, dual-eligible Medicare beneficiaries. The CHNA study for Washington identified high rates of unmet medical need particularly among Black and Hispanic residents with unmet need of 21% and 34% respectively (Exhibit 3). Our project aims to address this disparity.</p> |
| <p>2) Requested Project: CN approval – to operate a hospice agency co-located with the Eden Snohomish County home health agency</p> | <p>The requested project reduces current and future access barriers identified in the Snohomish County Planning Area. While initially our ALOS will be lower – 60.2 and 61.2 days as we reach out to new populations that have a more limited knowledge of hospice as well as a case mix that will initially include lower ALOS patients. ALOS should increase above the current 70-day ALOS because delays in enrollment will be sharply reduced. Eden will open new outreach channels for patients to enroll in hospice. A greater percentage of the hospice eligible population enrolling in hospice and longer ALOS will extend the lives of dying patients as well as reduce their discomfort.</p> |
| <p>3) Develop an independent location to operate a Snohomish County hospice operation</p> | <p>Co-location will allow our outreach team in both hospice and home health services to focus on the federally qualified health centers that specialize in serving low income and ethnic minority populations. This focus will have the highest impact on improving outcomes within the hospice program and reducing healthcare costs.</p> |
| <p>Conclusion: The status quo is clearly not advantageous for the community from a health outcome standpoint given the disparity metrics around lower than expected admits in using hospice services. In regard to establishing an independent hospice location, this can be carried out when volume for home health and hospice services demonstrates the advantage of multiple locations over a central Snohomish County location.</p> | |

Table 27
Alternative Analysis: Quality of Care

| Advantages/Disadvantages | |
|---|--|
| <p>The literature points to an ideal ALOS of 6 months. Studies cited in this application document that patients with terminal diagnoses with a longer progression of illness (the ALOS is 88 days but the median ALOS is 18 days), live longer with reduced hospitalizations and use of the emergency room if they are enrolled in hospice. Median ALOS in Snohomish County (5 reporting agencies) is approximately 61 days (5 reporting agencies) versus a national ALOS of 90 days. In addition to technical metrics, the care experience is also a quality metric. When patients and families are queried about the care experience, they often attribute quality of care issues as an issue of “not being on hospice long enough.” (Appendix 26) The literature on this point seems to be that dissatisfaction with hospice services is more related to elements of care rather than length of stay.¹⁸</p> | |
| <p>1) Status Quo: Do nothing or postpone action</p> | <p>There is no advantage to maintaining the status quo in terms of improving existing ALOS of about agencies and the trend of reduced care minutes per patient for the Snohomish Hospice are the kind of metrics that can detract from the patient and family care experience. As noted earlier, these metrics seem to be related to capacity constraints for the Snohomish Hospice.</p> |
| <p>2) Requested Project: CN approval – to operate a hospice agency co-located with the Eden Snohomish County home health agency</p> | <p>The requested project should increase ALOS and should reduce delays in enrollment. These two factors alone should improve the care experience for the patient and family. Ideally minutes of hospice care per day will also increase to national average rates.</p> |
| <p>3) Develop an independent location to operate a separate Snohomish County hospice operation</p> | <p>As volume in Eden home health and hospice services increases, economies of scale for one single office location are reduced and advantages of geographic closeness to the at-risk population increase. For example, a South Snohomish County colocation with an additional site could improve outreach to Snohomish County; and also reduce delays in enrollment and support more timely provision of care services in the rural area. This organizational form could be implemented at any time if it was advantageous but only after a CoN was fully implemented.</p> |
| <p>Conclusion: The status quo is clearly not advantageous for the community from health quality of care standpoint given the metrics around delays in enrollment in hospice both from hospital and home health transfers. In regard to a separate location for the Eden Hospice at Snohomish County, it could be implemented at any time when there was a need for expanded space.</p> | |

¹⁸ Joan M. Teno, MD *et al.* Timing of Referral to Hospice and Quality of Care: Length of Stay and Bereaved Family Members’ Perceptions of the Timing of Hospice Referral, *Journal of Pain and Symptom Management* Aug. 2007 pp 120, 123

Table 28
Alternative Analysis: Healthcare Cost Control – Patient and Payer

| | |
|--|--|
| <p>The literature points to an ideal ALOS of 6 months. Studies cited in this application document that patients with terminal diagnoses with a longer progression of illness (the ALOS is 88 days but the median ALOS is 18 days), live longer with reduced hospitalizations and use of the emergency room if they are enrolled in hospice. A Providence Hospice financial analysis in the approved CN 19-44 calculated a potential statewide savings of \$99 million or \$3,945 per patient if all hospice eligible patients received 35 days of hospice care in short if admits and ALOS increased.¹⁹ Table 14, estimated that expenditures for Snohomish County hospice patients during the last 30 days of their lives would be \$4,556 per patient lower when compared to national hospice data. A melanoma study found that patients who received 4 or more hospice days had average costs of \$14,594, compared to the groups who received one to three days of care, or no hospice care at all (\$22,647 and \$28,923 respectively).²⁰</p> | |
| <p>1) Status Quo: Do nothing or postpone action</p> | <p>There is no advantage to maintaining the status quo in terms of reducing patient or payer healthcare costs. In 2020, the State methodology yielded a 2022 unmet need of 87 ADC. Previous sections have addressed the 71-day ALOS versus the national 90-day ALOS as well as admission disparity rates.</p> |
| <p>2) Requested Project: CN approval – to operate a hospice agency co-located with the Eden Snohomish County home health agency</p> | <p>The requested project increases admits and ALOS should increase because delays in enrollment will be sharply reduced and Eden will open new outreach channels for patients to enroll in hospice. A higher percentage of hospice-eligible patients enrolling in hospice along with a longer ALOS for hospice care will reduce healthcare costs for both patients and payers. This approach also defers an approximate \$40,000 capital expenditure and higher lease costs and administrative costs until higher volumes are achieved in the out years.</p> |
| <p>3) Develop an independent location to operate a Snohomish County hospice operation</p> | <p>If a co-location facilitated outreach and more admits in South Snohomish County and facilitated earlier enrollment as well as the percentage of enrolled hospice-eligible patients then a colocation e could be considered. Given the cost reductions associated with setting up a new hospice for Eden, operating costs are not a major driver. This organizational form could be implemented at any time if it was advantageous.</p> |
| <p>Conclusion: The status quo is clearly not advantageous for the community from health quality of care standpoint given the metrics around delays in enrollment in hospice both from hospital and home health transfers. Regarding a separate location for the Eden Hospice at Snohomish County, it could be implemented at any time when there was a need for expanded space.</p> | |

¹⁹ *Op cit.* See footnote 10 for details and narrative on page 25.

²⁰ *Op cit.* See footnote 3 for details and narrative on page 9.

**Table 29
Alternative Analysis: Operating Efficiencies**

| Advantages/Disadvantages | |
|---|--|
| <p>There are distinct advantages to having Eden Hospice co-locate with EmpRes Home Health of Snohomish County; there will be no additional capital expenditure and utilities costs can be allocated to two programs rather than one program. Given that the Eden agency will be co-located with a 2-county home health agency (assuming approval of Pierce County), there will be economies of scale. In addition, the expense of developing multiple ancillary contracts can be avoided. Finally, co-locating should improve enrollment of hospice-eligible home health patients into hospice should be facilitated (easier and reduced wait times).</p> | |
| <p>1) Status Quo: Do nothing or postpone action</p> | <p>There is no advantage to maintaining the status quo in terms of operating efficiencies. In fact, Eden Hospice breakeven costs should be reduced with no capital expenditure and with a reduction in utilities and rent.</p> |
| <p>2) Requested Project: CN approval – to operate a hospice agency co-located with the Eden Snohomish County home health agency</p> | <p>Eden Hospice breakeven costs should be reduced with no capital expenditure and with a reduction in utilities and rent and any capital expenditure (e.g., \$40,000). As a result, Eden can concentrate on outreach to low-income Medicaid-eligible residents and low income, dual-eligible Medicare beneficiaries.</p> |
| <p>3) Develop an independent location to operate a Snohomish County hospice operation</p> | <p>There are more limited operating efficiencies related to an independent location in South Snohomish County for an Eden Hospice. The principal benefit would be potentially shortened response time for patient care. However, most of the staff are field-based rather than office-based, so operating efficiencies are generally more limited. Given the cost reductions associated with setting up a new hospice for Eden, operating costs are not a major driver. This organizational form could be implemented at any time if increases in volume made the approach advantageous.</p> |
| <p>Conclusion: The status quo is clearly not advantageous for the community from health quality of care standpoint given the metrics around delays in enrollment in hospice both from hospital and home health transfers. In regard to a separate location for the Eden Hospice at Snohomish County, it could be implemented at any time when there was a need for expanded space.</p> | |

Table 30
Alternative Analysis: Impact on Snohomish County Hospices

| Advantages/Disadvantages | |
|--|--|
| <p>As noted in this application, Snohomish Hospice is under capacity stress, a current need for three new hospices; resulting in shorter lengths of stay and limited outreach as shown by admissions. Eden being co-located with a one or two- county home health agency can operate with great economies of scale without large patient volumes that could affect new Snohomish County hospices and additional staffing is minimized due to the economies of scale. This addition of capacity should reduce future capacity stress for Snohomish County hospices while not reducing current volumes. This will give Snohomish Hospice an opportunity to catch up with their current volume of patients.</p> | |
| <p>1) Status Quo: Do nothing or postpone action</p> | <p>The status quo shows the Snohomish Hospice is under capacity stress. In addition to a State methodology projected need for three hospices in 2022, an analysis of seven hospice capacity related metrics, documents that Snohomish County hospices are unable to provide sufficient capacity resulting in documented barriers to access discussed in Table 25 and that lead to increased healthcare costs for patients and payers discussed in Table 28.</p> |
| <p>2) Requested Project: CN approval – to operate a hospice agency</p> | <p>Addition of the Eden Hospice will not reduce the utilization of the Snohomish County hospices. Most Eden Hospice patients will be generated by new outreach channels and simply by choice – choice that is afforded residents in other metropolitan areas. In addition, delays in enrollment from hospitals and home health agencies will be reduced or eliminated increasing ALOS. Eden will also concentrate on outreach to low-income Medicaid-eligible residents as well as low income, dual-eligible Medicare beneficiaries and the Hispanic community which will expand the overall percentage of patients receiving hospice services who are terminally ill.</p> <p>The Eden dual-eligible strategy outreach alone generates a potential for a 40 patient new census in 2022 and Eden expects to serve only 60% of that population with other hospices benefiting by new referrals. Other increases in census due to outreach to other populations (e.g., LGBTQ) and these populations will select from the various hospice options in the county.</p> |
| <p>3) Develop an independent location to operate a Snohomish County hospice operation</p> | <p>There are more limited operating efficiencies related to an independent location in South Snohomish County for an Eden Hospice. The principal benefit would be potentially shortened response time for patient care. However, most of the staff are field-based rather than office-based, so operating efficiencies are generally more limited. Given the cost reductions associated with setting up a new hospice for Eden, operating costs are not a major driver. This organizational form could be implemented at any time if increases in volume made the approach advantageous.</p> |

Conclusion: The status quo is clearly not advantageous for the community from health quality of care standpoint given the metrics around delays in enrollment in hospice both from hospital and home health transfers. In regard to a separate location for the Eden Hospice at Snohomish County, it could be implemented at any time when there was a need for expanded space.

3. If the project involves construction, provide information that supports conformance with WAC 246-310-240(2):

The costs, scope, and methods of construction and energy conservation are reasonable; and The project will not have an unreasonable impact on the costs and charges to the public of providing health services by other persons.

Not applicable.

4. Identify any aspects of the project that will involve appropriate improvements or innovations in the financing and delivery of health services which foster cost containment and which promote quality assurance and cost effectiveness.

Hospice promotes efficiency as it shifts care from expensive hospital settings to lower cost, home-based settings. For patients who choose hospice, they forgo more expensive curative treatments and seek the best possible care experience focused on personalized goals, pain and symptom alleviation, and comfort through end of life. The analysis prepared by Providence in its approved CoN that was based on Medicare claims data, demonstrated the cost-effectiveness of hospice care and estimated savings of over \$99 million across Washington State if all Medicare beneficiaries who died in 2017 without hospice instead benefited from five weeks of hospice and the Table 14-A and 14-B analysis of achieving the “average” national hospice utilization rate would save \$2,362 per hospice patient in Snohomish County hospitals.²¹

This is backed up by Table 12 and Table 13. Table 12 shows that the admission rate for dual eligible Medicare patients receiving hospice services is 14% lower than the non-dual rate in Snohomish County. Dual eligible beneficiaries make up about 20% of the Medicare population yet generate three times the cost per beneficiary compared to non-dual beneficiaries. With outreach to dual-eligible Medicare beneficiaries, substantial health care costs can be reduced for both the Medicare and Medicaid programs as shown in Table 13.

The tragic part of lower utilization of hospice services is that patients managed in programs like the health home project for fragile, acute care dual-eligible patients and hospice care for dual-eligible patients and their families demonstrate a high satisfaction rate with supportive services. The evidence presented in this application documents that pain can be reduced while health care costs related to emergency room visits and hospital admissions can be reduced by providing palliative and supportive care in the hospice setting.

The Eden Hospice project will co-locate with the EmpRes home health agency. This co-location approach will not only eliminate capital costs and reduce operating overhead, but it will improve continuity of care and facilitate rapid enrollment of hospice and skilled nursing facility patients based on existing referral relationships established by EmpRes home health. In addition, Eden Home Health will reach out to ten special population cohorts to increase hospice awareness and enrollment (see pages 43 - 45). In addition, Eden will collaborate with Snohomish County hospices in the provision of Pediatric services.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 1

APPLICATION COVER SHEET


STATE OF WASHINGTON
 DEPARTMENT OF HEALTH
Olympia, Washington 98504

WASHINGTON STATE CERTIFICATE OF NEED PROGRAM
 RCW 70.38 AND WAC 246-310

**APPLICATION FOR CERTIFICATE OF NEED
 HOSPICE PROJECTS
 (excludes amendments)**

Certificate of Need applications must be submitted with a fee in accordance with the instructions on page 2 of this form.

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

| | |
|--|---|
| <p>Signature and Title of Responsible Officer:</p>  <p>Michael J. Miller, CFO</p> <p>Date: 01/27/2021</p> | <p>Person To Whom Questions Regarding This Application Should Be Directed:</p> <p>Jamie Brown, Vice President Eden/EmpRes Home Services 4601 NE 77th Ave. Suite 300 Vancouver, WA 98662</p> <p>Telephone Number: 360-798-8298</p> |
| <p>Legal Name of Applicant: EmpRes Healthcare Group, Inc.. for Eden Hospice at Snohomish County, LLC</p> <p>Address of Applicant: 4601 NE 77th Ave., Ste. 300 Vancouver, WA 98662</p> <p>Telephone Number: 360-892-6628</p> | <p>Type of Project (check all that apply):</p> <p><input checked="" type="checkbox"/> New Agency</p> <p><input type="checkbox"/> Existing Medicare Certified/Medicaid Eligible Agency Expanding into Different County</p> <p><input type="checkbox"/> Existing Licensed-Only Hospice Agency to Become Medicare Certified/Medicaid Eligible</p> |
| <p>Project Summary: EmpRes Healthcare Group, Inc., through Eden Hospice at Snohomish County, LLC, intends to operate a Medicare certified and Medicaid eligible Hospice Agency serving Snohomish County.</p> <p>Estimated capital expenditure: \$0</p> | |



Eden Hospice at Snohomish County, LLC

RECEIVED

By CERTIFICATE OF NEED PROGRAM at 9:47 am, Dec 29, 2020

733 7th Ave., Ste. 110, Kirkland, WA 98033 | Phone: 206-717-8161 | Fax: 206-899-1641

December 23, 2020

Eric Hernandez, Program Manager
Washington State Department of Health
Health Facilities and Certificate of Need Program
111 Israel Rd., SE
Tumwater, WA 98501

LOI20-12EHS

ex: JAN 29, 2021

Re: Eden Hospice at Snohomish County, LLC Letter of Intent to Operate a Medicare Certified and Medicaid Eligible Hospice Agency

Dear Mr. Hernandez:

This letter of intent is issued on behalf of Eden Hospice at Snohomish County, LLC, a subsidiary of EmpRes Healthcare Group, Inc. Eden Hospice at Snohomish County, LLC in accordance with WAC 246-310-080, intends to operate a Medicare certified and Medicaid Eligible Hospice Agency to serve residents of Snohomish County.

1. Description of proposed service

EmpRes Healthcare Group, Inc., through Eden Hospice at Snohomish County, LLC requests certificate of need approval to operate a Hospice Agency in Snohomish County.

2. Estimated cost of the project

There are no capital costs associated with the proposed project.

3. Identification of the service area

Eden Hospice at Snohomish County, LLC will provide services in the Snohomish planning area, as identified in WAC 246-310-290 (3).

Please address all correspondence to:

Jamie Brown, Vice President of Home Services
EmpRes Healthcare / Eden Health
4601 NE 77th Ave., Ste. 300,
Vancouver, WA 98662

Thank you for your attention.

Sincerely,

Jamie Brown
Vice President of Home Services
EmpRes Healthcare Group, Inc.

Our Commitment to Caring
APPENDIX 2

LETTER OF INTENT

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 3

**CERTIFICATE OF FORMATION
LEGAL STRUCTURE OF EDEN HOSPICE
AT SNOHOMISH COUNTY, LLC
MANAGEMENT AGREEMENT AND
OPERATING AGREEMENT**

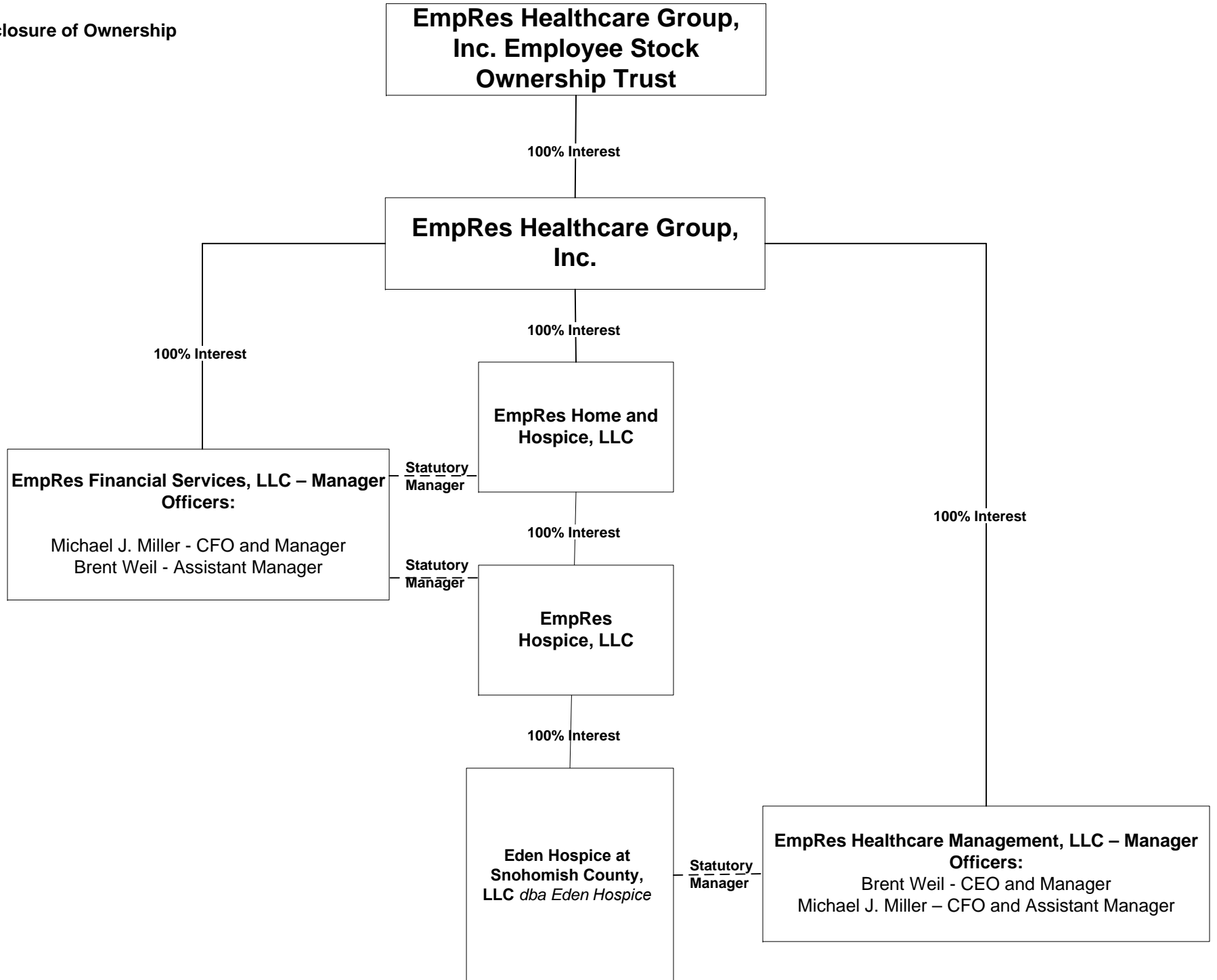
Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 4

ORGANIZATIONAL STRUCTURE OF EMPRES

Disclosure of Ownership



Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 5

LETTER OF FINANCIAL COMMITMENT



Eden Hospice at Snohomish County, LLC

733 7th Ave., Ste. 110, Kirkland, WA 98033 | Phone: 206-717-8161 | Fax: 206-899-1641

January 27, 2021

Eric Hernandez, Program Manager
Certificate of Need Program
Washington State Department of Health
111 Israel Road SE Tumwater, WA 98501

RE: Eden Hospice at Snohomish County, LLC Certificate of Need Application:

Dear Mr. Hernandez:

The Certificate of Need program's application for a Medicare-certified hospice agency asks for a financial letter of commitment.

The Members of Eden Hospice at Snohomish County, LLC have committed the necessary working capital to finance the establishment and operation of the proposed Medicare-certified hospice agency in Snohomish County.

On receipt of the Washington Certificate of Need, the members of Eden Hospice at Snohomish County, LLC will contribute sufficient funds, currently estimated at approximately \$100,000, to the working capital account of Eden Hospice at Snohomish County, LLC.

Sincerely,

Michael J. Miller
Chief Financial Office
EmpRes Healthcare Management, LLC

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 6

LEASE AGREEMENT

LEASE AGREEMENT
(Multi-Tenant Gross Lease)

THIS LEASE AGREEMENT (the "Lease") is entered into and effective as of this **26th** day of **December, 2018** between **GJR REIH II, LLC, a Washington Limited Liability Company** ("Landlord"), and **Eden Home Health of King County, LLC, a Washington Limited Liability Company** (Tenant"). Landlord and Tenant agree as follows:

1. LEASE SUMMARY.

- a. **Leased Premises.** The leased commercial real estate i) consists of an agreed area of **1,576** rentable square feet and is outlined on the floor plan attached as Exhibit A (the "Premises"); ii) is located on the land legally described on attached Exhibit B; and iii) is commonly known as **Parkade Plaza Suite 110 located at 733 7th Ave, Kirkland, WA 98033** (suite number and address). The Premises do not include, and Landlord reserves, the exterior walls and roof of the building in which the Premises are located (the "Building"), the land beneath the Building, the pipes and ducts, conduits, wires, fixtures, and equipment above the suspended ceiling; and the structural elements of the Building. The Building, the land upon which it is situated, all other improvements located on such land, and all common areas appurtenant to the Building are referred to as the "Property." The Building and all other buildings on the Property as of the date of this Lease consist of an agreed area of **25,026** rentable square feet.
- b. **Lease Commencement Date.** The term of this Lease shall be for a period of **thirty seven (37) months** and shall commence on **February 1, 2019** or such earlier or later date as provided in Section 3 (the "Commencement Date").
- c. **Lease Termination Date.** The term of this Lease shall terminate at midnight on **February 28, 2022** or such earlier or later date as provided in Section 3 (the "Termination Date").
- d. **Base Rent.** The base monthly rent shall be (check one): \$ _____, or according to the Rent Rider attached hereto ("Base Rent"). Rent shall be payable at Landlord's address shown in Section 1(h) below, or such other place designated in writing by Landlord.
- e. **Prepaid Rent.** Upon execution of this Lease, Tenant shall deliver to Landlord the sum of **\$4,005.67** as prepaid rent, to be applied to the Base Rent and Operating Costs due for month two () of the Lease.
- f. **Security Deposit.** Upon execution of this Lease, Tenant shall deliver to Landlord the sum of **\$4,400.00** to be held as a security deposit pursuant to Section 5 below. The security deposit shall be in the form of (check one): cash, or letter of credit according to the Letter of Credit Rider (CBA Form LCR) attached hereto.
- g. **Permitted Use.** The Premises shall be used only for **general office use** and for no other purpose without the prior written consent of Landlord (the "Permitted Use").
- h. **Notice and Payment Addresses.**

Landlord: **GJR REIH II, LLC**
C/O KidderMathews
500 - 108th Avenue NE #2400, Bellevue, WA 98004
Attn: Kristin Fabey
Email: **kfabey@kiddermathews.com**
425-283-5787

Tenant: **EmpRes Healthcare Management, LLC, a Washington Limited Liability Company.**

4601 NE 77th Avenue, Suite 300
Vancouver, WA 98662
Attn: Legal/Contracts

2. PREMISES.

- a. **Lease of Premises.** Landlord leases to Tenant, and Tenant leases from Landlord, the Premises upon the terms specified in this Lease.
- b. **Acceptance of Premises.** Except as specified elsewhere in this Lease, Landlord makes no representations or warranties to Tenant regarding the Premises, including the structural condition of the Premises or the condition of all mechanical, electrical, and other systems on the Premises. Except for any tenant improvements to be completed by Landlord as described on attached Exhibit C (the "Landlord's Work"), Tenant shall be responsible for performing any work necessary to bring the Premises into a condition satisfactory to Tenant. By signing this Lease, Tenant acknowledges that it has had an adequate opportunity to investigate the Premises; acknowledges responsibility for making any corrections, alterations and repairs to the Premises (other than the Landlord's Work); and acknowledges that the time needed to complete any such items shall not delay the Commencement Date.
- c. **Furniture.** Tenant acknowledges and agrees all "Built-In" furniture in the Premises, which is not directly owned by Tenant, may be removed from the Premises in the event a sheriff's sale occurs.
- d. **Tenant Improvements.** Attached Exhibit C sets forth all Landlord's Work, if any, and all tenant improvements to be completed by Tenant (the "Tenant's Work"), if any, that will be performed on the Premises. Responsibility for design, payment and performance of all such work shall be as set forth on attached Exhibit C. If Tenant fails to notify Landlord of any defects in the Landlord's Work within thirty (30) days of delivery of possession to Tenant, Tenant shall be deemed to have accepted the Premises in their then condition. If Tenant discovers any major defects in the Landlord's Work during this 30-day period that would prevent Tenant from using the Premises for the Permitted Use, Tenant shall notify Landlord and the Commencement Date shall be delayed until after Landlord has notified Tenant that Landlord has corrected the major defects and Tenant has had five (5) days to inspect and approve the Premises. The Commencement Date shall not be delayed if Tenant's inspection reveals minor defects in the Landlord's Work that will not prevent Tenant from using the Premises for the Permitted Use. Tenant shall prepare a punch list of all minor defects in Landlord's Work and provide the punch list to Landlord, which Landlord shall promptly correct.

3. TERM. The term of this Lease shall commence on the Commencement Date specified in Section 1, or on such earlier or later date as may be specified by notice delivered by Landlord to Tenant advising Tenant that the Premises are ready for possession and specifying the Commencement Date, which shall not be less than _____ days (thirty (30) days if not filled in) following the date of such notice.

- a. **Early Possession.** If Landlord permits Tenant to possess and occupy the Premises two (2) weeks prior to the Commencement Date specified in Section 1, then such early occupancy shall not advance the Commencement Date or the Termination Date set forth in Section 1, but otherwise all terms and conditions of this Lease shall nevertheless apply during the period of early occupancy before the Commencement Date. Tenant must not interfere with Landlord's Improvement Work outlined in Exhibit C during Early Possession.
- b. **Delayed Possession.** Landlord shall act diligently to make the Premises available to Tenant; provided, however, neither Landlord nor any agent or employee of Landlord shall be liable for any damage or loss due to Landlord's inability or failure to deliver possession of the Premises to Tenant as provided in this Lease. If possession is delayed, the Commencement Date set forth in Section 1 shall also be delayed. In addition, the Termination Date set forth in Section 1 shall be modified so that the length of the Lease term remains the same. If Landlord does not deliver possession of

the Premises to Tenant within _____ thirty (30) days if not filled in) after the Commencement Date specified in Section 1, Tenant may elect to cancel this Lease by giving written notice to Landlord within ten (10) days after such time period ends. If Tenant gives such notice of cancellation, the Lease shall be cancelled, all prepaid rent and security deposits shall be refunded to Tenant, and neither Landlord nor Tenant shall have any further obligations to the other. The first "Lease year" shall commence on the Commencement Date and shall end on the date which is twelve (12) months from the end of the month in which the Commencement Date occurs. Each successive Lease year during the initial term and any extension terms shall be twelve (12) months, commencing on the first day following the end of the preceding Lease year. To the extent that the tenant improvements are not completed in time for the Tenant to occupy or take possession of the Premises on the Commencement Date due to the failure of Tenant to fulfill any of its obligations under this Lease, the Lease shall nevertheless commence on the Commencement Date set forth in Section 1.

4. RENT.

- a. **Payment of Rent.** Tenant shall pay Landlord without notice, demand, deduction or offset, in lawful money of the United States, the monthly Base Rent stated in Section 1 in advance on or before the first day of each month during the Lease term beginning on (check one): the Commencement Date, or _____ (if no date specified, then on the Commencement Date), and shall also pay any other additional payments due to Landlord ("Additional Rent"), including Operating Costs (collectively the "Rent") when required under this Lease. Payments for any partial month at the beginning or end of the Lease shall be prorated. All payments due to Landlord under this Lease, including late fees and interest, shall also constitute Additional Rent, and upon failure of Tenant to pay any such costs, charges or expenses, Landlord shall have the same rights and remedies as otherwise provided in this Lease for the failure of Tenant to pay rent.
- b. **Late Charges; Default Interest.** If any sums payable by Tenant to Landlord under this Lease are not received within seven (7) business days after their due date, Tenant shall pay Landlord an amount equal to the greater of \$100 or five percent (5%) of the delinquent amount for the cost of collecting and handling such late payment in addition to the amount due and as Additional Rent. All delinquent sums payable by Tenant to Landlord and not paid within seven (7) business days after their due date shall, at Landlord's option, bear interest at the rate of fifteen percent (15%) per annum, or the highest rate of interest allowable by law, whichever is less (the "Default Rate"). Interest on all delinquent amounts shall be calculated from the original due date to the date of payment.
- c. **Less Than Full Payment.** Landlord's acceptance of less than the full amount of any payment due from Tenant shall not be deemed an accord and satisfaction or compromise of such payment unless Landlord specifically consents in writing to payment of such lesser sum as an accord and satisfaction or compromise of the amount which Landlord claims. Any portion that remains to be paid by Tenant shall be subject to the late charges and default interest provisions of this Section.
- d. **Base Year.** The Base Rent paid by Tenant under this Lease includes Tenant's Pro Rata Share of Operating Costs for 2019 (the "Base Year"). As additional Rent, Tenant shall pay to Landlord on the first day of each month commencing on the first day of 2019, with Tenant's payment of Base Rent, one-twelfth of the amount, if any, by which Tenant's Pro Rata Share of Operating Costs exceeds Tenant's annualized Pro Rata Share of Operating Costs for the Base Year of this Section. Tenant's percentage share of Operating Costs is computed by dividing the square footage of Tenant's leased Premises by the total rentable square footage of the Building. Tenant's pro-rata share is: 6.3%.
- e. **Operating Costs.** As used herein, "Operating Costs" shall mean all costs of operating, maintaining and repairing the Premises, the Building, and the Property, determined in accordance with generally accepted accounting principles, and including without limitation the following: real estate taxes and assessments; electricity, water, sewer, garbage and all other utility charges; all other

usual and necessary costs of operation, management, janitorial, maintenance, and repair, excluding depreciation, loan payments, replacement of major structural elements, and any items which are the direct responsibility of Tenant under this Lease.

5. SECURITY DEPOSIT. Upon execution of this Lease, Tenant shall deliver to Landlord the security deposit specified in Section 1 above. Landlord's obligations with respect to the security deposit are those of a debtor and not of a trustee, and Landlord may commingle the security deposit with its other funds. If Tenant breaches any covenant or condition of this Lease, including but not limited to the payment of Rent, Landlord may apply all or any part of the security deposit to the payment of any sum in default and any damage suffered by Landlord as a result of Tenant's breach. Tenant acknowledges, however, that the security deposit shall not be considered as a measure of Tenant's damages in case of default by Tenant, and any payment to Landlord from the security deposit shall not be construed as a payment of liquidated damages for Tenant's default. If Landlord applies the security deposit as contemplated by this Section, Tenant shall, within five (5) days after written demand therefore by Landlord, deposit with Landlord the amount so applied. If Tenant complies with all of the covenants and conditions of this Lease throughout the Lease term, the security deposit shall be repaid to Tenant without interest within thirty (30) days after the surrender of the Premises by Tenant in the condition required hereunder by Section 12 of this Lease.

6. USES. The Premises shall be used only for the Permitted Use specified in Section 1 above, and for no other business or purpose without the prior written consent of Landlord. No act shall be done on or around the Premises that is unlawful or that will increase the existing rate of insurance on the Premises, the Building, or the Property, or cause the cancellation of any insurance on the Premises, the Building, or the Property. Tenant shall not commit or allow to be committed any waste upon the Premises, or any public or private nuisance. Tenant shall not do or permit anything to be done on the Premises, the Building, or the Property which will obstruct or interfere with the rights of other tenants or occupants of the Property, or their employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees or to injure or annoy such persons.

7. COMPLIANCE WITH LAWS. Tenant shall not cause or permit the Premises to be used in any way which violates any law, ordinance, or governmental regulation or order. Landlord represents to Tenant that, as of the Commencement Date, to Landlord's knowledge, but without duty of investigation, and with the exception of any Tenant's Work, the Premises comply with all applicable laws, rules, regulations, or orders, including without limitation, the Americans With Disabilities Act, if applicable, and Landlord shall be responsible to promptly cure at its sole cost any noncompliance which existed on the Commencement Date. Tenant shall be responsible for complying with all laws applicable to the Premises as a result of the Permitted Use, and Tenant shall be responsible for making any changes or alterations as may be required by law, rule, regulation, or order for Tenant's Permitted Use at its sole cost and expense. Otherwise, if changes or alterations are required by law, rule, regulation, or order unrelated to the Permitted Use, Landlord shall make changes and alterations at its expense.

8. UTILITIES AND SERVICES. Landlord shall provide the Premises the following services, the cost of which shall be included in the Operating Costs, to the extent not separately metered to the Premises: water and electricity for the Premises seven (7) days per week, twenty-four (24) hours per day, and HVAC from 7:00 a.m. to 6:00 p.m. Monday through Friday. Landlord shall provide janitorial service to the Premises and Building five (5) nights each week, exclusive of holidays, the cost of which shall also be included in Operating Costs. HVAC services will also be provided by Landlord to the Premises during additional hours on reasonable notice to Landlord, at Tenant's sole cost and expense, at an hourly rate reasonably established by Landlord from time to time and payable by Tenant, as and when billed, as Additional Rent. Notwithstanding the foregoing, if Tenant's use of the Premises incurs utility service charges which are above those usual and customary for the Permitted Use, Landlord reserves the right to require Tenant to pay a reasonable additional charge for such usage. Landlord shall not be liable for any loss, injury or damage to person or property caused by or resulting from any variation, interruption, or failure of utilities due to any cause whatsoever, and Rent shall not abate as a result thereof.

Tenant shall furnish all other utilities (including, but not limited to, telephone, Internet, and cable service if available) and other services which Tenant requires with respect to the Premises, and shall pay, at Tenant's sole expense, the cost of all utilities separately metered to the Premises, and of all other utilities and other

services which Tenant requires with respect to the Premises, except those to be provided by Landlord and included in Operating Expenses as described above. Landlord shall not be liable for any loss, injury or damage to person or property caused by or resulting from any variation, interruption, or failure of utilities due to any cause whatsoever, and Rent shall not abate as a result thereof.

9. TAXES. Tenant shall pay all taxes, assessments, liens and license fees ("Taxes") levied, assessed or imposed by any authority having the direct or indirect power to tax or assess any such liens, related to or required by Tenant's use of the Premises as well as all Taxes on Tenant's personal property located on the Premises. Landlord shall pay all taxes and assessments with respect to the Property, including any taxes resulting from a reassessment of the Building or the Property due to a change of ownership or otherwise.

10. COMMON AREAS.

- a. **Definition.** The term "Common Areas" means all areas, facilities and building systems that are provided and designated from time to time by Landlord for the general non-exclusive use and convenience of Tenant with other tenants and which are not leased or held for the exclusive use of a particular tenant. To the extent that such areas and facilities exist within the Property, Common Areas include hallways, entryways, stairs, elevators, driveways, walkways, terraces, docks, loading areas, restrooms, trash facilities, parking areas and garages, roadways, pedestrian sidewalks, landscaped areas, security areas, lobby or mall areas, common heating, ventilating and air conditioning systems, common electrical service, equipment and facilities, and common mechanical systems, equipment and facilities. Tenant shall comply with reasonable rules and regulations concerning the use of the Common Areas adopted by Landlord from time to time. Without advance notice to Tenant and without any liability to Tenant, Landlord may change the size, use, or nature of any Common Areas, erect improvements on the Common Areas or convert any portion of the Common Areas to the exclusive use of Landlord or selected tenants, so long as Tenant is not thereby deprived of the substantial benefit of the Premises. Landlord reserves the use of exterior walls and the roof, and the right to install, maintain, use, repair and replace pipes, ducts, conduits, and wires leading through the Premises in areas which will not materially interfere with Tenant's use thereof.
- b. **Use of the Common Areas.** Tenant shall have the non-exclusive right, in common with such other tenants to whom Landlord has granted or may grant such rights, to use the Common Areas. Tenant shall abide by rules and regulations adopted by Landlord from time to time and shall use its best efforts to cause its employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees to comply with those rules and regulations, and not interfere with the use of Common Areas by others.
- c. **Maintenance of Common Areas.** Landlord shall maintain the Common Areas in good order, condition and repair. This maintenance cost shall be an Operating Cost chargeable to Tenant pursuant to Section 8. In performing such maintenance, Landlord shall use reasonable efforts to minimize interference with Tenant's use and enjoyment of the Premises.

11. ALTERATIONS. Tenant may make alterations, additions or improvements to the Premises, including any Tenant Work identified on attached Exhibit C (the "Alterations"), only with the prior written consent of Landlord, which, with respect to Alterations not affecting the structural components of the Premises or utility systems therein, shall not be unreasonably withheld, conditioned, or delayed. Landlord shall have thirty (30) days in which to respond to Tenant's request for any Alterations so long as such request includes the name of Tenant's contractors and reasonably detailed plans and specifications therefor. The term "Alterations" shall not include the installation of shelves, movable partitions, Tenant's equipment, and trade fixtures that may be performed without damaging existing improvements or the structural integrity of the Premises, the Building, or the Property, and Landlord's consent shall not be required for Tenant's installation or removal of those items. Tenant shall perform all work at Tenant's expense and in compliance with all applicable laws and shall complete all Alterations in accordance with plans and specifications approved by Landlord, using contractors approved by Landlord, and in a manner so as not to unreasonably interfere with other tenants. Tenant shall pay, when due, or furnish a bond for payment (as set forth in

Section 20) all claims for labor or materials furnished to or for Tenant at or for use in the Premises, which claims are or may be secured by any mechanics' or materialmen's liens against the Premises or the Property or any interest therein. Tenant shall remove all Alterations at the end of the Lease term unless Landlord conditioned its consent upon Tenant leaving a specified Alteration at the Premises, in which case Tenant shall not remove such Alteration, and it shall become Landlord's property. Tenant shall immediately repair any damage to the Premises caused by removal of Alterations.

12. REPAIRS AND MAINTENANCE; SURRENDER. Tenant shall, at its sole expense, maintain the entire Premises in good condition and promptly make all non-structural repairs and replacements necessary to keep the Premises safe and in good condition, including all HVAC components and other utilities and systems to the extent exclusively serving the Premises. Landlord shall maintain and repair the Building structure, foundation, subfloor, exterior walls, roof structure and surface, and HVAC components and other utilities and systems serving more than just the Premises, and the Common Areas, the costs of which shall be included as an Operating Cost. Tenant shall not damage any demising wall or disturb the structural integrity of the Premises, the Building, or the Property and shall promptly repair any damage or injury done to any such demising walls or structural elements caused by Tenant or its employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees. Notwithstanding anything in this Section to the contrary, Tenant shall not be responsible for any repairs to the Premises made necessary by the negligence or willful misconduct of Landlord or its employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees therein. If Tenant fails to perform Tenant's obligations under this Section, Landlord may at Landlord's option enter upon the Premises after ten (10) days' prior notice to Tenant and put the same in good order, condition and repair and the cost thereof together with interest thereon at the default rate set forth in Section 4 shall be due and payable as additional rent to Landlord together with Tenant's next installment of Base Rent. Upon expiration of the Lease term, whether by lapse of time or otherwise, Tenant shall promptly and peacefully surrender the Premises, together with all keys, to Landlord in as good condition as when received by Tenant from Landlord or as thereafter improved, reasonable wear and tear and insured casualty excepted.

13. ACCESS AND RIGHT OF ENTRY. After twenty-four (24) hours' notice from Landlord and during normal working hours (except in cases of emergency, when no notice shall be required), Tenant shall permit Landlord and its agents, employees and contractors to enter the Premises at all reasonable times to make repairs, inspections, alterations or improvements, provided that Landlord shall use reasonable efforts to minimize interference with Tenant's use and enjoyment of the Premises. This Section shall not impose any repair or other obligation upon Landlord not expressly stated elsewhere in this Lease. After reasonable notice to Tenant, Landlord shall have the right to enter the Premises for the purpose of (a) showing the Premises to prospective purchasers or lenders at any time, and to prospective tenants within one hundred eighty (180) days prior to the expiration or sooner termination of the Lease term; and (b) posting "for lease" signs within one hundred eighty (180) days prior to the expiration or sooner termination of the Lease term.

14. SIGNAGE. Tenant shall obtain Landlord's written consent as to size, location, materials, method of attachment, and appearance, before installing any signs within the Premises. Tenant shall install any approved signage at Tenant's sole expense and in compliance with all applicable laws. Tenant shall not damage or deface the Premises in installing or removing signage and shall repair any injury or damage to the Premises caused by such installation or removal. Landlord will be responsible for all directory and suite signage.

15. DESTRUCTION OR CONDEMNATION.

- a. **Damage and Repair.** If the Premises or the portion of the Building or the Property necessary for Tenant's occupancy are partially damaged but not rendered untenable, by fire or other insured casualty, then Landlord shall diligently restore the Premises and the portion of the Property necessary for Tenant's occupancy to the extent required below and this Lease shall not terminate. Tenant may, however, terminate the Lease if Landlord is unable to restore the Premises within six (6) months of the casualty event by giving twenty (20) days written notice of termination.

The Premises or the portion of the Building or the Property necessary for Tenant's occupancy shall not be deemed untenable if twenty-five percent (25%) or less of each of those areas are

damaged. If insurance proceeds are not available or are not sufficient to pay the entire cost of restoring the Premises, or if Landlord's lender does not permit all or any part of the insurance proceeds to be applied toward restoration, then Landlord may elect to terminate this Lease and keep the insurance proceeds, by notifying Tenant within sixty (60) days of the date of such casualty.

If the Premises, the portion of the Building or the Property necessary for Tenant's occupancy, or fifty percent (50%) or more of the rentable area of the Property are entirely destroyed, or partially damaged and rendered untenable, by fire or other casualty, Landlord may, at its option: (a) terminate this Lease as provided herein, or (b) restore the Premises and the portion of the Property necessary for Tenant's occupancy to their previous condition to the extent required below; provided, however, if such casualty event occurs during the last six (6) months of the Lease term (after considering any option to extend the term timely exercised by Tenant) then either Tenant or Landlord may elect to terminate the Lease. If, within sixty (60) days after receipt by Landlord from Tenant of written notice that Tenant deems the Premises or the portion of the Property necessary for Tenant's occupancy untenable, Landlord fails to notify Tenant of its election to restore those areas, or if Landlord is unable to restore those areas within six (6) months of the date of the casualty event, then Tenant may elect to terminate the Lease upon twenty (20) days' notice to Landlord unless Landlord, within such twenty (20) day period, notifies Tenant that it will in fact restore the Premises or actually completes such restoration work to the extent required below, as applicable.

If Landlord restores the Premises or the Property under this Section, Landlord shall proceed with reasonable diligence to complete the work, and the Rent shall be abated in the same proportion as the untenable portion of the Premises bears to the whole Premises, provided that there shall be a Rent abatement only if the damage or destruction of the Premises or the Property did not result from, or was not contributed to directly or indirectly by the act, fault or neglect of Tenant, or Tenant's employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees. No damages, compensation or claim shall be payable by Landlord for inconvenience, loss of business or annoyance directly, incidentally or consequentially arising from any repair or restoration of any portion of the Premises or the Property. Landlord shall have no obligation to carry insurance of any kind for the protection of Tenant; any alterations or improvements paid for by Tenant; any Tenant's Work identified in Exhibit C (regardless of who may have completed them); Tenant's furniture; or on any fixtures, equipment, improvements or appurtenances of Tenant under this Lease, and Landlord's restoration obligations hereunder shall not include any obligation to repair any damage thereto or replace the same.

- b. **Condemnation.** If the Premises, the portion of the Building or the Property necessary for Tenant's occupancy, or 50% or more of the rentable area of the Property are made untenable by eminent domain, or conveyed under a threat of condemnation, this Lease shall terminate at the option of either Landlord or Tenant as of the earlier of the date title vests in the condemning authority or the condemning authority first has possession of the Premises or the portion of the Property taken by the condemning authority. All Rents and other payments shall be paid to that date.

If the condemning authority takes a portion of the Premises or of the Building or the Property necessary for Tenant's occupancy that does not render them untenable, then this Lease shall continue in full force and effect and the Rent shall be equitably reduced based on the proportion by which the floor area of any structures is reduced. The reduction in Rent shall be effective on the earlier of the date the condemning authority first has possession of such portion or title vests in the condemning authority. The Premises or the portion of the Building or the Property necessary for Tenant's occupancy shall not be deemed untenable if twenty-five percent (25%) or less of each of those areas are condemned. Landlord shall be entitled to the entire award from the condemning authority attributable to the value of the Premises or the Building or the Property and Tenant shall make no claim for the value of its leasehold. Tenant shall be permitted to make a separate claim against the condemning authority for moving expenses if Tenant may terminate the Lease under this Section, provided that in no event shall Tenant's claim reduce Landlord's award.

16. INSURANCE

- a. **Tenant's Liability Insurance.** During the Lease term, Tenant shall pay for and maintain commercial general liability insurance with broad form property damage and contractual liability endorsements. This policy shall name Landlord, its property manager (if any), and other parties designated by Landlord as additional insureds using an endorsement form acceptable to Landlord, and shall insure Tenant's activities and those of Tenant's employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees with respect to the Premises against loss, damage or liability for personal injury or bodily injury (including death) or loss or damage to property with a combined single limit of not less than \$1,000,000, and a deductible of not more than \$10,000. Tenant's insurance will be primary and noncontributory with any liability insurance carried by Landlord. Landlord may also require Tenant to obtain and maintain business income coverage for at least six (6) months, business auto liability coverage, and, if applicable to Tenant's Permitted Use, liquor liability insurance and/or warehouseman's coverage.
- b. **Tenant's Property Insurance.** During the Lease term, Tenant shall pay for and maintain special form clauses of loss coverage property insurance (with coverage for earthquake if required by Landlord's lender and, if the Premises are situated in a flood plain, flood damage) for all of Tenant's personal property, fixtures and equipment in the amount of their full replacement value, with a deductible of not more than \$10,000.
- c. **Miscellaneous.** Tenant's insurance required under this Section shall be with companies rated A-/VII or better in Best's Insurance Guide, and which are admitted in the State in which the Premises are located. No insurance policy shall be cancelled or reduced in coverage and each such policy shall provide that it is not subject to cancellation or a reduction in coverage except after thirty (30) days prior written notice to Landlord. Tenant shall deliver to Landlord upon commencement of the Lease and from time to time thereafter, copies of the insurance policies or evidence of insurance and copies of endorsements required by this Section. In no event shall the limits of such policies be considered as limiting the liability of Tenant under this Lease. If Tenant fails to acquire or maintain any insurance or provide any policy or evidence of insurance required by this Section, and such failure continues for three (3) days after notice from Landlord, Landlord may, but shall not be required to, obtain such insurance for Landlord's benefit and Tenant shall reimburse Landlord for the costs of such insurance upon demand. Such amounts shall be Additional Rent payable by Tenant hereunder and in the event of non-payment thereof, Landlord shall have the same rights and remedies with respect to such non-payment as it has with respect to any other non-payment of Rent hereunder.
- d. **Landlord's Insurance.** Landlord shall carry special form clauses of loss coverage property insurance of the Building shell and core in the amount of their full replacement value, liability insurance with respect to the Common Areas, and such other insurance of such types and amounts as Landlord, in its discretion, shall deem reasonably appropriate.
- e. **Waiver of Subrogation.** Landlord and Tenant hereby release each other and any other tenant, their agents or employees, from responsibility for, and waive their entire claim of recovery for any loss or damage arising from any cause covered by property insurance required to be carried or otherwise carried by each of them. Each party shall provide notice to the property insurance carrier or carriers of this mutual waiver of subrogation, and shall cause its respective property insurance carriers to waive all rights of subrogation against the other. This waiver shall not apply to the extent of the deductible amounts to any such property policies or to the extent of liabilities exceeding the limits of such policies.

17. INDEMNIFICATION.

- a. **Indemnification by Tenant.** Tenant shall defend, indemnify, and hold Landlord and its property manager (if any) harmless against all liabilities, damages, costs, and expenses, including attorneys' fees, for personal injury, bodily injury (including death) or property damage arising from any negligent or wrongful act or omission of Tenant or Tenant's employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees on or around the

Premises or the Property, or arising from any breach of this Lease by Tenant. Tenant shall use legal counsel reasonably acceptable to Landlord in defense of any action within Tenant's defense obligation.

- b. **Indemnification by Landlord.** Landlord shall defend, indemnify and hold Tenant harmless against all liabilities, damages, costs, and expenses, including attorneys' fees, for personal injury, bodily injury (including death) or property damage arising from any negligent or wrongful act or omission of Landlord or Landlord's employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees on or around the Premises or the Property, or arising from any breach of this Lease by Landlord. Landlord shall use legal counsel reasonably acceptable to Tenant in defense of any action within Landlord's defense obligation.
- c. **Waiver of Immunity.** Landlord and Tenant each specifically and expressly waive any immunity that each may be granted under the Washington State Industrial Insurance Act, Title 51 RCW. Neither party's indemnity obligations under this Lease shall be limited by any limitation on the amount or type of damages, compensation, or benefits payable to or for any third party under the Worker Compensation Acts, Disability Benefit Acts or other employee benefit acts.
- d. **Exemption of Landlord from Liability.** Except to the extent of claims arising out of Landlord's gross negligence or intentional misconduct, Landlord shall not be liable to Tenant for injury to Tenant's business or assets or any loss of income therefrom or for damage to any property of Tenant or of its employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees, or any other person in or about the Premises or the Property.
- e. **Survival.** The provisions of this Section shall survive expiration or termination of this Lease.

18. ASSIGNMENT AND SUBLETTING. Tenant shall not assign, sublet, mortgage, encumber or otherwise transfer any interest in this Lease (collectively referred to as a "Transfer") or any part of the Premises, without first obtaining Landlord's written consent, which shall not be unreasonably withheld, conditioned, or delayed. No Transfer shall relieve Tenant of any liability under this Lease notwithstanding Landlord's consent to such Transfer. Consent to any Transfer shall not operate as a waiver of the necessity for Landlord's consent to any subsequent Transfer. In connection with each request for consent to a Transfer, Tenant shall pay the reasonable cost of processing same, including attorneys' fees, upon demand of Landlord, up to a maximum of \$1,250.

If Tenant is a partnership, limited liability company, corporation, or other entity, any transfer of this Lease by merger, consolidation, redemption or liquidation, or any change in the ownership of, or power to vote, which singularly or collectively represents a majority of the beneficial interest in Tenant, shall constitute a Transfer under this Section.

As a condition to Landlord's approval, if given, any potential assignee or sublessee otherwise approved by Landlord shall assume all obligations of Tenant under this Lease and shall be jointly and severally liable with Tenant and any guarantor, if required, for the payment of Rent and performance of all terms of this Lease. In connection with any Transfer, Tenant shall provide Landlord with copies of all assignments, subleases and assumption agreement or documents.

19. LIENS. Tenant shall not subject the Landlord's assets to any liens or claims of lien. Tenant shall keep the Premises free from any liens created by or through Tenant. Tenant shall indemnify and hold Landlord harmless from liability for any such liens including, without limitation, liens arising from any Alterations. If a lien is filed against the Premises by any person claiming by, through or under Tenant, Tenant shall, within ten (10) days after Landlord's demand, at Tenant's expense, either remove the lien or furnish to Landlord a bond in form and amount and issued by a surety satisfactory to Landlord, indemnifying Landlord and the Premises against all liabilities, costs and expenses, including attorneys' fees, which Landlord could reasonably incur as a result of such lien.

20. DEFAULT. The following occurrences shall each constitute a default by Tenant (an "Event of Default"):

- a. **Failure To Pay.** Failure by Tenant to pay any sum, including Rent, due under this Lease following seven (7) days' notice from Landlord of the failure to pay.
- b. **Vacation/Abandonment.** Vacation by Tenant of the Premises (defined as an absence for at least fifteen (15) consecutive days without prior notice to Landlord), or abandonment by Tenant of the Premises (defined as an absence of five (5) days or more while Tenant is in breach of some other term of this Lease). Tenant's vacation or abandonment of the Premises shall not be subject to any notice or right to cure.
- c. **Insolvency.** Tenant's insolvency or bankruptcy (whether voluntary or involuntary); or appointment of a receiver, assignee or other liquidating officer for Tenant's business; provided, however, that in the event of any involuntary bankruptcy or other insolvency proceeding, the existence of such proceeding shall constitute an Event of Default only if such proceeding is not dismissed or vacated within sixty (60) days after its institution or commencement.
- d. **Levy or Execution.** The taking of Tenant's interest in this Lease or the Premises, or any part thereof, by execution or other process of law directed against Tenant, or attachment of Tenant's interest in this Lease by any creditor of Tenant, if such attachment is not discharged within fifteen (15) days after being levied.
- e. **Other Non-Monetary Defaults.** The breach by Tenant of any agreement, term or covenant of this Lease other than one requiring the payment of money and not otherwise enumerated in this Section or elsewhere in this Lease, which breach continues for a period of thirty (30) days after notice by Landlord to Tenant of the breach.
- f. **Failure to Take Possession.** Failure by Tenant to take possession of the Premises on the Commencement Date or failure by Tenant to commence any Tenant Improvement in a timely fashion.

21. REMEDIES. Landlord shall have the following remedies upon an Event of Default. Landlord's rights and remedies under this Lease shall be cumulative, and none shall exclude any other right or remedy allowed by law.

- a. **Termination of Lease.** Landlord may terminate Tenant's interest under the Lease, but no act by Landlord other than notice of termination from Landlord to Tenant shall terminate this Lease. The Lease shall terminate on the date specified in the notice of termination. Upon termination of this Lease, Tenant will remain liable to Landlord for damages in an amount equal to the Rent and other sums that would have been owing by Tenant under this Lease for the balance of the Lease term, less the net proceeds, if any, of any reletting of the Premises by Landlord subsequent to the termination, after deducting all of Landlord's Reletting Expenses (as defined below). Landlord shall be entitled to either collect damages from Tenant monthly on the days on which rent or other amounts would have been payable under the Lease, or alternatively, Landlord may accelerate Tenant's obligations under the Lease and recover from Tenant: (i) unpaid rent which had been earned at the time of termination; (ii) the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of rent loss that Tenant proves could reasonably have been avoided; (iii) the amount by which the unpaid rent for the balance of the term of the Lease after the time of award exceeds the amount of rent loss that Tenant proves could reasonably be avoided (discounting such amount by the discount rate of the Federal Reserve Bank of San Francisco at the time of the award, plus 1%); and (iv) any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under the Lease, or which in the ordinary course would be likely to result from the Event of Default, including without limitation Reletting Expenses described below.
- b. **Re-Entry and Reletting.** Landlord may continue this Lease in full force and effect, and without demand or notice, re-enter and take possession of the Premises or any part thereof, expel the

Tenant from the Premises and anyone claiming through or under the Tenant, and remove the personal property of either. Landlord may relet the Premises, or any part of them, in Landlord's or Tenant's name for the account of Tenant, for such period of time and at such other terms and conditions as Landlord, in its discretion, may determine. Landlord may collect and receive the rents for the Premises. To the fullest extent permitted by law, the proceeds of any reletting shall be applied: first, to pay Landlord all Reletting Expenses (defined below); second, to pay any indebtedness of Tenant to Landlord other than rent; third, to the rent due and unpaid hereunder; and fourth, the residue, if any, shall be held by Landlord and applied in payment of other or future obligations of Tenant to Landlord as the same may become due and payable, and Tenant shall not be entitled to receive any portion of such revenue. Re-entry or taking possession of the Premises by Landlord under this Section shall not be construed as an election on Landlord's part to terminate this Lease, unless a notice of termination is given to Tenant. Landlord reserves the right following any re-entry or reletting, or both, under this Section to exercise its right to terminate the Lease. Tenant will pay Landlord the Rent and other sums which would be payable under this Lease if repossession had not occurred, less the net proceeds, if any, after reletting the Premises and after deducting Landlord's Reletting Expenses. "Reletting Expenses" is defined to include all expenses incurred by Landlord in connection with reletting the Premises, including without limitation, all repossession costs, brokerage commissions and costs for securing new tenants, attorneys' fees, remodeling and repair costs, costs for removing persons or property, costs for storing Tenant's property and equipment, and costs of tenant improvements and rent concessions granted by Landlord to any new Tenant, prorated over the life of the new lease.

- c. **Waiver of Redemption Rights.** Tenant, for itself, and on behalf of any and all persons claiming through or under Tenant, including creditors of all kinds, hereby waives and surrenders all rights and privileges which they may have under any present or future law, to redeem the Premises or to have a continuance of this Lease for the Lease term, or any extension thereof.
- d. **Nonpayment of Additional Rent.** All costs which Tenant is obligated to pay to Landlord pursuant to this Lease shall in the event of nonpayment be treated as if they were payments of Rent, and Landlord shall have the same rights it has with respect to nonpayment of Rent.
- e. **Failure to Remove Property.** If Tenant fails to remove any of its property from the Premises at Landlord's request following an uncured Event of Default, Landlord may, at its option, remove and store the property at Tenant's expense and risk. If Tenant does not pay the storage cost within five (5) days of Landlord's request, Landlord may, at its option, have any or all of such property sold at public or private sale (and Landlord may become a purchaser at such sale), in such manner as Landlord deems proper, without notice to Tenant. Landlord shall apply the proceeds of such sale: (i) to the expense of such sale, including reasonable attorneys' fees actually incurred; (ii) to the payment of the costs or charges for storing such property; (iii) to the payment of any other sums of money which may then be or thereafter become due Landlord from Tenant under any of the terms hereof; and (iv) the balance, if any, to Tenant. Nothing in this Section shall limit Landlord's right to sell Tenant's personal property as permitted by law or to foreclose Landlord's lien for unpaid rent.

22. MORTGAGE SUBORDINATION AND ATTORNMENT. This Lease shall automatically be subordinate to any mortgage or deed of trust created by Landlord which is now existing or hereafter placed upon the Premises including any advances, interest, modifications, renewals, replacements or extensions ("Landlord's Mortgage"). Tenant shall attorn to the holder of any Landlord's Mortgage or any party acquiring the Premises at any sale or other proceeding under any Landlord's Mortgage provided the acquiring party assumes the obligations of Landlord under this Lease. Tenant shall promptly and in no event later than fifteen (15) days after request execute, acknowledge and deliver documents which the holder of any Landlord's Mortgage may reasonably require as further evidence of this subordination and attornment. Notwithstanding the foregoing, Tenant's obligations under this Section to subordinate in the future are conditioned on the holder of each Landlord's Mortgage and each party acquiring the Premises at any sale or other proceeding under any such Landlord's Mortgage not disturbing Tenant's occupancy and other rights under this Lease, so long as no uncured Event of Default by Tenant exists.

23. NON-WAIVER. Landlord's waiver of any breach of any provision contained in this Lease shall not be deemed to be a waiver of the same provision for subsequent acts of Tenant. The acceptance by Landlord of Rent or other amounts due by Tenant hereunder shall not be deemed to be a waiver of any previous breach by Tenant.

24. HOLDOVER. If Tenant shall, without the written consent of Landlord, remain in possession of the Premises and fail to return them to Landlord after the expiration or termination of this Lease, the tenancy shall be a holdover tenancy and shall be on a month-to-month basis, which may be terminated according to Washington law. During such tenancy, Tenant agrees to pay to Landlord 150% of the rate of rental last payable under this Lease, unless a different rate is agreed upon by Landlord. All other terms of the Lease shall remain in effect. Tenant acknowledges and agrees that this Section does not grant any right to Tenant to holdover, and that Tenant may also be liable to Landlord for any and all damages or expenses which Landlord may have to incur as a result of Tenant's holdover.

25. NOTICES. All notices under this Lease shall be in writing and effective (i) when delivered in person or via overnight courier to the other party, (ii) three (3) days after being sent by registered or certified mail to the other party at the address set forth in Section 1; or (iii) upon confirmed transmission by facsimile to the other party at the facsimile numbers set forth in Section 1. The addresses for notices and payment of rent set forth in Section 1 may be modified by either party only by written notice delivered in conformance with this Section.

26. COSTS AND ATTORNEYS' FEES. If Tenant or Landlord engage the services of an attorney to collect monies due or to bring any action for any relief against the other, declaratory or otherwise, arising out of this Lease, including any suit by Landlord for the recovery of Rent or other payments, or possession of the Premises, the losing party shall pay the prevailing party a reasonable sum for attorneys' fees in such action, whether in mediation or arbitration, at trial, on appeal, or in any bankruptcy proceeding.

27. ESTOPPEL CERTIFICATES. Tenant shall, from time to time, upon written request of Landlord, execute, acknowledge and deliver to Landlord or its designee a written statement specifying the following, subject to any modifications necessary to make such statements true and complete: (i) the total rentable square footage of the Premises; (ii) the date the Lease term commenced and the date it expires; (iii) the amount of minimum monthly Rent and the date to which such Rent has been paid; (iv) that this Lease is in full force and effect and has not been assigned, modified, supplemented or amended in any way; (v) that this Lease represents the entire agreement between the parties; (vi) that all obligations under this Lease to be performed by either party have been satisfied; (vii) that there are no existing claims, defenses or offsets which the Tenant has against the enforcement of this Lease by Landlord; (viii) the amount of Rent, if any, that Tenant paid in advance; (ix) the amount of security that Tenant deposited with Landlord; (x) if Tenant has sublet all or a portion of the Premises or assigned its interest in the Lease and to whom; (xi) if Tenant has any option to extend the Lease or option to purchase the Premises; and (xii) such other factual matters concerning the Lease or the Premises as Landlord may reasonably request. Tenant acknowledges and agrees that any statement delivered pursuant to this Section may be relied upon by a prospective purchaser of Landlord's interest or assignee of any mortgage or new mortgagee of Landlord's interest in the Premises. If Tenant shall fail to respond within ten (10) days to Landlord's request for the statement required by this Section, Landlord may provide the statement and Tenant shall be deemed to have admitted the accuracy of the information provided by Landlord.

28. TRANSFER OF LANDLORD'S INTEREST. This Lease shall be assignable by Landlord without the consent of Tenant. In the event of any transfer or transfers of Landlord's interest in the Premises, other than a transfer for collateral purposes only, upon the assumption of this Lease by the transferee, Landlord shall be automatically relieved of obligations and liabilities accruing from and after the date of such transfer, including any liability for any retained security deposit or prepaid rent, for which the transferee shall be liable, and Tenant shall attorn to the transferee.

29. LANDLORD'S LIABILITY. Anything in this Lease to the contrary notwithstanding, covenants, undertakings and agreements herein made on the part of Landlord are made and intended not as personal covenants, undertakings and agreements for the purpose of binding Landlord personally or the assets of Landlord but are made and intended for the purpose of binding only the Landlord's interest in the Premises,

as the same may from time to time be encumbered. In no event shall Landlord or its partners, shareholders, or members, as the case may be, ever be personally liable hereunder.

30. RIGHT TO PERFORM. If Tenant shall fail to timely pay any sum or perform any other act on its part to be performed hereunder, Landlord may make any such payment or perform any such other act on Tenant's behalf. Tenant shall, within ten (10) days of demand, reimburse Landlord for its expenses incurred in making such payment or performance. Landlord shall (in addition to any other right or remedy of Landlord provided by law) have the same rights and remedies in the event of the nonpayment of sums due under this Section as in the case of default by Tenant in the payment of Rent.

31. HAZARDOUS MATERIAL. As used herein, the term "Hazardous Material" means any hazardous, dangerous, toxic or harmful substance, material or waste including biomedical waste which is or becomes regulated by any local governmental authority, the State of Washington or the United States Government, due to its potential harm to the health, safety or welfare of humans or the environment. Landlord represents and warrants to Tenant that, to Landlord's knowledge without duty of investigation, there is no Hazardous Material on, in, or under the Premises as of the Commencement Date except as may otherwise have been disclosed to Tenant in writing before the execution of this Lease. If there is any Hazardous Material on, in, or under the Premises as of the Commencement Date which has been or thereafter becomes unlawfully released through no fault of Tenant, then Landlord shall indemnify, defend and hold Tenant harmless from any and all claims, judgments, damages, penalties, fines, costs, liabilities or losses including without limitation sums paid in settlement of claims, attorneys' fees, consultant fees and expert fees, incurred or suffered by Tenant either during or after the Lease term as the result of such contamination.

Tenant shall not cause or permit any Hazardous Material to be brought upon, kept, or used in or about, or disposed of on the Premises or the Property by Tenant, its employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees, except with Landlord's prior consent and then only upon strict compliance with all applicable federal, state and local laws, regulations, codes and ordinances. If Tenant breaches the obligations stated in the preceding sentence, then Tenant shall indemnify, defend and hold Landlord harmless from any and all claims, judgments, damages, penalties, fines, costs, liabilities or losses including, without limitation, diminution in the value of the Premises or the Property; damages for the loss or restriction on use of rentable or usable space or of any amenity of the Premises or the Property, or elsewhere; damages arising from any adverse impact on marketing of space at the Premises or the Property; and sums paid in settlement of claims, attorneys' fees, consultant fees and expert fees incurred or suffered by Landlord either during or after the Lease term. These indemnifications by Landlord and Tenant include, without limitation, costs incurred in connection with any investigation of site conditions or any clean-up, remedial, removal or restoration work, whether or not required by any federal, state or local governmental agency or political subdivision, because of Hazardous Material present in the Premises, or in soil or ground water on or under the Premises. Tenant shall immediately notify Landlord of any inquiry, investigation or notice that Tenant may receive from any third party regarding the actual or suspected presence of Hazardous Material on the Premises.

Without limiting the foregoing, if the presence of any Hazardous Material brought upon, kept or used in or about the Premises or the Property by Tenant, its employees, officers, agents, servants, contractors, customers, clients, visitors, guests, or other licensees or invitees, results in any unlawful release of any Hazardous Materials on the Premises or the Property, Tenant shall promptly take all actions, at its sole expense, as are necessary to return the Premises or the Property to the condition existing prior to the release of any such Hazardous Material; provided that Landlord's approval of such actions shall first be obtained, which approval may be withheld at Landlord's sole discretion. The provisions of this Section shall survive expiration or termination of this Lease.

32. QUIET ENJOYMENT. So long as Tenant pays the Rent and performs all of its obligations in this Lease, Tenant's possession of the Premises will not be disturbed by Landlord or anyone claiming by, through or under Landlord.

33. MERGER. The voluntary or other surrender of this Lease by Tenant, or a mutual cancellation thereof, shall not work a merger and shall, at the option of Landlord, terminate all or any existing subtenancies or may, at the option of Landlord, operate as an assignment to Landlord of any or all of such subtenancies.

34. GENERAL.

- a. **Heirs and Assigns.** This Lease shall apply to and be binding upon Landlord and Tenant and their respective heirs, executors, administrators, successors and assigns.
- b. **Brokers' Fees.** Tenant represents and warrants to Landlord that except for Tenant's Broker, if any, described and disclosed in Section 37 of this Lease, it has not engaged any broker, finder or other person who would be entitled to any commission or fees for the negotiation, execution or delivery of this Lease and shall indemnify and hold harmless Landlord against any loss, cost, liability or expense incurred by Landlord as a result of any claim asserted by any such broker, finder or other person on the basis of any arrangements or agreements made or alleged to have been made by or on behalf of Tenant. Landlord represents and warrants to Tenant that except for Landlord's Broker, if any, described and disclosed in Section 37 of this Lease, it has not engaged any broker, finder or other person who would be entitled to any commission or fees for the negotiation, execution or delivery of this Lease and shall indemnify and hold harmless Tenant against any loss, cost, liability or expense incurred by Tenant as a result of any claim asserted by any such broker, finder or other person on the basis of any arrangements or agreements made or alleged to have been made by or on behalf of Landlord.
- c. **Entire Agreement.** This Lease contains all of the covenants and agreements between Landlord and Tenant relating to the Premises. No prior or contemporaneous agreements or understandings pertaining to the Lease shall be valid or of any force or effect and the covenants and agreements of this Lease shall not be altered, modified or amended except in writing, signed by Landlord and Tenant.
- d. **Severability.** Any provision of this Lease which shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision of this Lease.
- e. **Force Majeure.** Time periods for either party's performance under any provisions of this Lease (excluding payment of Rent) shall be extended for periods of time during which the party's performance is prevented due to circumstances beyond such party's control, including without limitation, fires, floods, earthquakes, lockouts, strikes, embargoes, governmental regulations, acts of God, public enemy, war or other strife.
- f. **Governing Law.** This Lease shall be governed by and construed in accordance with the laws of the State of Washington.
- g. **Memorandum of Lease.** Neither this Lease nor any memorandum or "short form" thereof shall be recorded without Landlord's prior consent.
- h. **Submission of Lease Form Not an Offer.** One party's submission of this Lease to the other for review shall not constitute an offer to lease the Premises. This Lease shall not become effective and binding upon Landlord and Tenant until it has been fully signed by both of them.
- i. **No Light, Air or View Easement.** Tenant has not been granted an easement or other right for light, air or view to or from the Premises. Any diminution or shutting off of light, air or view by any structure which may be erected on or adjacent to the Building shall in no way effect this Lease or the obligations of Tenant hereunder or impose any liability on Landlord.
- j. **Authority of Parties.** Each party signing this Lease represents and warrants to the other that it has the authority to enter into this Lease, that the execution and delivery of this Lease has been duly authorized, and that upon such execution and delivery, this Lease shall be binding upon and enforceable against the party on signing.

- k. **Time.** "Day" as used herein means a calendar day and "business day" means any day on which commercial banks are generally open for business in the state where the Premises are situated. Any period of time which would otherwise end on a non-business day shall be extended to the next following business day. Time is of the essence of this Lease.

35. EXHIBITS AND RIDERS. The following exhibits and riders are made a part of this Lease, and the terms thereof shall control over any inconsistent provision in the sections of this Lease:

Exhibit A Floor Plan/Outline of the Premises
Exhibit B Legal Description of the Property
Exhibit C Tenant Work Letter
Exhibit D Commencement Date Memorandum
Exhibit E Rules and Regulations

CHECK THE BOX FOR ANY OF THE FOLLOWING THAT WILL APPLY. CAPITALIZED TERMS USED IN THE RIDERS SHALL HAVE THE MEANING GIVEN TO THEM IN THE LEASE.

- Rent Rider
 Arbitration Rider
 Letter of Credit Rider
 Parking Rider
 Option to Extend Rider
 Guaranty of Tenant's Lease Obligations Rider

36. AGENCY DISCLOSURE. At the signing of this Lease, Landlord is represented by Derek Heed of Colliers International (the "Landlord's Broker"), and Tenant is represented by Jordan Siek of Kidder Mathews (the "Tenant's Broker").

This Agency Disclosure creates an agency relationship between Landlord, Landlord's Broker (if any such person is disclosed), and any managing brokers who supervise Landlord's Broker's performance (collectively the "Supervising Brokers"). In addition, this Agency Disclosure creates an agency relationship between Tenant, Tenant's Broker (if any such person is disclosed), and any managing brokers who supervise Tenant's Broker's performance (also collectively the "Supervising Brokers"). If Tenant's Broker and Landlord's Broker are different real estate licensees affiliated with the same Firm, then both Tenant and Landlord confirm their consent to that Firm and both Tenant's and Landlord's Supervising Brokers acting as dual agents. If Tenant's Broker and Landlord's Broker are the same real estate licensee who represents both parties, then both Landlord and Tenant acknowledge that the Broker, his or her Supervising Brokers, and his or her Firm are acting as dual agents and hereby consent to such dual agency. If Tenant's Broker, Landlord's Broker, their Supervising Brokers, or their Firm are dual agents, Landlord and Tenant consent to Tenant's Broker, Landlord's Broker and their Firm being compensated based on a percentage of the rent or as otherwise disclosed on the attached addendum. Neither Tenant's Broker, Landlord's Broker nor either of their Firms are receiving compensation from more than one party to this transaction unless otherwise disclosed on an attached addendum, in which case Landlord and Tenant consent to such compensation. Landlord and Tenant confirm receipt of the pamphlet entitled "The Law of Real Estate Agency."

37. COMMISSION AGREEMENT. If Landlord has not entered into a listing agreement (or other compensation agreement with Landlord's Broker), Landlord agrees to pay a commission to Landlord's Broker (as identified in the Agency Disclosure paragraph above) as follows:

- \$
 _____% of the gross rent payable pursuant to the Lease
 Other \$1.00/SF/Yr to Tenant's Broker; \$0.50/SF/Yr to Landlord's Broker less any free rent

Landlord's Broker shall shall not (shall not if not filled in) be entitled to a commission upon the extension by Tenant of the Lease term pursuant to any right reserved to Tenant under the Lease calculated as provided above or as follows _____ (if no box is checked,

as provided above). Landlord's Broker shall shall not (shall not if not filled in) be entitled to a commission upon any expansion of the Premises pursuant to any right reserved to Tenant under the Lease, calculated as provided above or as follows _____ (if no box is checked, as provided above).

Any commission shall be earned upon execution of this Lease, and paid one-half upon execution of the Lease and one-half upon occupancy of the Premises by Tenant. Landlord's Broker shall pay to Tenant's Broker (as identified in the Agency Disclosure paragraph above) the amount stated in a separate agreement between them or, if there is no agreement, \$0.00 or _____% (complete only one) of any commission paid to Landlord's Broker, within five (5) days after receipt by Landlord's Broker.

If any other lease or sale is entered into between Landlord and Tenant pursuant to a right reserved to Tenant under the Lease, Landlord shall shall not (shall not if not filled in) pay an additional commission according to any commission agreement or, in the absence of one, according to the commission schedule of Landlord's Broker in effect as of the execution of this Lease. Landlord's successor shall be obligated to pay any unpaid commissions upon any transfer of this Lease and any such transfer shall not release the transferor from liability to pay such commissions.

38. BROKER PROVISIONS.

LANDLORD'S BROKER, TENANT'S BROKER AND THEIR FIRMS HAVE MADE NO REPRESENTATIONS OR WARRANTIES CONCERNING THE PREMISES; THE MEANING OF THE TERMS AND CONDITIONS OF THIS LEASE; LANDLORD'S OR TENANT'S FINANCIAL STANDING; ZONING OR COMPLIANCE OF THE PREMISES WITH APPLICABLE LAWS; SERVICE OR CAPACITY OF UTILITIES; OPERATING COSTS; OR HAZARDOUS MATERIALS. LANDLORD AND TENANT ARE EACH ADVISED TO SEEK INDEPENDENT LEGAL ADVICE ON THESE AND OTHER MATTERS ARISING UNDER THIS LEASE.

IN WITNESS WHEREOF, this Lease has been executed the date and year first above written.

GJR REIH II, LLC,
a Washington Limited Liability Company
Washington

Eden Home Health of King County, LLC, a
Limited Liability Company by its Manager,
EmpRes Healthcare Management, LLC

LANDLORD


LANDLORD (Signature)

TENANT


TENANT (Signature)

Gary Rubens
BY
Manager
ITS

Brent Weil
BY
CEO
ITS

State of Washington)
County of King) ss.

On this 22nd day of January, 2019 before me personally appeared before me Gary Rubens, to me known to be the Manager of GJR REIH II, the L.L.C. that executed the within and foregoing instrument and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned an on oath stating that he is authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed by official seal the day and year first written above.

Kendra Mills
(Signature of Notary)

Kendra Mills
(Legibly Print or Stamp Name of Notary)

Notary public in and for the state of Washington
Residing at Issaquah
My appointment expires 10-2-19



State of Utah)
County of King) ss.

On this 17 day of January, 2019 before me personally appeared before me Brent Weil, to me known to be the CEO of EmpRes Healthcare Management, LLC, a Washington Limited Liability Company Manager of Eden Home Health of King County, LLC, a Washington Limited Liability Company that executed the within and foregoing instrument and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned an on oath stating that he is authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed by official seal the day and year first written above.

Brooke Nicole Barraza
(Signature of Notary)

Brooke Nicole Barraza
(Legibly Print or Stamp Name of Notary)

Notary public in and for the state of Utah
Residing at Utah
My appointment expires 10/19/21

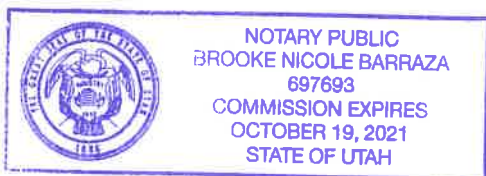


EXHIBIT A
[Floor Plan/Outline of the Premises]

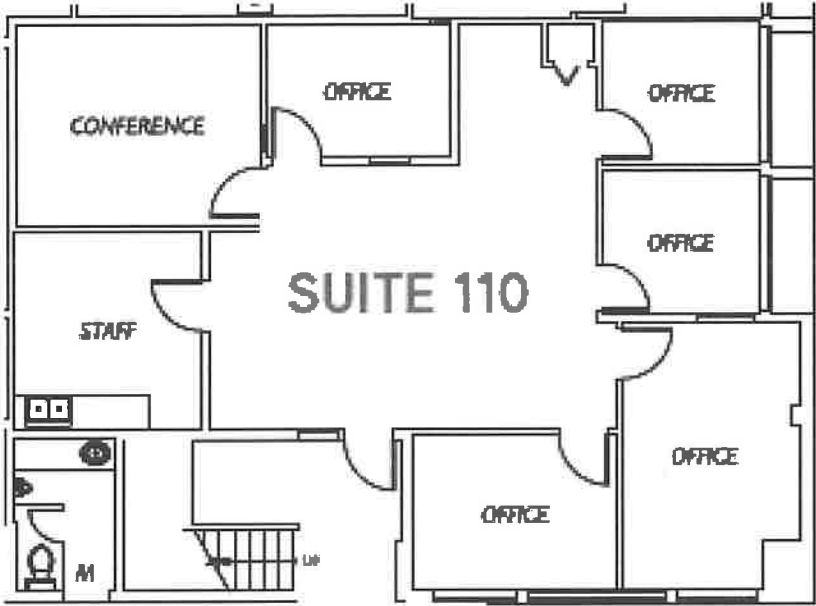


EXHIBIT B
[Legal Description of the Property]

LEGAL DESCRIPTION

PARKADE PLAZA, KIRKLAND, WASHINGTON

PARCEL A:

Lots 8 through 15 inclusive. Block 225. Supplementary Plat to Kirkland, according to the plat thereof recorded in Volume 8 of Plats, Page 5, records of King County, Washington.

PARCEL B:

Lots 1 and 2. Block 186, Town of Kirkland, according to the plat thereof recorded in Volume 6 of Plats, Page 53, records of King County, Washington.

Together with that portion of Lot 3 and Lot 21, Block 186, of said plat described as follows:

Beginning at the northeasterly corner of said Lot 3:
thence westerly along the northerly line of said Lot 3, a distance of 24.00 feet;
thence south parallel to the easterly line of said Lot 3 a distance of 124.75 feet to the northerly margin of Central Way as conveyed 80 feet in width;
thence northeasterly along said northerly margin to the southeasterly corner of said Lot 3;
thence north along the easterly line of said Lot 3 to the true point of beginning;

(Being known as Lots A and B of City of Kirkland Short Plat No. 78-6-22, recorded under Recording No. 7806270925, records of King County, Washington).

Both situate in the County of King, State of Washington.

EXHIBIT C
[Tenant Work Letter]

Landlord will provide the following initial tenant improvements, at Landlord's sole cost (i) new paint (Tenant to select color); (ii) repair and patch wall prior to painting; (iii) professionally clean carpet and kitchen; and (iv) replace ceiling tiles. Tenant accepts the Premises in its current, "as is" condition, subject to Landlord's construction of the initial tenant improvements. It shall be Tenant's obligation to determine whether the Premises comply with the applicable governmental regulations with regard to Tenant's intended use. Tenant acknowledges that (i) neither Landlord nor any of its employees or agents has made any representations regarding the Premises or the suitability of the Premises for any particular use or the condition thereof; and (ii) except for the Improvements, Landlord has no obligation to perform any work, supply any materials, incur any expense, or make any alterations or improvements to prepare the Premises for Tenant's occupancy.

EXHIBIT D

[Commencement Date Memorandum Form]

This Letter is an amendment to the Lease for space in Parkade Plaza in Kirkland, Washington, executed on the ____ day of _____, 20__ between GJR REIH II, LLC, a Washington Limited Liability Company, as Landlord, and EmpRes Healthcare Management, LLC, a Washington Limited Liability Company, dba Eden Home Health of King County, LLC, a Washington Limited Liability Company, as Tenant.

Landlord and Tenant agree that:

1. The Premises consists of 1,576 square feet of net rentable area.
2. Except for those items shown on the attached "punch list", if any, which Landlord will remedy within ____ days hereof, Landlord has fully completed the construction work required under the terms of the Lease.
3. The Premises are tenantable, the Landlord has no further obligation for construction (except as specified above), and Tenant acknowledges that both the Building and the Premises are satisfactory in all respects.
4. The Commencement Date of the Lease is agreed to be the ____ day of _____, 20__.
5. The Expiration Date of the Lease is agreed to be the ____ day of _____, 20__.

All other terms and conditions of the Lease are ratified and acknowledged to be unchanged.

Agreed and executed this ____ day of _____, 20__.

ACKNOWLEDGED AND AGREED:

**LANDLORD: GJR REIH II, LLC,
a Washington Limited Liability Company
Washington**

By _____

Name _____

Its _____

Dated: _____

ACKNOWLEDGED AND AGREED:

**TENANT:
Eden Home Health of King County, LLC, a
Limited Liability Company, by its Manager
EmpRes Healthcare Management, LLC**

By  _____

Name Brent Weil

Its CEO

Dated: 1/17/2019

EXHIBIT E
[Rules and Regulations]

1. No sign, placard, picture, advertisement, name or notice shall be installed or displayed on any part of the outside or inside of the Building or Land without the prior written consent of the Landlord. Landlord shall have the right to remove, at Tenant's expense and without notice, any sign installed or displayed in violation of this rule. All approved signs or lettering on doors and walls shall be printed, painted, affixed or inscribed at the expense of Tenant by a person with the appropriate experience performing such work.

2. If Landlord objects in writing to any curtains, blinds, shades, screens or hanging plants or other similar objects attached to or used in connection with any window or door of the Premises, Tenant shall immediately discontinue such use. No awning shall be permitted on any part of the Premises. Tenant shall not place anything against or near glass partitions or doors or windows which may appear unsightly from outside the Premises.

3. Tenant shall not obstruct any sidewalk, halls, passages, exits, entrances, elevators, escalators, or stairways of the Building. The halls, passages, exits, entrances, elevators, escalators and stairways are not open to the general public. Landlord shall in all cases retain the right to control and prevent access to such areas of all persons whose presence in the judgment of Landlord would be prejudicial to the safety, character, reputation and interest of the Land, Building and the Building's tenants; provided that, nothing in this Lease contained shall be construed to prevent such access to persons with whom any Tenant normally deals in the ordinary course of its business, unless such persons are engaged in illegal activities. Tenant shall not go upon the roof of the Building.

4. The directory of the Building will be provided exclusively for the display of the name and location of tenants only, and Landlord reserves the right to exclude any other names there from.

5. Landlord will furnish Tenant, free of charge, two (2) keys to each door lock in the Premises. Landlord may make a reasonable charge for any additional keys. Tenant shall not make or have made additional keys, and Tenant shall not alter any lock or install a new additional lock or bolt on any door of its Premises. Tenant, upon the termination of its tenancy, shall deliver to Landlord the keys of all doors which have been furnished to Tenant, and in the event of loss of any keys so furnished, shall pay Landlord therefor.

6. HVAC service shall be provided to the Premises Monday through Friday from 7:00 a.m. to 6:00 p.m. After-hours HVAC usage will be charged to Tenant.

7. If Tenant requires Telecommunication Services, computer circuits, burglar alarm or similar services or other utility services, it shall first obtain Landlord's approval of the construction or installation of such services. Application for such services shall be made in accordance with the procedure prescribed by Landlord in the Lease.

8. Tenant shall not place a load upon any floor of the Premises which exceeds the load per square foot which such floor was designed to carry and which is allowed by Government Requirements. Landlord shall have the right to, within reason, prescribe the weight, size and position of all equipment, materials, furniture or other property brought into the Building. Heavy objects shall, if considered necessary by Landlord, stand on such platforms as determined by Landlord to be necessary to properly distribute the weight. Business machines and mechanical equipment belonging to Tenant, which cause noise or vibration that may be transmitted to the structure of the Building or to any space in the Building or to any other tenant in the Building, shall be placed and maintained by Tenant, at Tenant's expense, on vibration eliminators or other devices sufficient to eliminate noise or vibration. The persons employed to move such equipment in or out of the Building must be acceptable to Landlord. Landlord will not be responsible for loss of, or damage to, any such equipment or other property from any cause, and all damage done to the Building by maintaining or moving such equipment or other property shall be repaired at the expense of Tenant.

9. Tenant shall not use or keep in the Premises any kerosene, gasoline or inflammable or combustible fluid or material other than those limited quantities permitted by the Lease. Tenant shall not use or permit to be used in the Premises any foul or noxious gas or substance, or permit or allow the Premises to be occupied or used in a manner offensive or objectionable to Landlord or other occupants of the Building by reason of noise, odors or vibrations nor shall Tenant bring into or keep in or about the Premises any birds or animals.

10. Tenant shall not use any method of heating or air conditioning other than that supplied by Landlord.

11. Tenant shall not waste any utility provided by Landlord and agrees to cooperate fully with Landlord to assure the most effective operation of the Building's heating and air conditioning and to comply with any governmental energy-saving rules, laws or regulations of which Tenant has actual notice.

12. Landlord reserves the right, exercisable without notice and without liability to Tenant, to change the name and street address of the Building.

13. Landlord reserves the right to exclude from the Building between the hours of 6 p.m. and 7 a.m. the following day, or such other hours as may be established from time to time by Landlord, and on Sundays and legal holidays, any person other than Tenant's employees. Tenant shall be responsible for all persons for whom it requests passes and shall be liable to Landlord for all acts of such persons. Landlord shall not be liable for damages for any error with regard to the admission to or exclusion from the Building of any person. Landlord reserves the right to prevent access to the Building in case of invasion, mob, riot, public excitement or other commotion by closing the doors or by other appropriate action.

14. Tenant shall close and lock the doors of its Premises and entirely shut off all water faucets or other water apparatus, and electricity, gas or air outlets before Tenant and its employees leave the Premises. Tenant shall be responsible for any damage or injuries sustained by other tenants or occupants of the Building or by Landlord for noncompliance with this rule.

15. The toilet rooms, toilets, urinals, wash bowls and other apparatus shall not be used for any purpose other than that for which they were constructed. The expenses of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by Tenant if it or its employees or invitees shall have caused it.

16. Tenant shall not sell, or permit the sale at retail, of newspapers, magazines, periodicals, theater tickets or any other goods or merchandise to the general public in or on the Premises other than the products that the Tenant markets. Tenant shall not make any room-to-room solicitation of business from other tenants in the Building. Tenant shall not use the Premises for any business or activity other than that specifically provided for in the Lease.

17. Tenant shall not install any radio or television antenna, loudspeaker or other device on the roof or exterior walls of the Building. Tenant shall not interfere with radio or television broadcasting or reception from or in the Building or elsewhere. Other than the usual and customary cellular telephones, Tenant shall not install or utilize any wireless Telecommunication Facilities, including antenna and satellite receiver dishes within the Premises or on, in, or about the Building without first obtaining Landlord's prior written consent and Landlord at its option may require the entry of a supplemental agreement with respect to such construction or installation. Tenant shall comply with all instructions for installation and shall pay or shall cause to be paid the entire cost of such installations. Application for such facilities shall be made in the same manner and shall be subject to the same requirements as specified for Telecommunication Services and Telecommunication Facilities in the paragraph of the Lease entitled "Utilities". Supplemental rules and regulations may be promulgated by Landlord specifying the form of and information to be included with the application and establishing procedures, regulations, and controls with respect to the installation and use of such wireless Telecommunication Facilities.

18. Tenant shall not mark, drive nails, screws or drill into the partitions, woodwork or plaster or in any way deface the Premises unless hanging customary fixtures such as pictures, signs and other commercially reasonable items. Landlord reserves the right to direct electricians as to where and how telephone and telegraph wires are to be introduced to the Premises. Tenant shall not cut or bore holes for wires. Tenant shall not affix any floor covering to the floor of the Premises in any manner except as approved by Landlord. Tenant shall repair any damage resulting from noncompliance with this rule.

19. Tenant shall not install, maintain or operate upon the Premises any vending machine without the written consent of Landlord.

20. Canvassing, soliciting and distribution of handbills or any other written material, and peddling in the Building or Land are prohibited, and Tenant shall cooperate to prevent the same.

21. Landlord reserves the right to exclude or expel from the Building and Land any person who, in Landlord's judgment, is intoxicated, under the influence of liquor or drugs or in violation of any of these Rules and Regulations.

22. Tenant shall store all of its trash and garbage within the Premises. Tenant shall not place in any trash box or receptacle any material which cannot be disposed of in the ordinary and customary manner of trash and garbage disposal. All garbage and refuse disposal shall be made in accordance with directions issued from time to time by Landlord.

23. The Premises shall not be used for lodging or any improper or immoral or objectionable purpose. No cooking shall be done or permitted by Tenant, except that use by Tenant of Underwriters' Laboratory approved equipment for brewing coffee, tea, hot chocolate and similar beverages shall be permitted and the use of a microwave oven; provided that, such equipment and its use is in accordance with all Governmental Requirements.

24. Tenant shall not use in the Premises or in the public halls of the Building any hand truck except those equipped with rubber tires and side guards or such other material-handling equipment as Landlord may approve. Tenant shall not bring any other vehicles of any kind into the Building.

25. Without the prior written consent of Landlord, Tenant shall not use the name of the Building in connection with or in promoting or advertising the business of Tenant except as Tenant's address.

26. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any governmental agency.

27. Tenant assumes any and all responsibility for protecting the Premises from theft, robbery and pilferage, which includes keeping doors locked and other means of entry to the Premises closed.

28. The requirements of Tenant will be attended to only upon appropriate application to the Manager of the Building by an authorized individual. Employees of Landlord are not required to perform any work or do anything outside of their regular duties unless under special instructions from Landlord, and no employee of Landlord is required to admit Tenant to any space other than the Premises without specific instructions from Landlord.

29. Tenant shall not park its vehicles in any parking areas designated by Landlord as areas for parking by visitors to the Building or Land. Tenant shall not leave vehicles in the parking areas overnight nor park any vehicles in the Building parking areas other than automobiles, motorcycles, motor driven or non-motor driven bicycles or four-wheeled trucks.

30. Landlord may waive any one or more of these Rules and Regulations for the benefit of Tenant or any other tenant, but no such waiver by Landlord shall be construed as a waiver of such Rules

and Regulations in favor of any other person, nor prevent Landlord from thereafter revoking such waiver and enforcing any such Rules and Regulations against any or all of the tenants of the Building.

31. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in part, the covenants and conditions of any lease of premises in the Building. If any provision of these Rules and Regulations conflicts with any provision of the Lease, the terms of the Lease shall prevail.

32. Landlord reserves the right to make such other and reasonable Rules and Regulations as, in its judgment, may from time to time be needed for safety and security, the care and cleanliness of the Building and Land, the preservation of good order in the Building and the maintenance or enhancement of the value of the Building as a rental property. Tenant agrees to abide by all the Rules and Regulations stated in this exhibit and any additional rules and regulations which are so made by Landlord.

33. Tenant shall be responsible for the observance of all of the foregoing rules by Tenant and Tenant's Agents.

RENT RIDER

This Rent Rider ("Rider") is made part of the Lease Agreement dated December 26, 2018 (the "Lease"), between GJR REIH II, LLC, a Washington Limited Liability Company ("Landlord"), and EmpRes Healthcare Management, LLC, a Washington Limited Liability Company, dba Eden Home Health of King County, LLC, a Washington Limited Liability Company ("Tenant") concerning the space commonly known as 733 7th Avenue, Suite 110, Kirkland, WA 98033 (the "Premises"), located at the property commonly known as Parkade Plaza (the "Property").

1. BASE MONTHLY RENT SCHEDULE. Tenant shall pay Landlord base monthly rent during the Lease Term according to the following schedule:

| Lease Term | Base Monthly Rent Amount |
|---|-----------------------------|
| <u>February 1, 2019– February 28, 2019</u> | <u>\$0.00 per month</u> |
| <u>March 1, 2019 – January 31, 2020</u> | <u>\$4,005.67 per month</u> |
| <u>February 1 2020 – January 31, 2021</u> | <u>\$4,137.00 per month</u> |
| <u>February 1, 2021 – January 31, 2022</u> | <u>\$4,268.33 per month</u> |
| <u>February 1, 2022 – February 28, 2022</u> | <u>\$4,399.67 per month</u> |

PARKING RIDER

This Parking Rider (the "Rider") is made part of the Lease Agreement dated December 26, 2018 (the "Lease"), between GJR REIH II, LLC, a Washington Limited Liability Company ("Landlord"), and EmpRes Healthcare Management, LLC, a Washington Limited Liability Company, dba Eden Home Health of King County, LLC, a Washington Limited Liability Company ("Tenant") concerning the space commonly known as 733 7th Avenue, Suite 110, Kirkland, WA 98033 (the "Premises"), located at the property commonly known as Parkade Plaza (the "Property").

1. Tenant's Parking Rights. Tenant's right to park on the Property shall be as follows (check one):

- Tenant shall be entitled to use parking stalls on the Property or other designated parking area on a (check one) reserved unreserved (unreserved, if neither box checked) basis at the prevailing monthly rate established by Landlord from time to time. Tenant shall comply with the reasonable rules and regulations which Landlord or its parking operator may adopt from time to time for the safe and orderly operation of the parking areas.
- Free Parking.** Tenant shall be entitled to share parking with Landlord's other tenants in the designated parking areas at no charge at a ratio of 2.8 parking stalls for every 1,000 square feet leased. Tenant shall be responsible for ensuring compliance with the terms of the Lease, this Rider, and any reasonable rules and regulations adopted by Landlord from time to time for the safe and orderly sharing of parking.
- No Parking.** The Lease does not include parking on the Property, and Tenant shall park off the Property at Tenant's own expense.

2. Tenant. For purpose of this Rider only, the term "Tenant" shall include Tenant and Tenant's employees, officers, contractors, licensees, agents, and invitees, except as follows:

OPTION TO EXTEND RIDER

This Option to Extend Rider (the "Rider") is made part of the Lease Agreement dated December 10, 2018 (the "Lease"), between GJR REIH II, LLC, a Washington Limited Liability Company ("Landlord"), and EmpRes Healthcare Management, LLC, a Washington Limited Liability Company, dba Eden Home Health of King County, LLC, a Washington Limited Liability Company ("Tenant") concerning the space commonly known as 733 7th Avenue, Suite 110, Kirkland, WA 98033 (the "Premises"), located at the property commonly known as Parkade Plaza (the "Property").

1. **Extension of Lease.** Provided Tenant is not in default of any provision of the Lease at the time that Tenant exercises the right to extend the Lease or at the time the new term begins, Tenant shall have one (1) (zero if not completed) successive option to extend the term of the Lease for three (3) years. The term of the Lease shall be extended on the same terms, conditions and covenants set forth in the Lease, except that (i) the amount of the Base Rent stated in the Lease shall be adjusted as set forth below (provided, however, that Base Rent shall not be decreased); (ii) there shall be no free or abated rent periods, tenant improvement allowances or other concessions that may have been granted to Tenant at the beginning of the initial term hereof; and (iii) after exercise of Tenant's final extension term option, there shall be no further extension or renewal term options.
2. **Notice.** To extend the Lease, Tenant must deliver written notice to Landlord not less than one hundred eighty (180) days prior to the expiration of the then-current Lease term. Time is of the essence of this Rider.
3. **Monthly Rent.** Landlord and Tenant shall make a good faith effort to determine and agree on the fair market value of rent for the Premises for the next term of the Lease.
 - a. **Failure to Agree on Rent.** If Landlord and Tenant are unable to agree on the fair market rental value for the Premises within thirty (30) days after Tenant gives notice to extend, they shall then have ten (10) days to select or, appoint one real estate appraiser to determine the fair market value of rent for the Premises. All appraisers selected or appointed pursuant to this Rider shall be a Member of the American Institute of Real Estate Appraisers ("M.A.I.") with at least ten (10) years' experience appraising commercial properties in the commercial leasing market in which the Premises are located, or equivalent. The appraiser appointed shall determine the fair market rental value for the Premises within twenty (20) days of appointment, which determination shall be final, conclusive, and binding upon both Landlord and Tenant, and Base Rent shall be adjusted accordingly for the new term. The appraiser's fees and expenses shall be shared equally between the parties.
 - b. **Failure to Appoint One Appraiser.** If Landlord and Tenant cannot mutually agree upon an appraiser, then either party may give the other party written notice that it has selected and appointed an M.A.I. appraiser, complete with the name, address, and other identifying information about the appraiser. The party receiving such notice shall then have ten (10) days to select and appoint its own M.A.I. appraiser and respond by giving written notice to the other party, complete with the name, address, and other identifying information about the appraiser. If, however, the responding party fails to select and appoint an appraiser and give notice to the other party within ten (10) days, the determination of the appraiser first appointed shall be final, conclusive and binding upon both parties, and the Base Rent shall be adjusted accordingly for the new term. The appraiser's fees and expenses shall be shared equally between the parties.
 - c. **Method of Determining Rent.** The appraisers appointed shall proceed to determine fair market rental value within twenty (20) days following their appointment. The conclusion shall be final, conclusive and binding upon both Landlord and Tenant. If the appraisers should fail to agree, but the difference in their conclusions as to fair market rental value is ten percent (10%) or less of the lower of the two

appraisals, then the fair market rental value shall be deemed to be the average of the two, and Base Rent shall be adjusted accordingly for the new term. If the two appraisers should fail to agree on the fair market rental value, and the difference between the two appraisals exceeds ten percent (10%) of the lower of the two appraisals, then the two appraisers shall appoint a third M.A.I.-qualified appraiser. If they fail to agree on a third appraiser within ten (10) days after their individual determination of the fair market rental value, either party may apply to the courts for the county in which the Premises are located, requesting the appointment of a the third M.A.I.-qualified appraiser. The third appraiser shall promptly determine the fair market rental value of the Premises. The parties shall then take the average of the two appraisals that are closest in value, which shall then constitute the fair market value; shall be final, conclusive and binding upon both parties; and Base Rent shall be adjusted accordingly for the new term. Each party shall pay the fees and expenses for its own appraiser. In the event a third appraiser must be appointed, his or her fees and expenses shall be borne equally by the parties.

MEMO OF UNDERSTANDING

DOCUMENTATION OF LEASE COST ALLOCATIONS FOR CERTIFICATE OF NEED (CON) APPLICATION #21-28, EDEN HOSPICE AT KING COUNTY, LLC SERVICE AREA EXPANSION AND EDEN HOSPICE AT SNOHOMISH COUNTY CON APPLICATIONS

Whereas EmpRes Healthcare Group, Inc, which owns 100% of EmpRes Home and Hospice, LLC, which in turn: (1) owns 100% of EmpRes Home Health, LLC, which owns 100% of **Eden Home Health of King County, LLC**; and (2) owns 100% of EmpRes Hospice, LLC, which owns 100% of **Eden Hospice at King County, LLC**, and 100% of **Eden Hospice at Snohomish County, LLC**, is required to present lease cost allocations for the financial pro forma of three separate certificate of need (CON) applications under review by the Washington State Department of Health; and

Whereas each of the three CON applications are required to identify the financial impact of each application on the operating costs of the other two applications as well as the impact of the other two projects on the applicant project; and

Whereas, the Washington State Department of Health could approve only one of the three CON applications, two of the three CON applications, or all three of the CON applications.

Therefore, the parties to each of the three separate CON applications set forth the following lease allocations for each Certificate of Need Application:

- (1) If Certificate of Need Application #21-28: Expand the Service to Pierce County is approved, 30% of the lease costs held by Eden Home Health of King County, LLC will be allocated to the Pierce County service area pro forma and 70% to the Eden Home Health of King County service area.
- (2) If one of two CON applications for new hospices for King County or Pierce County is approved, then 50% of the lease costs held by Eden Home Health of King County, LLC will be allocated to the approved hospice application and the other 50% will be allocated to Eden Home Health of King County. The allocation to Eden Home Health of King County, LLC will be further reallocated per the provisions of the allocation in the preceding section (1), if CON Application #21-28 is approved.
- (3) If both of the two CON applications are approved, then 25% of the total Eden Home Health of King County, LLC lease costs will be allocated to each approved hospice project and 50% of the lease costs will be allocated to the Eden Home Health of King County, LLC, which will be further reallocated per the provisions of the allocation in the preceding section (1).

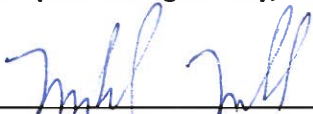
IT IS SO AGREED.

Eden Home Health of King County, LLC



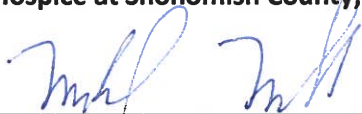
By EmpRes Healthcare Management, LLC, its Manager
By Michael Miller, CFO

Eden Hospice at King County, LLC



By EmpRes Healthcare Management, LLC, its Manager
By Michael Miller, CFO

Eden Hospice at Snohomish County, LLC



By EmpRes Healthcare Management, LLC, its Manager
By Michael Miller, CFO

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 7

2018 NHPCO FACTS & FIGURES



NHPCO Facts and Figures

2018 EDITION *(REVISION 7-2-2019)*



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Introduction

About this Report

NHPCO Facts and Figures: Hospice Care in America provides an annual overview of hospice care delivery. This overview provides specific information on:

- Hospice patient characteristics
- Location and level of care
- Medicare hospice spending
- Hospice provider characteristics
- Volunteer and bereavement services

Currently, most hospice patients have their costs covered by Medicare, through the Medicare Hospice Benefit. The findings in this report reflect only those patients who received care through 2017, provided by the Medicare Hospice Benefit by the hospices certified by the Centers for Medicare and Medicaid Services (CMS) to care for them.

What is hospice care?

Considered the model for quality compassionate care for people facing a life-limiting illness, hospice provides expert medical care, pain management, and emotional and spiritual support expressly tailored to the patient's needs and wishes. Support is provided to the patient's family as well.

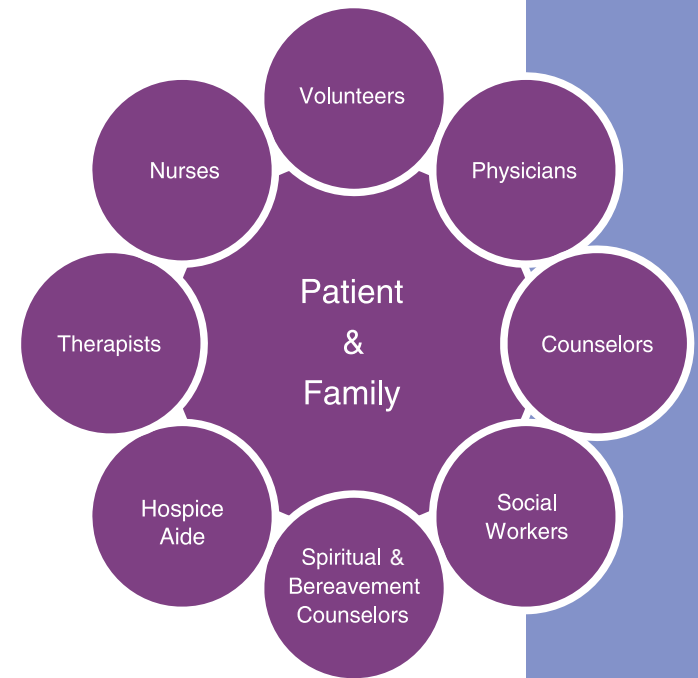
Hospice focuses on caring, not curing. In most cases, care is provided in the patient's home but may also be provided in freestanding hospice facilities, hospitals, and nursing homes and other long-term care facilities. Hospice services are available to patients with any terminal illness or of any age, religion, or race.

Introduction (continued)

How is hospice care delivered?

Typically, a family member serves as the primary caregiver and, when appropriate, helps make decisions for the terminally ill individual. Members of the hospice staff make regular visits to assess the patient and provide additional care or other services. Hospice staff is on-call 24 hours a day, seven days a week.

The hospice team develops a care plan that meets each patient's individual needs for pain management and symptom control. This interdisciplinary team, as illustrated in Figure 1, usually consists of the patient's personal physician, hospice physician or medical director, nurses, hospice aides, social workers, bereavement counselors, clergy or other spiritual counselors, trained volunteers, and speech, physical, and occupational therapists, if needed.



What services are provided?

The interdisciplinary hospice team:

- Manages the patient's pain and other symptoms;
- Assists the patient and family members with the emotional, psychosocial, and spiritual aspects of dying;
- Provides medications and medical equipment;
- Instructs the family on how to care for the patient;
- Provides grief support and counseling;
- Makes short-term inpatient care available when pain or symptoms become too difficult to manage at home, or the caregiver needs respite time;
- Delivers special services like speech and physical therapy when needed;
- Provides grief support and counseling to surviving family and friends.

Location of Care

The majority of hospice care is provided in the place the patient calls home. In addition to private residences, this includes nursing homes and residential facilities. Hospice care may also be provided in freestanding hospice facilities and hospitals (see Levels of Care).



Introduction (continued)

Levels of Care

Hospice patients may require differing intensities of care during the course of their disease. While hospice patients may be admitted at any level of care, changes in their status may require a change in their level of care.

The Medicare Hospice Benefit affords patients four levels of care to meet their clinical needs: Routine Home Care, General Inpatient Care, Continuous Home Care, and Inpatient Respite Care. Payment for each covers all aspects of the patient's care related to the terminal illness, including all services delivered by the interdisciplinary team, medication, medical equipment and supplies.

- **Routine Hospice Care (RHC)** is the most common level of hospice care. With this type of care, an individual has elected to receive hospice care at their residence.
- **Continuous Home Care (CHC)** is care provided for between 8 and 24 hours a day to manage pain and other acute medical symptoms. CHC services must be predominately nursing care, supplemented with caregiver and hospice aide services and are intended to maintain the terminally ill patient at home during a pain or symptom crisis.
- **Inpatient Respite Care (IRC)** is available to provide temporary relief to the patient's primary caregiver. Respite care can be provided in a hospital, hospice facility, or a long-term care facility that has sufficient 24 hour nursing personnel present.
- **General Inpatient Care (GIP)** is provided for pain control or other acute symptom management that cannot feasibly be provided in any other setting. GIP begins when other efforts to manage symptoms are not sufficient. GIP can be provided in a Medicare certified hospital, hospice inpatient facility, or nursing facility that has a registered nursing available 24 hours a day to provide direct patient care.



Introduction (continued)

Volunteer Services

The U.S. hospice movement was founded by volunteers and continues to play an important and valuable role in hospice care and operations. Moreover, hospice is unique in that it is the only provider with Medicare Conditions of Participation (CoPs) requiring volunteers to provide at least 5% of total patient care hours.

Hospice volunteers provide service in three general areas:

- Spending time with patients and families (“direct support”)
- Providing clerical and other services that support patient care and clinical services (“clinical support”)
- Engaging in a variety of activities such as fundraising, outreach and education, and serving on a board of directors (general support).

Bereavement Services

Counseling or grief support for the patient and loved ones is an essential part of hospice care. After the patient’s death, bereavement support is offered to families for at least one year. These services can take a variety of forms, including telephone calls, visits, written materials about grieving, and support groups. Individual counseling may be offered by the hospice or the hospice may make a referral to a community resource.

Some hospices also provide bereavement services to the community at large.

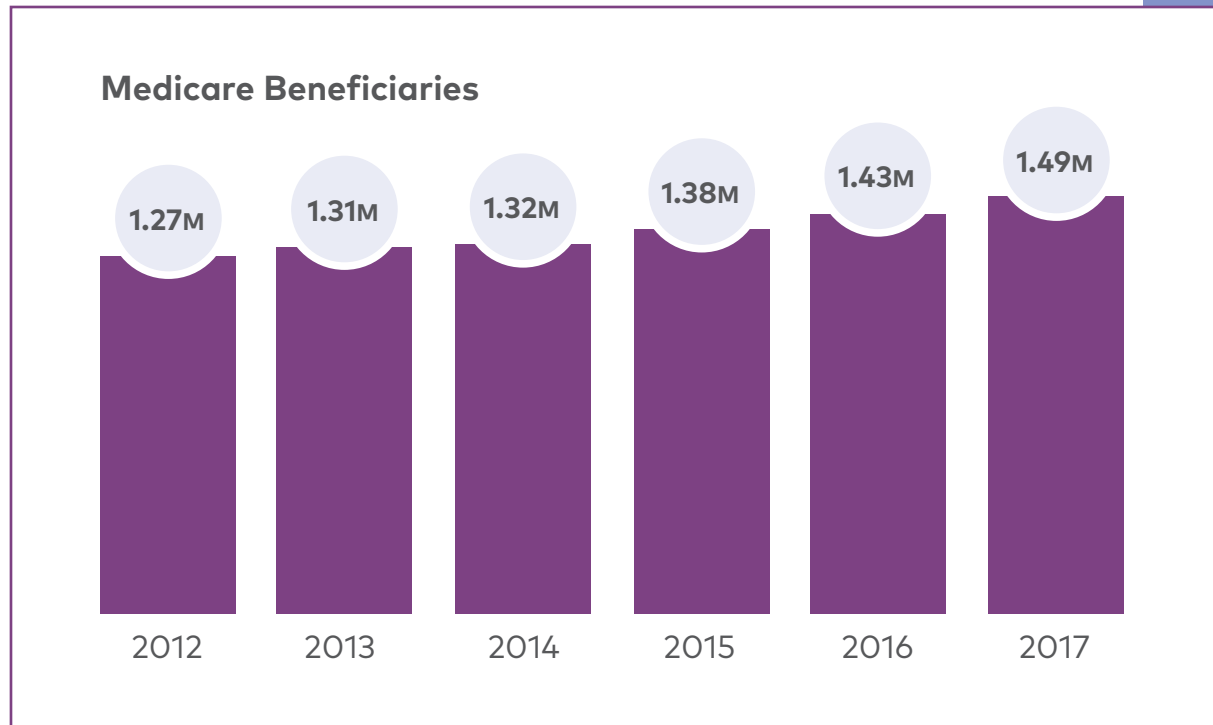
Who Receives Hospice Care

How many Medicare beneficiaries received hospice care in 2017?

1.49 million Medicare beneficiaries, a 4.5% increase from prior year, were enrolled in hospice care for one day or more in 2017*. This includes patients who:

- Died while enrolled in hospice
- Were enrolled in hospice in 2016 and continued to receive care in 2017
- Left hospice care alive during 2017 (live discharges)

*includes all states, Washington, D.C., U.S. territories, and Other.

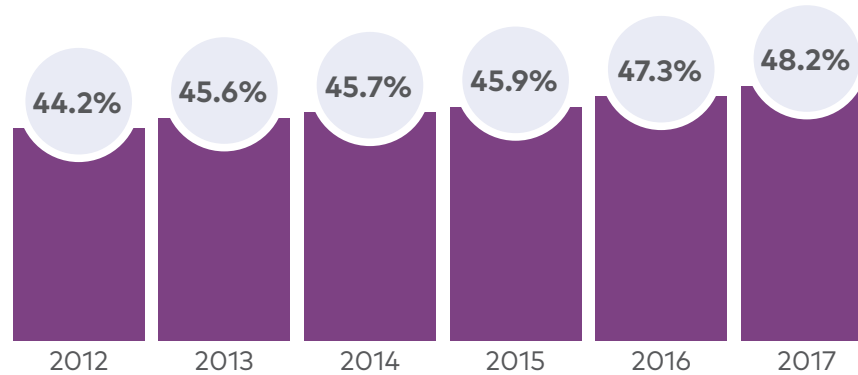


Who Receives Hospice Care (continued)

What proportion of Medicare decedents were served by hospice in 2017?

Of all Medicare decedents in 2017, 48.2% received one day or more of hospice care and were enrolled in hospice at the time of death.

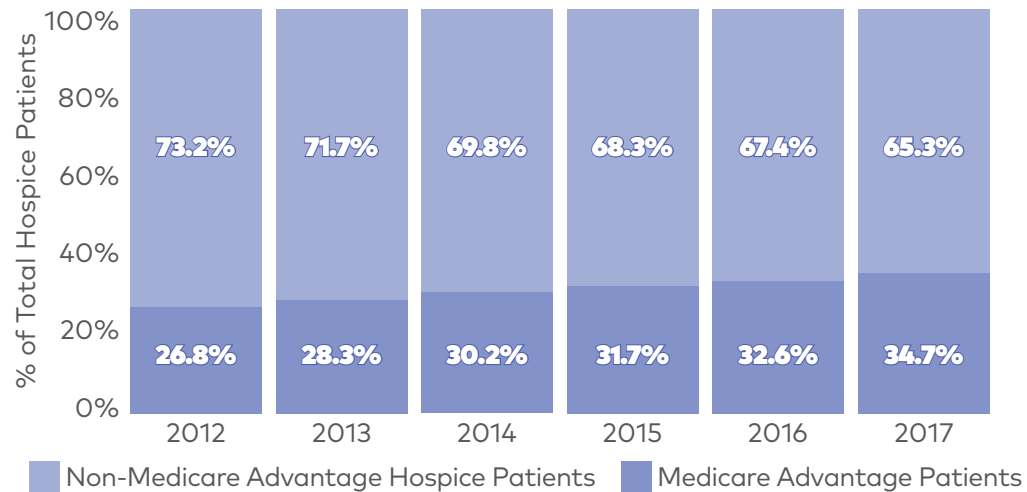
Medicare Decedents Receiving 1 or more Days of Hospice Care



What % of Hospice Patients Enrolled in Medicare Advantage within the Year?

The number of individuals who enrolled in a Medicare Advantage plan within the same year that they utilized the hospice benefit rose from 26.8% of Medicare hospice patients in 2012 to 34.7% in 2017. The increase in hospice beneficiaries with MA enrollment is consistent with the overall increase in MA enrollment over this period.

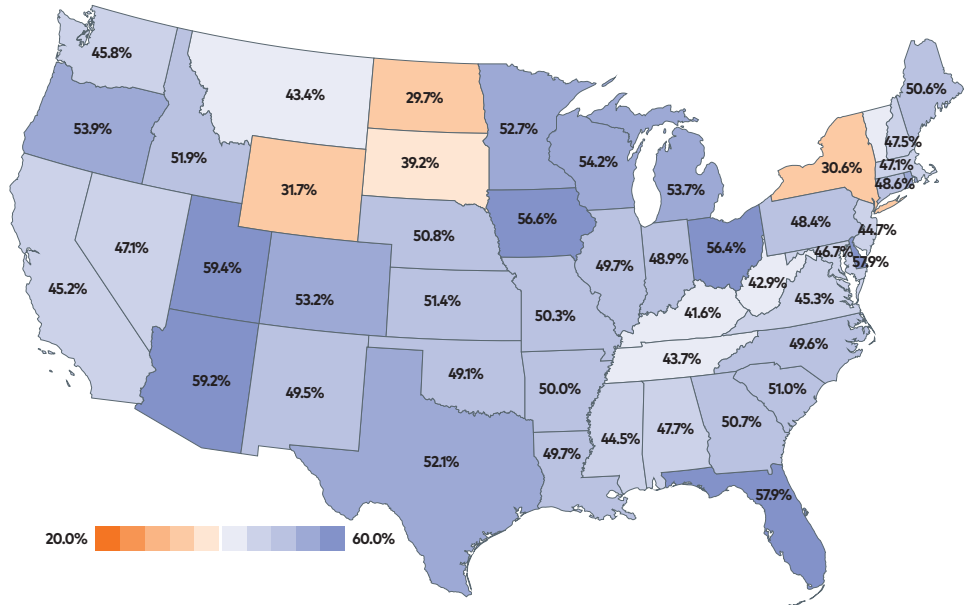
Growth of Medicare Advantage Hospice Patients



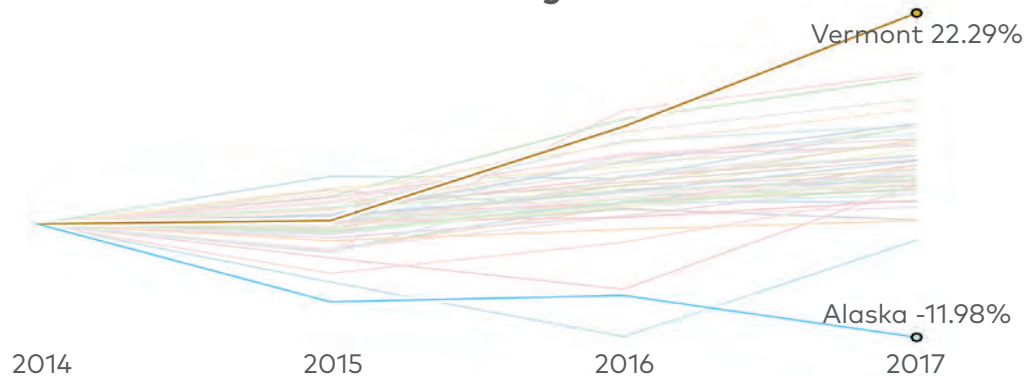
Who Receives Hospice Care (continued)

As illustrated on this page, the proportion of Medicare decedents enrolled in hospice at the time of death varied from a low of 13% (other) to a high of 59.4% (UT). Vermont and Alaska had the greatest % increase/decrease in decedents enrolled in hospice at the time of death since 2014.

% of Medicare Decedents Services by Hospice and Aligns to Graphic at Right



% of Medicare Enrollment Change from Base Year



2017 State Rank For Decedent Medicare Enrollment %

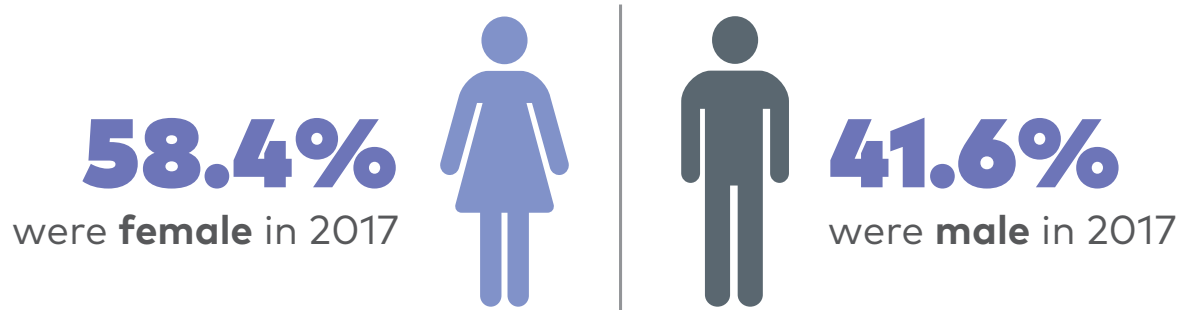
| Rank | State | Enrollment % |
|------|----------------------|--------------|
| 1 | Utah | 59.4% |
| 2 | Arizona | 59.2% |
| 3 | Florida | 57.9% |
| 4 | Delaware | 57.9% |
| 5 | Iowa | 56.6% |
| 6 | Ohio | 56.4% |
| 7 | Rhode Island | 55.0% |
| 8 | Wisconsin | 54.2% |
| 9 | Oregon | 53.9% |
| 10 | Michigan | 53.7% |
| 11 | Colorado | 53.2% |
| 12 | Minnesota | 52.7% |
| 13 | Texas | 52.1% |
| 14 | Idaho | 51.9% |
| 15 | Kansas | 51.4% |
| 16 | South Carolina | 51.0% |
| 17 | Nebraska | 50.8% |
| 18 | Georgia | 50.7% |
| 19 | Maine | 50.6% |
| 20 | Missouri | 50.3% |
| 21 | Arkansas | 50.0% |
| 22 | Illinois | 49.7% |
| 23 | Louisiana | 49.7% |
| 24 | North Carolina | 49.6% |
| 25 | New Mexico | 49.5% |
| 26 | Oklahoma | 49.1% |
| 27 | Indiana | 48.9% |
| 28 | Connecticut | 48.6% |
| 29 | Pennsylvania | 48.4% |
| 30 | Alabama | 47.4% |
| 31 | New Hampshire | 47.5% |
| 32 | Massachusetts | 47.1% |
| 33 | Nevada | 47.1% |
| 34 | Maryland | 46.7% |
| 35 | Hawaii | 46.1% |
| 36 | Washington | 45.8% |
| 37 | Virginia | 45.3% |
| 38 | California | 45.2% |
| 39 | New Jersey | 44.7% |
| 40 | Mississippi | 44.5% |
| 41 | Tennessee | 43.7% |
| 42 | Montana | 43.4% |
| 43 | West Virginia | 42.9% |
| 44 | Vermont | 42.9% |
| 45 | Kentucky | 41.6% |
| 46 | South Dakota | 39.2% |
| 47 | District of Columbia | 32.0% |
| 48 | Wyoming | 31.7% |
| 49 | New York | 30.6% |
| 50 | North Dakota | 29.7% |
| 51 | Alaska | 22.5% |
| 52 | Other | 13.9% |

Who Receives Hospice Care (continued)

What are the characteristics of Medicare beneficiaries who received hospice care in 2017?

Patient Gender

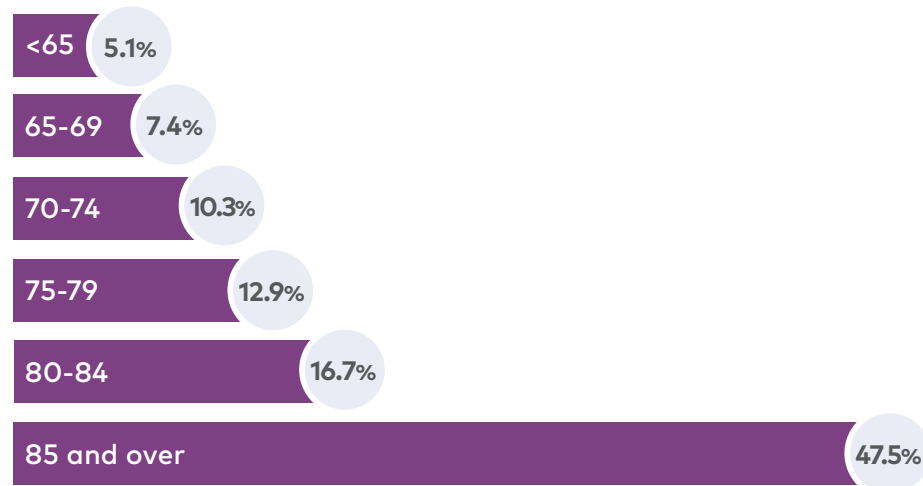
In 2017, more than half of hospice Medicare beneficiaries were female.



Patient Age

In 2017, about 64.2% of Medicare hospice patients were 80 years of age or older.

% of Patients by Age for 2017



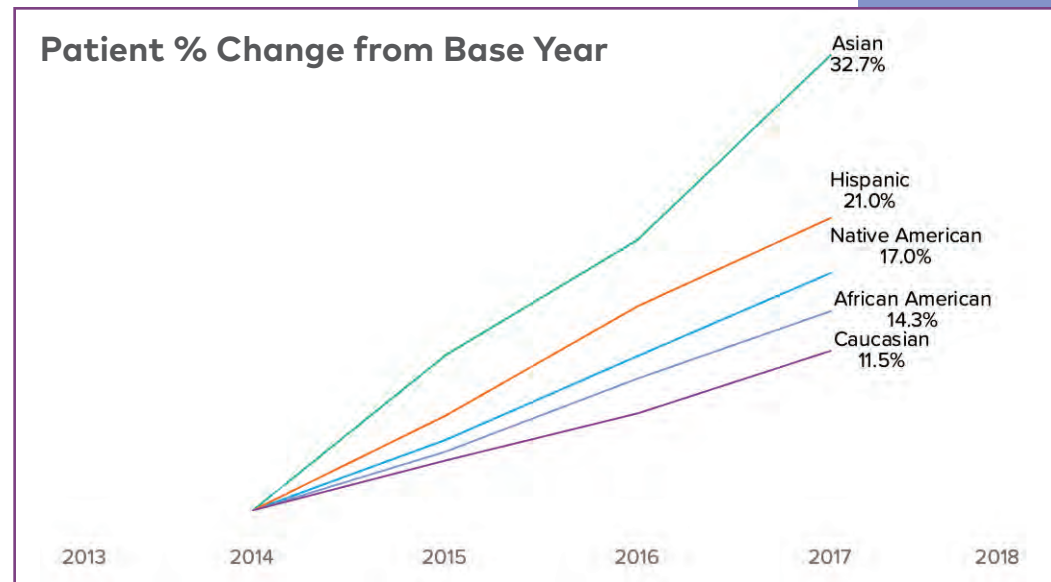
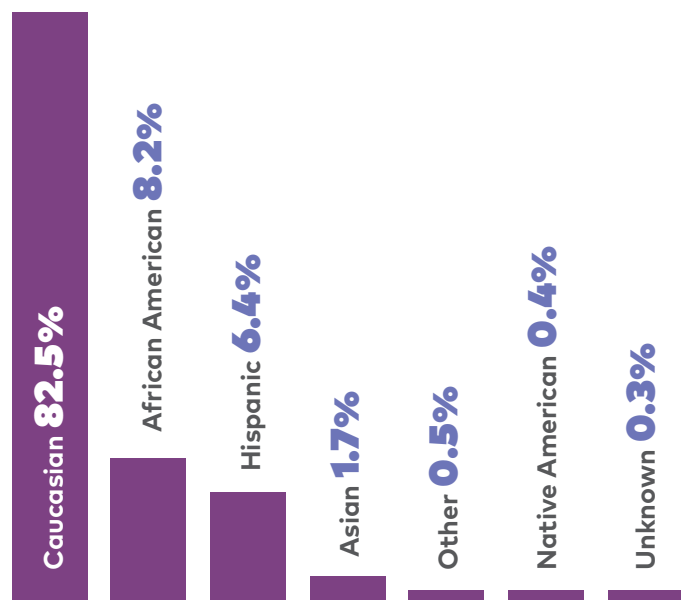
Who Receives Hospice Care (continued)

What are the characteristics of Medicare beneficiaries who received hospice care in 2017?

Patient Race*

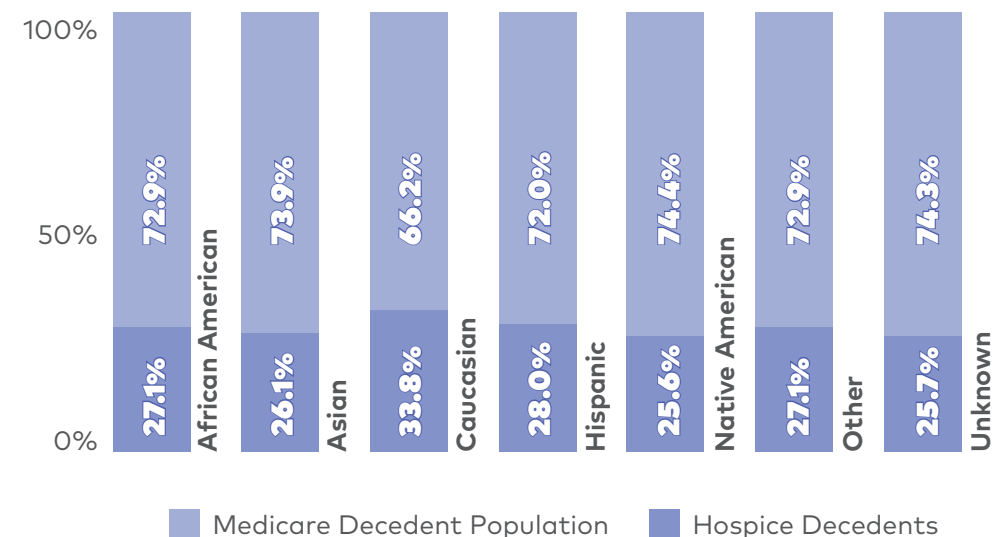
In 2017 a substantial majority of Medicare hospice patients were Caucasian. However, since 2014 Patients identified as Asian and Hispanic increased by 32% and 21% respectively.

% of Patients by Race for 2017



* Categories correspond to those used by CMS in the Hospice Limited Data Set

Death Service Ratio by Race for 2017



*Percentage of Medicare decedents who died under hospice care by race.

Who Receives Hospice Care (continued)

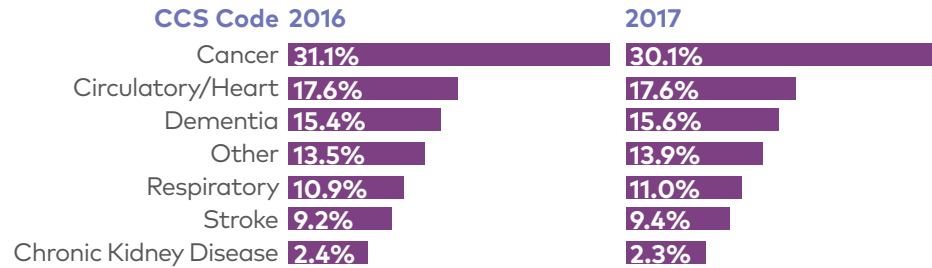
What are the characteristics of Medicare beneficiaries who received hospice care in 2017?

Principal Diagnosis

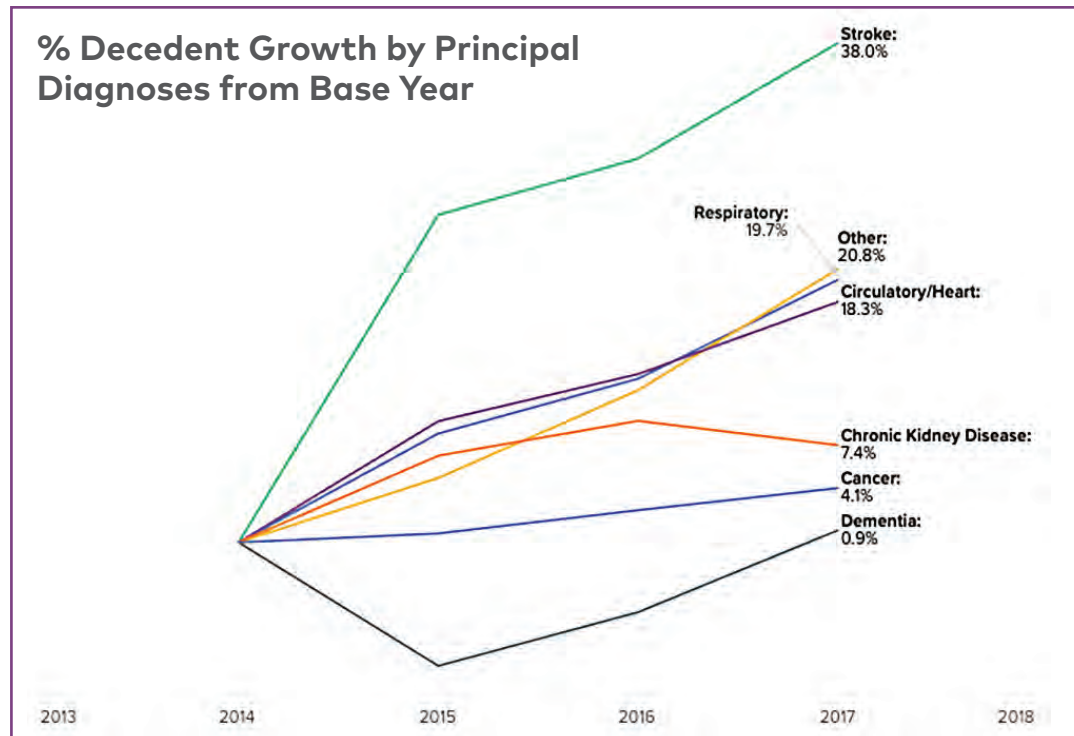
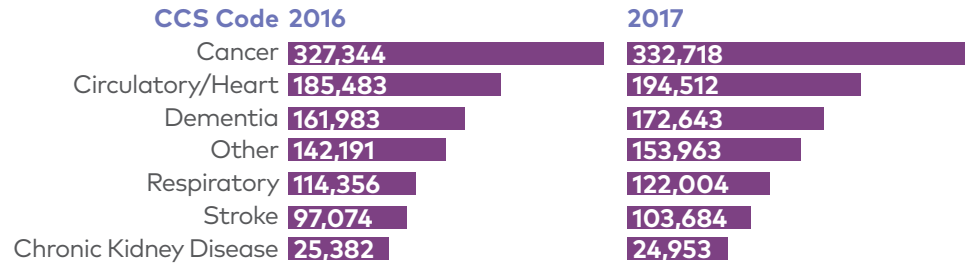
The principal hospice diagnosis is the diagnosis that has been determined to be the most contributory to the patient's terminal prognosis. 2017 continued to show that more Medicare hospice patients had a principal diagnosis of cancer than any other disease.

Stroke, circulatory/heart, Respiratory, and other CCS diagnosis grew the most since 2014.

% of Hospice Decedents by Principal Diagnosis for 2016 & 2017



No. of Hospice Decedents by Principal Diagnosis for 2016 & 2017



How Much Care Is Received?

Length of Service*

The average length of service (ALOS) for Medicare patients enrolled in hospice in 2017 was 76.1 days.

The median length of service (MLOS) was 24 days.

Average Levels of Service

| Year | Patients | Total Days | Avg. Days of Care |
|------|----------|------------|-------------------|
| 2012 | 1.3M | 98.7M | 77.6 |
| 2013 | 1.3M | 103.7M | 79.0 |
| 2014 | 1.3M | 100.7M | 76.1 |
| 2015 | 1.4M | 102.6M | 74.5 |
| 2016 | 1.4M | 108.2M | 75.7 |
| 2017 | 1.5M | 113.6M | 76.1 |

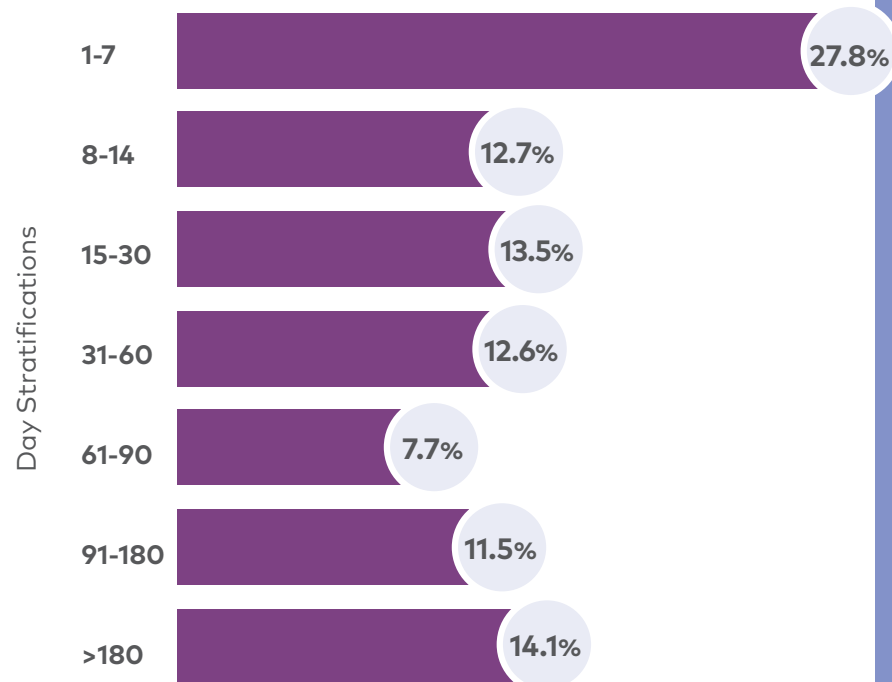
*LOS calculation is based on the total days of care for patients who received care in 2017. Also included in the calculation are days from 2014 and 2015 for patients who received care in those years as well as in 2016.

Days of Care

In 2017 hospice patients received a total of 113.6 million days of care paid for by Medicare.

A greater proportion of Medicare patients (27.8%) were enrolled in hospice a total of seven days or fewer compared to all other length of service categories.

% of Patients by Days of Care for 2017



*These values are computed using only days of care that occurred in 2017. Days of care occurring in other years are not included. Days of care have been combined for patients who had multiple episodes of care in 2017.

How Much Care Is Received (continued)

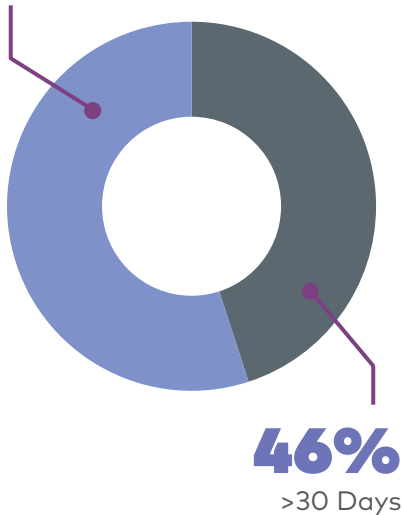
Days of Care

In 2017 over half (54%) of patients were enrolled in hospice for 30 or fewer days.

% of Patients by Days of Care for 2017

54%

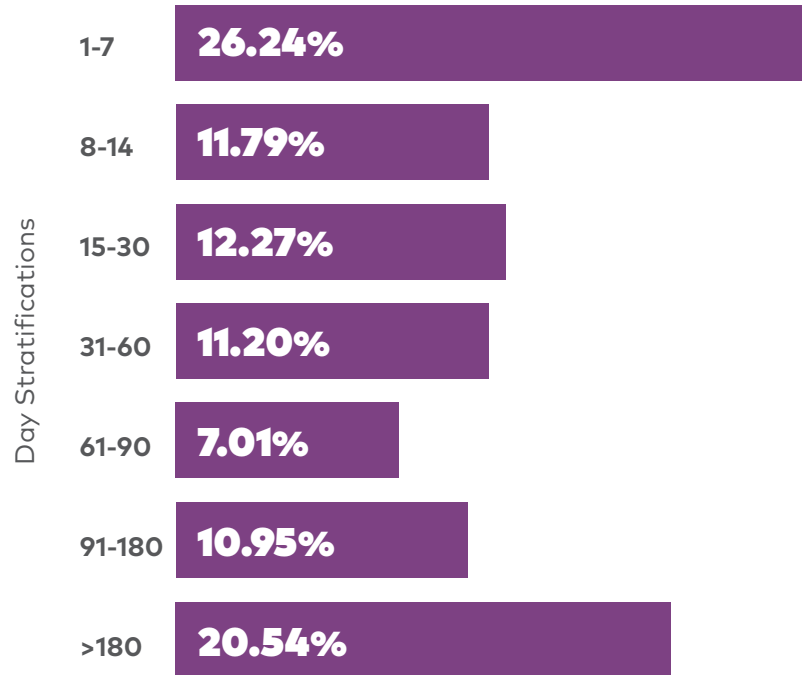
First 30 Days



Days of Care

Days of care over multiple years by percentage of patients*

Days of Care Between 2015-2017 by % of Patients



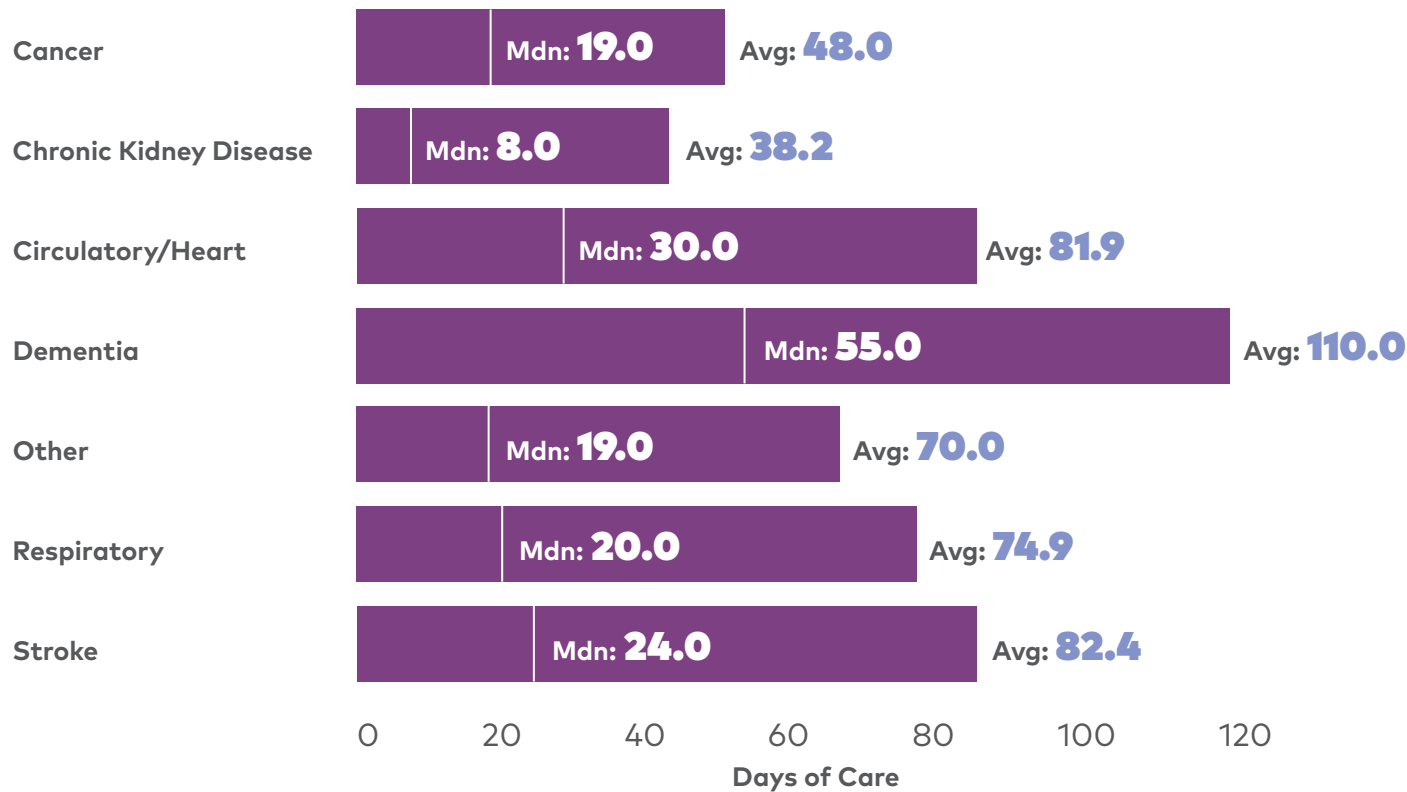
**These values are computed using all days of care that occurred between 2015 through 2017 highlighting extended care beyond 180 days that covered multiple years vs just 2017.*

How Much Care Is Received? (continued)

Days of Care

Patients with a principal diagnosis of dementia had the largest number of days of care on average in 2017.

Days of Care by Principal Diagnosis for 2017



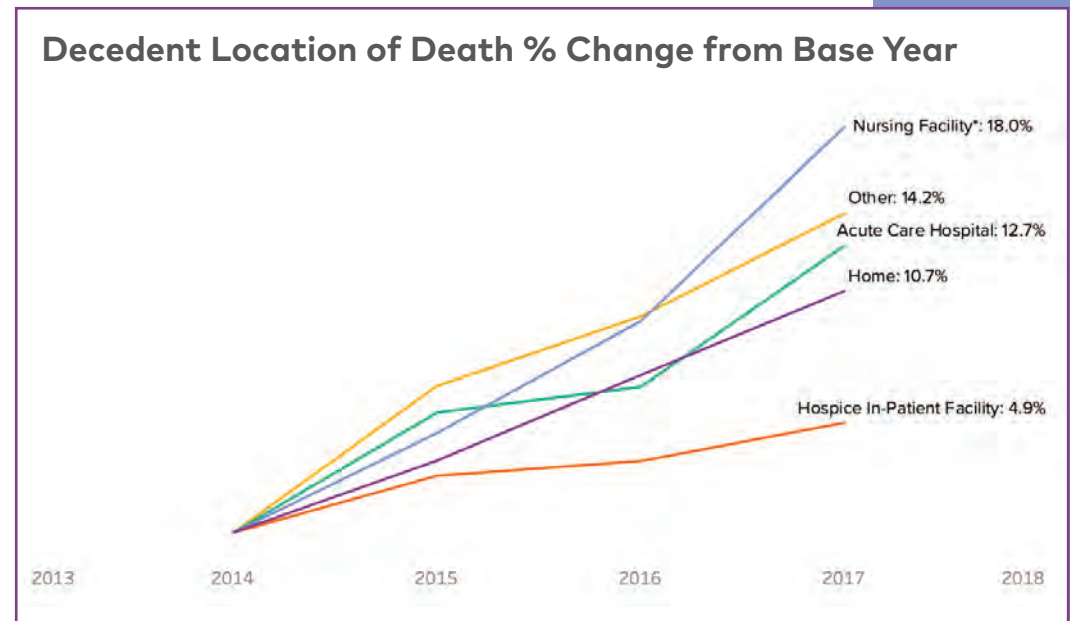
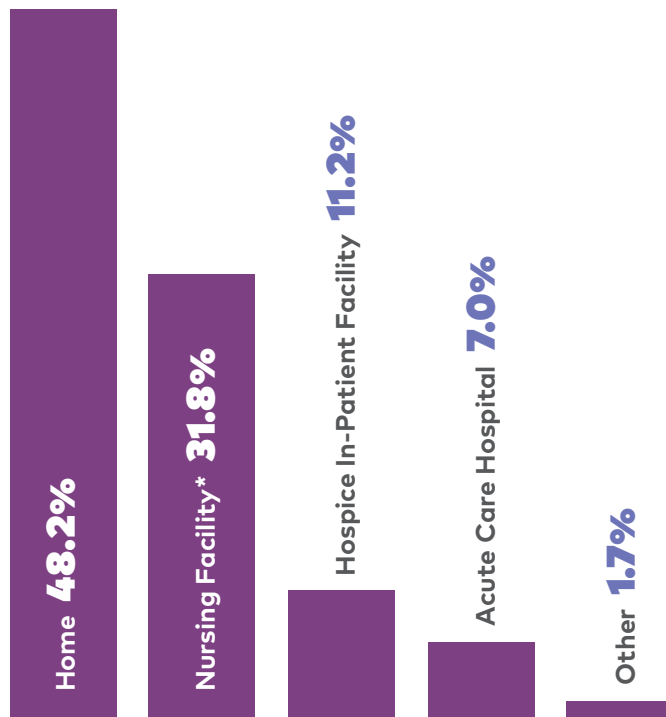
*These values are computed using only days of care that occurred in 2017. Days of care have been combined for patients who had multiple episodes of care in 2017. Days of care occurring in other years are not included.

How Much Care Is Received? (continued)

Deaths

In 2017 1.1 million Medicare beneficiaries died while enrolled in hospice care. 48.2 % of deaths occurred in the home, and almost a third in nursing facilities. Nursing facilities have continued to grow the most since 2014 at 18% followed acute care and other facilities.

Decedent % by Location of Death



* Includes skilled nursing facilities, nursing facilities, assisted living facilities, and long-term care facilities.

How Much Care Is Received? (continued)

Discharges and Transfers

In 2017, there were 1.3M discharges. Live discharges comprised 17% of all Medicare hospice discharges with patient and hospice initiated discharges being about equal.

Discharge by Type for 2017

| | | |
|--|-------------------------------|-------|
| Deaths | Decedents | 82.9% |
| | | |
| Patient Initiated-Live Discharges | Revocations | 6.5% |
| | Transfers | 2.1% |
| Hospice Initiated-Live Discharges | No Longer Terminally Ill | 6.7% |
| | Moved Out of the Service Area | 1.4% |
| | Discharges for Cause | 0.3% |

**Calculations are based on total number of discharges which includes patients who were discharged more than one time in 2017.*

Level of Care

In 2016 the vast majority of days of care were at the Routine Homecare (RHC) level.

Level of Care by % of Days of Care

| LOC Metrics | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|-------|-------|-------|-------|-------|-------|
| RHC Days | 97.6% | 97.8% | 97.8% | 97.9% | 98.1% | 98.2% |
| CHC Days | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% | 0.2% |
| IRC Days | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% |
| GIC Days | 1.8% | 1.6% | 1.5% | 1.5% | 1.4% | 1.3% |

Location of Care

In 2017, most of days of care were provided at a private residence followed by Nursing Facilities. Since 2014, Nursing Facilities have grown by over 14% and Home by 12.3%.

Location of Care by % of Days of Care for 2017

| | |
|-----------------------------|-------|
| Home | 55.7% |
| Nursing Facility* | 42.2% |
| Hospice In-Patient Facility | 0.8% |
| Acute Care Hospital | 0.3% |
| Other | 1.1% |

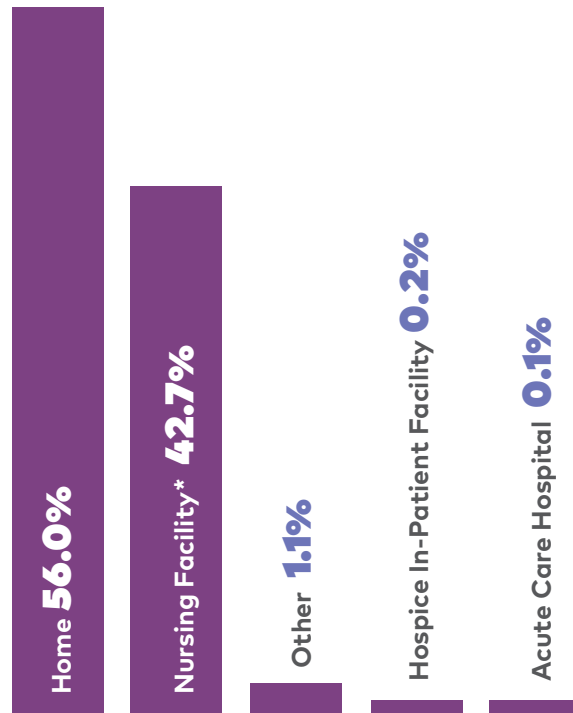
** Includes skilled nursing facilities, nursing facilities, assisted living facilities, and RHC days in a hospice inpatient facility.*

How Much Care Is Received? (continued)

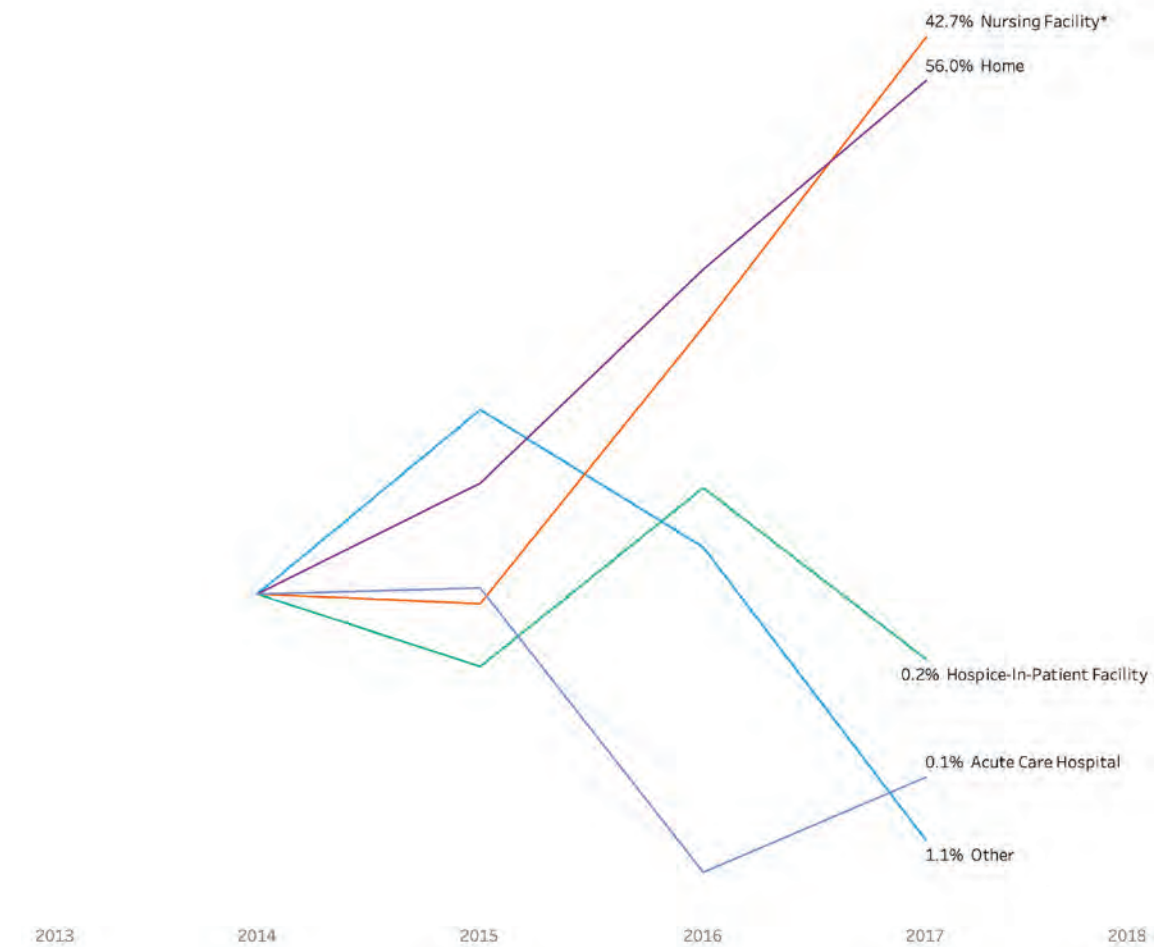
Location of RHC Days

56% of RHC days of care occurred in a private residence. RHC days in nursing facilities and home care have grown since 2014 by more than 42% while use of hospice inpatient facilities have declined.

Location of RHC Days for 2017



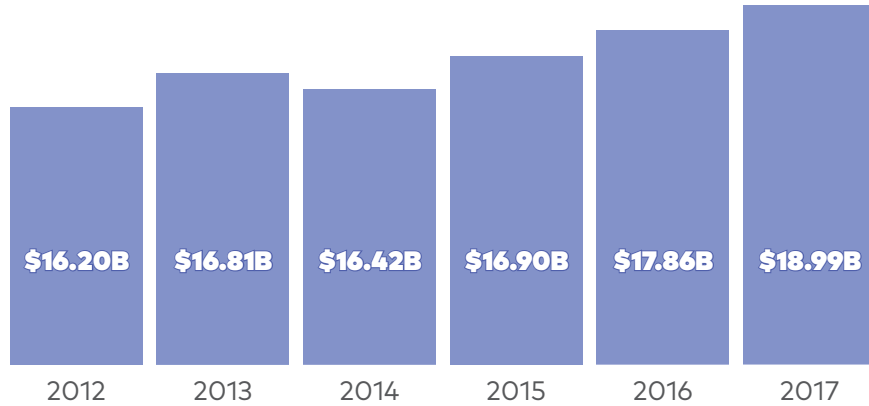
% Change in RHC Days from Base Period



How Does Medicare Pay for Hospice?

Medicare paid hospice providers a total of \$18.99 billion dollars for care provided in 2017, representing an increase of 6.3% over the previous year.

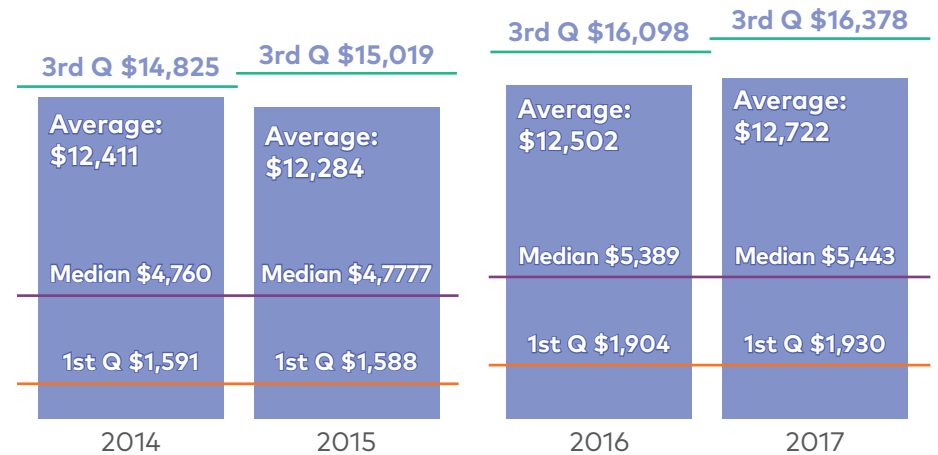
Medicare Spending



Spending Per Patient

The average spending per Medicare hospice patient was \$12,722.

Average Medicare Spending Per Patient



Spending by Days of Care

In 2017, only 26.2% of Medicare spending for hospice care was for patients who had received 180 or fewer days of care.*

Medicare Payments by Days of Care Stratified from 2012-2017

| Day Stratifications | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---------------------|-------|-------|-------|-------|-------|-------|
| 1-7 | 97.6% | 97.8% | 97.8% | 97.9% | 98.1% | 98.2% |
| 8-14 | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% | 0.2% |
| 15-30 | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% |
| 31-60 | 1.8% | 1.6% | 1.5% | 1.5% | 1.4% | 1.3% |
| 61-90 | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% | 0.2% |
| 91-180 | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% |
| >180 | 1.8% | 1.6% | 1.5% | 1.5% | 1.4% | 1.3% |

* Includes days of care that spanned between the years of 2012 through 2017.

How Does Medicare Pay for Hospice? (continued)

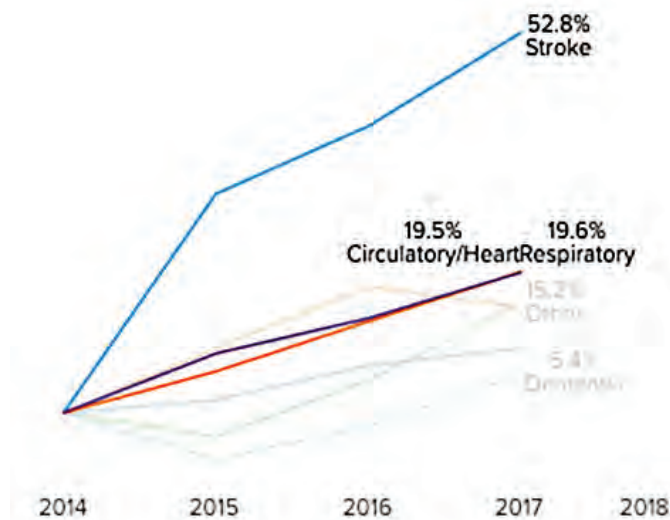
Spending by Diagnosis

In 2017, patients with a principal diagnosis of dementia continued to lead Medicare hospice spending at 25.4%. Stroke, circulatory/heart, and respiratory related diagnosis grew the most since 2014.

% of Medicare Spending by Principal Diagnosis

| CCS | 2017 |
|------------------------|-------|
| Dementia | 25.4% |
| Circulatory/Heart | 20.0% |
| Cancer | 18.4% |
| Other | 13.3% |
| Respiratory | 10.9% |
| Stroke | 10.9% |
| Chronic Kidney Disease | 1.1% |

Medicare Spending % Change from Base Period



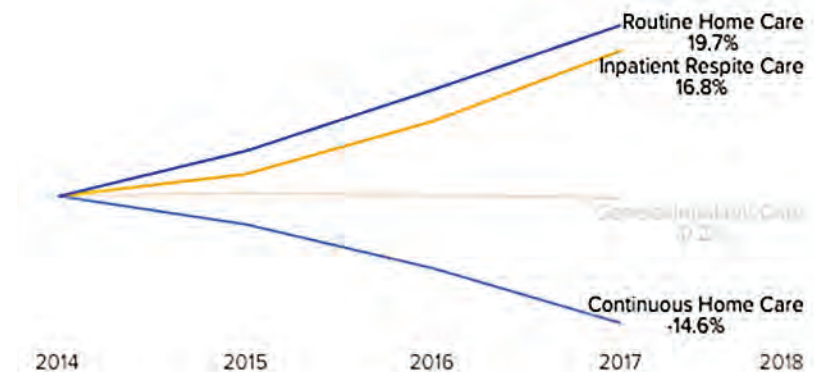
Spending by Level of Care

In 2017, the vast majority of Medicare spending for hospice care was for care at the routine home care level. This has grown 20% since 2014, followed by inpatient respite care. Continuous home care has declined 14% over the same period.

Spending by Level of Care

| Level of Care | 2017 |
|------------------------|--------|
| Routine Home Care | 89.31% |
| General Inpatient Care | 7.14% |
| Inpatient Respite Care | 1.78% |
| Continuous Home Care | 1.77% |

LOC Spending % Change from Base Period

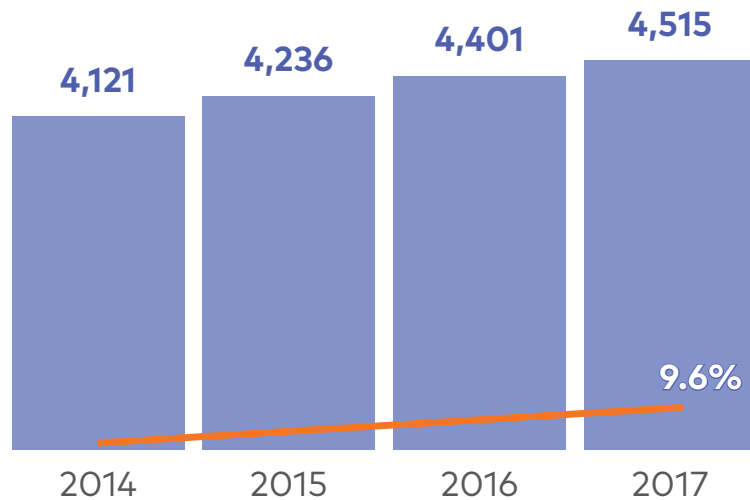


Who Provides Care?

How many hospices were in operation in 2017?

Over the course of 2017, there were 4,515 Medicare certified hospices in operation based on claims data. This represents an increase of 9.6% since 2014.

Number of Operating Hospices



ADC Support Stats

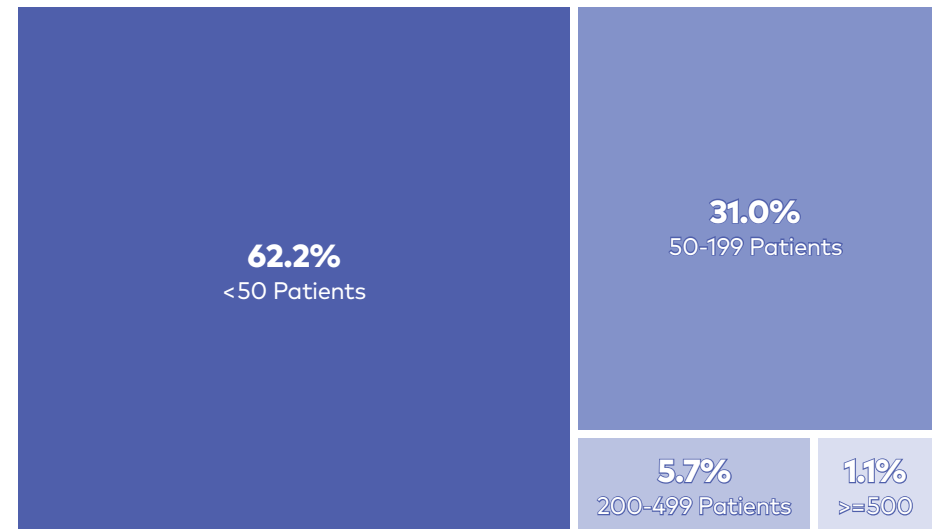
| Year | Providers | Mean Census | Median Census | 10th Percentile Census | 25th Percentile Census | 75th Percentile Census | 90th Percentile Census |
|------|-----------|-------------|---------------|------------------------|------------------------|------------------------|------------------------|
| 2014 | 4,121 | 66.9 | 33.5 | 4.1 | 12.8 | 75.3 | 150.3 |
| 2015 | 4,236 | 66.3 | 33.2 | 4.0 | 13.2 | 74.5 | 146.5 |
| 2016 | 4,401 | 67.3 | 33.1 | 3.1 | 12.1 | 75.9 | 153.5 |
| 2017 | 4,515 | 68.9 | 33.2 | 3.6 | 12.2 | 78.3 | 157.6 |

Hospice Size

One indicator of hospice size is the average daily census (ADC) or more specifically the number of patients cared for by a hospice on average each day.

In 2017 the mean ADC was 63 and the median 31. 62% of hospices had an ADC of less than 50 patients.

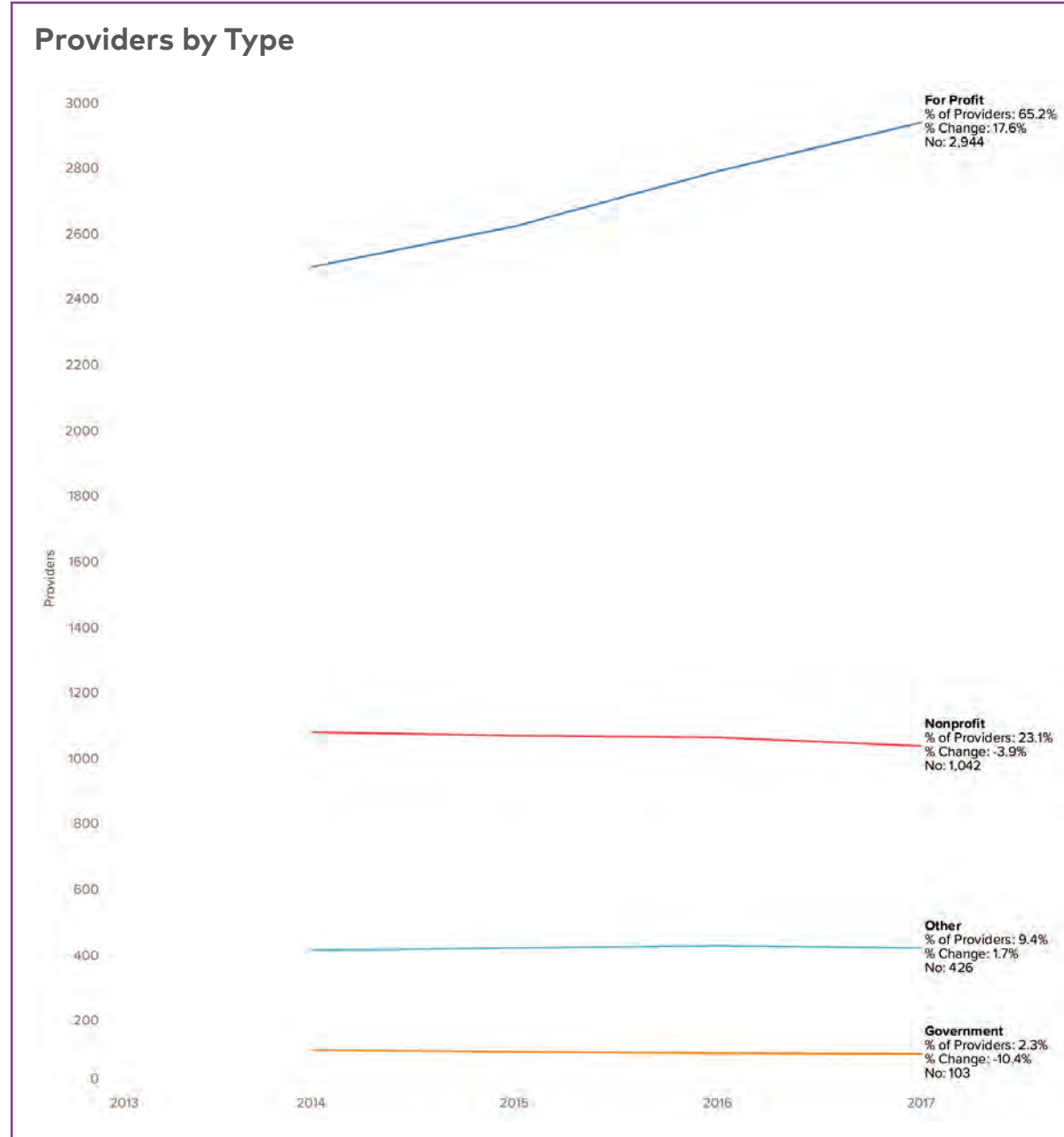
Hospice Average Daily Census for 2017



Who Provides Care? (continued)

Tax Status

62.2% of active Medicare provider numbers were assigned to hospice providers with for-profit tax status and 23.1% with not-for-profit status. For-profit hospice providers grew more than 17% since 2014 while non-profit hospice providers retracted 3.9%. Government-owned hospice providers comprised only 2.3% and has also declined.

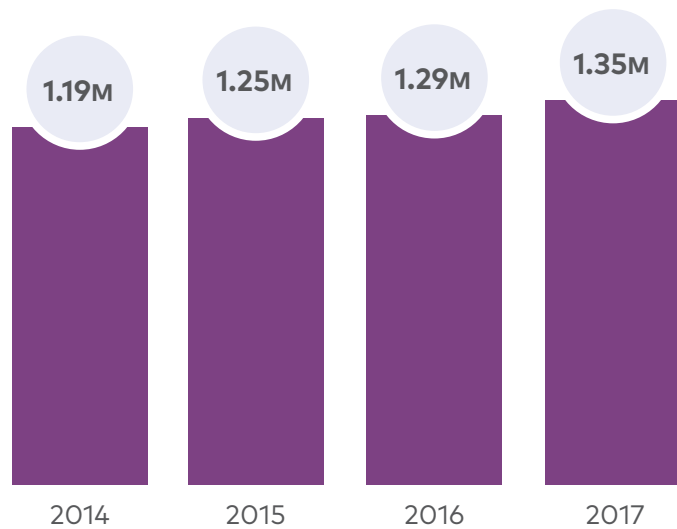


Who Provides Care? (continued)

Patient Volume First Admissions

In 2017 hospice providers performed a total 1.3 million unduplicated admissions* of Medicare hospice patients representing a 13.1% increase since 2014.

First Admissions

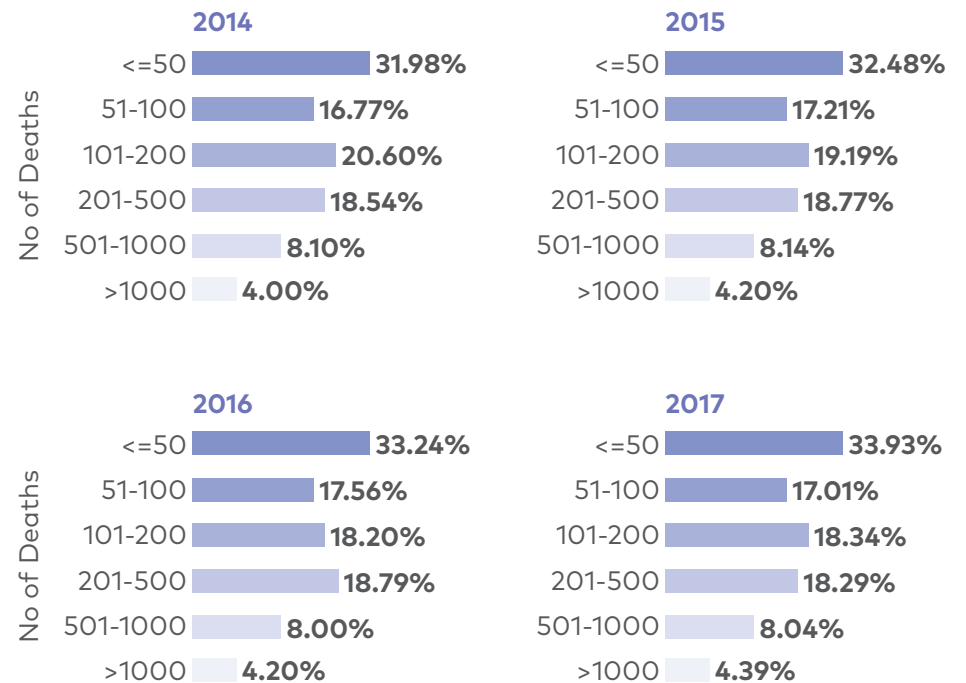


*Unduplicated admissions include patients who were part of the census at the end of 2016, carried over into 2017, discharged in 2016 and readmitted within the year.

Volume of Deaths

In 2017, the highest number of hospice providers served 50 or fewer patients who died while enrolled in hospice care.

% of Hospice Providers by Decedent Count



Who Provides Care? (continued)

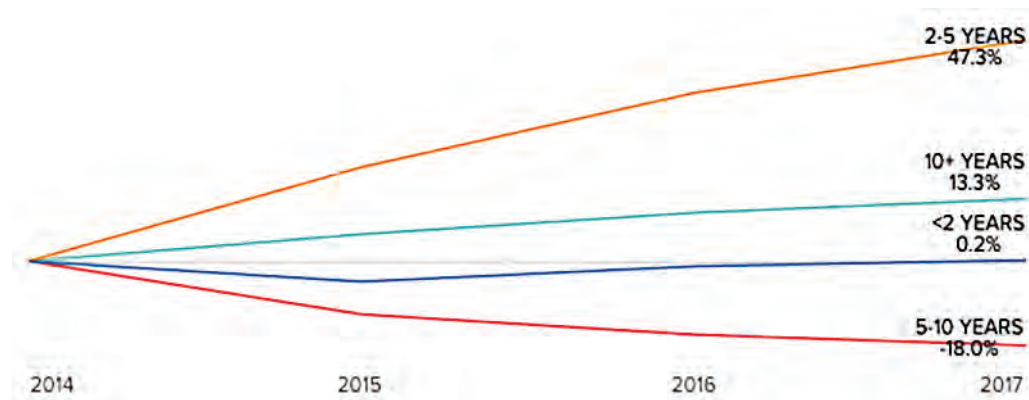
Provider Medicare Certification

More than 55% of all providers have been certified for 10 or more years highlighting the maturity of the industry. The biggest growth of provider certification since 2014 have been on newer providers certified for 2-5 years highlighting new entrants within the industry.

Provider Certification

| Years Certified | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-----------------|-------|-------|-------|-------|-------|-------|
| <2 Years | 9.6% | 11.0% | 11.1% | 10.3% | 10.3% | 10.1% |
| 2-5 Years | 12.5% | 12.3% | 13.3% | 15.5% | 16.9% | 17.9% |
| 5-10 Years | 25.7% | 24.8% | 21.8% | 18.8% | 17.2% | 16.3% |
| 10+ Years | 52.1% | 51.9% | 53.8% | 55.4% | 55.6% | 55.7% |
| N/A | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% |

% of Medicare Certified Providers Change from Base Year



Data Sources

The primary data source used for the findings in this report is CMS Research Identifiable Files (RIF) Medicare Fee-for-Service (FFS) claims data including 100% of Medicare Part A from 2012-2017. The CMS 2018 Provider of Service (POS) file is used to provide further information on facilities certified to provide care to Medicare beneficiaries. The Healthcare Cost and Utilization Project (HCUP) Clinical Classification Software (CCS) was used to classify patients into diagnosis categories based on their primary ICD-9 or ICD-10 diagnosis. The FY 2018 Hospice Wage Index and Payment Rate Update and Hospice Quality Reporting Requirements is the source for the tax status statistics.

Methodology Note

All claims are analyzed within the calendar year with the date assigned based on the claim through date, the last date on the billing statement for services covered to a beneficiary. The methods used to aggregate hospice claims were based on those outlined in the Centers for Medicare and Medicaid Services' [Medicare Hospice Utilization & Payment Public Use File: A Methodological Overview](#). Results may differ from other reports such as Medpac's publications that look within a fiscal year or across multiple years for patients that have lengths of stay that cross many years. Unless otherwise specified, the denominator is all hospice beneficiaries who had any services covered within the calendar year, regardless of the discharge status code for the last service rendered. This differs from other analyses that may restrict to patients who were discharged (live discharges and/or decedents).

CMS Research Identifiable Files (RIF) Data Set

The Medicare FFS RIFs used for this report contain all Medicare Part A claims related to payment made directly towards hospice services. All

beneficiaries with at least one hospice claim paid through Medicare are included in this file (2.5% of all Medicare beneficiaries in 2017). Selected variables within the files are encrypted, blanked, or ranged. The RIF Medicare claims used for Facts and Figures include the following data files:

- Hospice File: Hospice Fee-for-Service claims submitted by Medicare certified hospice providers ([see documentation](#) for detailed information on hospice files)
- Member Beneficiary Summary File (MBSF): Medicare beneficiary enrollment information via Medicare Parts A, B, C, and D ([see documentation](#) for detailed information on MBSF)

CMS 2018 Provider of Service (POS) Data Set

The [POS file](#) contains information of health care providers who are certified to provide care to Medicare beneficiaries.

Healthcare Cost and Utilization Project (HCUP) Clinical Classification Software (CCS)

The [CCS tool](#) was used to group patients into diagnosis groups based off ICD-9 or ICD-10 diagnosis.

Questions May Be Directed To:

National Hospice and Palliative Care Organization

Attention: Research

Phone: 703.837.1500

Web: www.nhpco.org/research

Email: Research@nhpco.org

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NHPCO

National Hospice and Palliative
Care Organization

NHPCO

1731 King Street
Alexandria, VA 22314

tel. 703.837.1500 | nhpco.org

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 8

LIST OF EMPRES/EDEN SKILLED NURSING FACILITIES, HOSPICE, & HOME HEALTH AGENCIES

| Legal Name | DBA | Address | Phone | UBI | NPI | Medicare | Medicaid | State Nursing Home License |
|---------------------------------------|-----------------------------|---|--------------|-------------|------------|----------|------------|----------------------------|
| OPERATING ENTITIES | | | | | | | | |
| ARIZONA | | | | | | | | |
| Eden Hospice at Sierra Vista, LLC | Eden Hospice | Home Office: 1491 West Thatcher Blvd. Suite 108 Safford, AZ 85546 Branch Office: 4066 East Monsanto Drive Unit F Sierra | 928-432-6255 | 604-259-763 | 1487131215 | 03-1522 | 00-4621 | HSPC9395 |
| Eden Home Health of Sierra Vista, LLC | Eden Home Health | 4066 East Monsanto Drive, Unit E Sierra Vista, AZ 85650 | 520-335-6118 | 604-375-155 | 1568936334 | 03-7099 | 00-4613 | HHA9998 |
| Eden Home Health of Safford, LLC | Eden Home Health of Safford | 1491 West Thatcher Blvd. Suite 104 Safford, AZ 85546 | 928-432-6255 | 604-375-156 | 1649744418 | 03-7294 | | HHA10005 |
| CALIFORNIA | | | | | | | | |
| Evergreen at Salinas, L.L.C. | Katherine Healthcare | 315 Alameda Avenue Salinas, CA 93901 | 831-424-1878 | 601-906-864 | 1811945652 | 05-5311 | ZZR05311J | 070000058 |
| Evergreen at Heartwood Avenue, L.L.C. | Heartwood Avenue Healthcare | 1044 Heartwood Avenue Vallejo, CA 94591 | 707-643-2267 | 601-906-853 | 1245288083 | 55-5184 | LTC55184H | 110000020 |
| Evergreen at Springs Road, L.L.C. | Springs Road Healthcare | 1527 Springs Road Vallejo, CA 94591 | 707-643-2793 | 601-906-866 | 1023066966 | 05-5222 | ZZR05222J | 110000003 |
| Eden Home Health of Elk Grove, LLC | Eden Home Health | 9299 East Stockton Blvd. Suite 10 Elk Grove, CA 95624 | 916-681-4949 | 604-023-071 | 1497200745 | 05-8314 | 1497200745 | 100000640 |

| Legal Name | DBA | Address | Phone | UBI | NPI | Medicare | Medicaid | State Nursing Home License |
|---|---|--|--------------|------------------------------------|----------------------------------|----------|---------------------|----------------------------|
| IDAHO | | | | | | | | |
| EmpRes at Idaho Falls, LLC | Teton Post Acute Care and Rehabilitation | 3111 Channing Way Idaho Falls, ID 83404-7534 | 208-529-0067 | 603-256-867 | 1649517806 | 13-5138 | 1649517806 | 67 |
| Lewiston Royal Plaza Care, LLC | Royal Plaza Health and Rehabilitation | 2870 Juniper Drive Lewiston, ID 83501 | 208-746-2855 | 603-416-216 | 1982011474 | 13-5116 | 1982011474 | 59 |
| Lewiston Royal Plaza Retirement, LLC | Royal Plaza Retirement Center | 2870 Juniper Drive Lewiston, ID 83501 | 208-746-2800 | 603-416-162 | 1376940809 | | 1376940809 | RC-1083 |
| Eden Home Health of Idaho Falls, LLC | Eden Home Health | 1480 Midway Avenue Unit 7 Ammon, ID 83406-4587 | 208-523-1980 | 603-343-174 | 1649683582 | 13-7119 | 1649683582 | HH-248 |
| Eden Hospice at Idaho Falls, LLC | Eden Hospice | 1480 Midway Avenue Unit 7 Ammon, ID 83406-4587 | 208-523-1980 | 603-580-154 Old 604-631-303 New | 1669839395 | | | |
| Eden Home Health of Sandpoint, LLC | Eden Home Health | 530 Pine Street Sandpoint, ID 83864 | 208-255-1640 | 604-498-334 | 1346898830 | 13-7122 | | HH-247 |
| MONTANA | | | | | | | | |
| Evergreen at Polson, L.L.C. | Polson Health and Rehabilitation Center | Nine 14th Avenue West Polson, MT 59860 | 406-883-4378 | 601-771-966 | 1093763419 | 27-5049 | 310622 | 13551 |
| Evergreen at Hot Springs, L.L.C. | Hot Springs Health and Rehabilitation Center | 600 First Avenue North Hot Springs, MT 59845 | 406-741-2992 | 601-771-969 | 1689623357 | 27-5069 | 310635 | 13488 |
| Evergreen at Missoula, L.L.C. | Missoula Health and Rehabilitation Center | 3018 Rattlesnake Drive Missoula, MT 59802 | 406-549-0988 | 601-780-502 | 1538117940 SNF 1447703533 ALF | 27-5035 | 310029 | 13453 SNF 13184 ALF |
| Evergreen at Laurel, L.L.C. | Laurel Health and Rehabilitation Center | 820 3rd Avenue Laurel, MT 59044 | 406-628-8251 | 601-780-456 | 1750339149 | 27-5111 | 310114 | 12861 |
| Evergreen at Livingston, L.L.C. | Livingston Health and Rehabilitation Center | 510 South 14th Street Livingston, MT 59047 | 406-222-0672 | 602-347-324 | 1497703896 | 27-5047 | 310862 | 12545 SNF |
| EmpRes at Lewistown, LLC | Central Montana Nursing & Rehabilitation Center | 410 Wendell Avenue Lewistown, MT 59457 | 406-535-6225 | 603-437-044 | 1336546811 | 27-5064 | 0318539 ? 395044 | 13023 |
| EmpRes at Shelby, LLC | Marias Care Center | 630 Park Drive Box 346 Shelby, MT 59474 | 406-434-3260 | 603-552-367 | 1659743441 | 27-5061 | 425113 | 13563 |
| EmpRes at Billings, LLC | Aspen Meadows Health and Rehabilitation Center | 3155 Avenue C Billings, MT 59102 | 406-656-8818 | 604-117-975 | 1619402765 | 27-5140 | 522561 | 13565 |
| Aspen Meadows Assisted Living, LLC | Aspen Meadows Assisted Living | 3155 Avenue C Billings, MT 59102 | 406-656-8818 | 604-121-195 | 1700312931 | | | 31502 |
| Eden Home Health of Yellowstone County, LLC | Eden Home Health | 3155 Avenue C Billings, MT 59102 | 406-656-8818 | 604 534 735 | 1710592266 | | | |
| Eden Hospice at Yellowstone County, LLC | Eden Hospice | 3155 Avenue C Billings, MT 59102 | 406-656-8818 | 604 536 264 | 1437764982 | | | |
| NEVADA | | | | | | | | |
| Evergreen at Pahrump, L.L.C. | Pahrump Health and Rehabilitation Center | 4501 N Blagg Road Pahrump, NV 89060 | 775-751-6600 | 602-160-690 | 1568410884 | 29-5075 | 1912881 | 2770-SNF-44 |
| Evergreen at Carson City, L.L.C. | Ormsby Post Acute Rehab | 3050 North Ormsby Blvd. Carson City, NV 89703 | 775-841-4646 | 602-160-692 | 1558319889 | 29-5067 | 1913305 | 2355-SNF-37 |
| Evergreen at Mountain View, L.L.C. | Mountain View Health and Rehabilitation Center | 201 Koontz Lane Carson City, NV 89701 | 775-883-3622 | 602-229-498 | 1144279472 | 29-5079 | 1913700 | 3331-SNF-44 |
| Evergreen at Gardnerville, L.L.C. | Gardnerville Health and Rehabilitation Center | 1573 Muller Parkway Gardnerville, NV 89410 | 775-782-6620 | 602-299-654 | 1083662514 | 29-5082 | 100503498 | 3995-SNF-38 |

| Legal Name | DBA | Address | Phone | UBI | NPI | Medicare | Medicaid | State Nursing Home License |
|----------------------------------|------------------|---|--|-------------|------------|----------|----------------------------------|----------------------------|
| EmpRes Personal Care Nevada, LLC | Eden Home Care | 911 Mountain Street Carson City, NV 89703 | 775-392-2000 | 603-310-107 | 1427578418 | | | 7175-PCS-10 |
| Quality Health Care Corporation | Eden Home Health | <u>Home Office:</u> 500 Damonte Ranch Parkway Suite 929 Reno, NV 89521 <u>Branch Office:</u> 907 Mountain Street Carson City, NV 89703 | 775-432-0831 775-828-1000 775-687-1530 | | 1497746226 | 29-7035 | 2916050 | 548-HHA-27 546-HBR-27 |
| Eden Hospice at Carson City, LLC | Eden Hospice | 907 Mountain Street Carson City, NV 89703 | 775-841-6123 | 603-450-017 | 1487051728 | 29-1515 | T64: 100504255 T65: 100546106 | 6275-HPC-11 |

| Legal Name | DBA | Address | Phone | UBI | NPI | Medicare | Medicaid | State Nursing Home License |
|---|--|---|--------------|--------------------|------------|----------|----------------------------|---------------------------------|
| OREGON | | | | OR Registry | | | | |
| Evergreen Oregon Healthcare Mountain Vista, L.L.C. | LaGrande Post Acute Rehab | 91 Aries Lane La Grande, OR 97850 | 541-963-8678 | | 1801844501 | 38-5211 | 801035 | 1825618921 |
| Evergreen Oregon Healthcare Independence, L.L.C. | Independence Health and Rehabilitation Center | 1525 Monmouth Avenue Independence, OR 97351 | 503-838-0001 | | 1497703201 | 38-5188 | 801030 | 1240315675 |
| Evergreen Oregon Healthcare Tualatin, L.L.C. | EmpRes Hillsboro Health and Rehabilitation Center | 1778 NE Cornell Road Hillsboro, OR 97124 | 503-648-6621 | | 1780632471 | 38-5217 | 801043 | 1001406013 |
| Evergreen Oregon Healthcare Orchards Rehabilitation, L.L.C. | Milton Freewater Health and Rehabilitation Center | 120 Elzora Street Milton Freewater, OR 97862 | 541-938-3318 | | 1407804198 | 38-5161 | 801048 | 1368282496 |
| Evergreen Oregon Healthcare Orchards Retirement, L.L.C. | Cascade Valley Assisted Living and Memory Care Cascade Valley Assisted Living | 1010 NE Third Milton Freewater, OR 97862 | 541-938-5693 | | 1710296793 | | 526588 502086 526773 | 1208675563 ALF 1473705768 MC |
| Evergreen Oregon Healthcare Valley Vista, L.L.C. | The Dalles Health and Rehabilitation Center | 1023 West 25th The Dalles, OR 97058 | 541-298-5158 | | 1487602173 | 38-5172 | 801055 | 1317989527 |
| Evergreen Oregon Healthcare Portland, L.L.C. | Portland Health and Rehabilitation Center | 12441 SE Stark Street Portland, OR 97233 | 503-255-7040 | | 1497703110 | 38-5228 | 800000 | 1395692050 |
| Evergreen Oregon Healthcare Salem, L.L.C. | Windsor Health and Rehabilitation Center | 820 Cottage Street NE Salem, OR 97301 | 503-399-1135 | 60058386 | 1760430482 | 38-5224 | 800001 | 1873152135 |
| SOUTH DAKOTA | | | | | | | | |
| EmpRes at Mitchell, LLC | Firesteel Healthcare Center | 1120 East 7th Avenue Mitchell, SD 57301 | 605-996-6526 | 604-372-689 | 1922570894 | 43-5109 | 1922570894 | 10653 |
| EmpRes at Rapid City, LLC | Fountain Springs Healthcare Center | 2000 Wesleyan Blvd. Rapid City, SD 57702 | 605-343-3555 | 604-372-690 | 1558833426 | 43-5110 | 1558833426 | 10723 |
| Rapid City Assisted Living, LLC | Fountain Springs Assisted Living | 2000 Wesleyan Blvd. Rapid City, SD 57702 | 605-343-3555 | 604-363-274 | 1811469687 | | | 10757 |
| Sturgis Assisted Living, LLC | Aspen Grove Assisted Living | 2065 Moose Drive Sturgis, SD 57785 | 605-720-4738 | 604-362-961 | 1447722210 | | | 65673 |
| EmpRes at Garretson, LLC | Palisade Healthcare Center | 920 4th Street Garretson, SD 57030 | 605-594-3466 | 604-362-961 | 1083186852 | 43-5115 | 1083186852 | 10623 |
| EmpRes at Woonsocket, LLC | Prairie View Healthcare Center | 401 South 1st Avenue Woonsocket, SD 57385 | 605-796-4467 | 604-372-244 | 1164994943 | 43-5118 | 1164994943 | 10714 |
| EmpRes at Flandreau, LLC | Riverview Healthcare Center | 611 East 2nd Avenue Flandreau, SD 57028 | 605-997-2481 | 604-368-328 | 1982176764 | 43-5086 | 1982176764 | 10620 |
| Flandreau Independent Living, LLC | Riverview Care Center | 610 East Pipestone Avenue Flandreau, SD 57430 | 605-997-2481 | 604-363-273 | 1861964645 | | | N/A |
| EmpRes at Britton, LLC | Wheatcrest Hills Healthcare Center | 1311 Vander Horck Street Britton, SD 57430 | 605-448-2251 | 604-362-959 | 1306318183 | 43-5105 | 1306318183 | 10599 |

| Legal Name | DBA | Address | Phone | UBI | NPI | Medicare | Medicaid | State Nursing Home License |
|---|---|--|--------------|-------------|------------|-------------|----------------------------|----------------------------|
| WASHINGTON | | | | | | | | |
| Evergreen Washington Healthcare Frontier, L.L.C. | Frontier Rehabilitation and Extended Care | 1500 3rd Avenue Longview, WA 98632 | 360-423-8800 | 601-765-215 | 1104811207 | 50-5276 | Old 4112256 New 4116051 | 1605 |
| Evergreen Washington Healthcare Americana, L.L.C. | Americana Health and Rehabilitation Center | 917 7th Avenue Longview, WA 98632 | 360-425-5910 | 601-765-213 | 1063461325 | 50-5361 | Old 4112231 New 4116041 | 1604 |
| Evergreen Washington Healthcare Whitman, L.L.C. | Whitman Health and Rehabilitation Center | 1150 W. Fairview Street Colfax, WA 99111 | 509-397-4603 | 601-774-227 | 1265427397 | 50-5251 | Old 4112405 New 4116091 | 1609 |
| Evergreen Washington Healthcare Seattle, L.L.C. | Seattle Medical Post Acute Care | 555 16th Avenue Seattle, WA 98122 | 206-324-8200 | 601-771-724 | 1851386957 | 50-5311 | Old 4112280 New 4116111 | 1611 |
| Evergreen Washington Healthcare Enumclaw, L.L.C. | Enumclaw Health and Rehabilitation Center | 2323 Jensen Street Enumclaw, WA 98022 | 360-825-2541 | 601-866-073 | 1457346785 | 50-5400 | Old 4112660 New 4116021 | 1602 |
| Evergreen Washington Healthcare Auburn, L.L.C. | Canterbury House | 502 29th Street SE Auburn, WA 98002 | 253-939-0090 | 601-894-247 | 1235187931 | 50-5344 | Old 4112694 New 4116061 | 1606 |
| Evergreen at Shelton, L.L.C. | Shelton Health and Rehabilitation Center | 153 Johns Court Shelton, WA 98584 | 360-427-2575 | 602-122-492 | 1427006220 | 50-5507 | Old 4113247 New 4116081 | 1608 |
| Evergreen at Bellingham, L.L.C. | North Cascades Health and Rehabilitation Center | 4680 Cordata Parkway Bellingham, WA 98226 | 360-398-1966 | 602-281-546 | 1174572432 | 50-5393 | Old 4113486 New 4116071 | 1607 |
| Evergreen at Tacoma, L.L.C. | Alaska Gardens Health and Rehabilitation Center | 6220 South Alaska Street Tacoma, WA 98408 | 253-476-5300 | 602-615-023 | 1659326338 | 50-5483 | Old 4113973 New 4116031 | 1603 |
| EmpRes at Alderwood, LLC | Alderwood Park Health and Rehabilitation | 2726 Alderwood Avenue Bellingham, WA 98225 | 360-733-2322 | 603-416-121 | 1093700148 | 50-5092 | Old 4114737 New 4115981 | 1598 |
| EmpRes Highland Care, LLC | Highland Health and Rehabilitation | 2400 Samish Way Bellingham, WA 98229 | 360-734-4800 | 603-416-128 | 1336134741 | 50-5140 | Old 4114729 New 4116001 | 1600 |
| EmpRes at Snohomish, LLC | Snohomish Health and Rehabilitation | 800 Tenth Street Snohomish, WA 98290 | 360-568-3161 | 603-416-183 | 1740275957 | 50-5338 | Old 4114745 New 4116101 | 1610 |
| Spokane Royal Park Care, LLC | Royal Park Health and Rehabilitation | 7411 North Nevada Street Spokane, WA 99208 | 509-489-2273 | 603-416-172 | 1376538637 | 50-5379 | Old 4114712 New 4116121 | 1612 |
| Spokane Royal Park Retirement, LLC | Royal Park Retirement Center | 302 E. Wedgewood Avenue Spokane, WA 99208 | 509-483-7136 | 603-416-165 | 1801251566 | | 2039158 | 2533 |
| EmpRes at Colville, LLC | Buena Vista Healthcare | 151 Buena Vista Drive Colville, WA 99114 | 509-684-4539 | 603-450-228 | 1477950954 | 50-5329 | Old 4115021 New 4116011 | 1601 SNF 2534 ALF |
| Fort Vancouver Post Acute, LLC | Fort Vancouver Healthcare Fort Vancouver Post Acute | 8507 NE 8th Way Vancouver, WA 98664 | 360-254-5335 | 603-495-351 | 1568858090 | 50-5260 | Old 4115271 New 4115991 | 1599 |
| Fort Vancouver Assisted Living, LLC | Fort Vancouver Assisted Living | 8422 NE 8th Way Vancouver, WA 98664 | 360-256-2980 | 603-495-209 | 1730575267 | | | 2537 |
| EmpRes at Auburn, LLC | Advanced Post Acute | 414 17th Street SE Auburn, WA 98002 | 253-833-1740 | 604-025-977 | 1467909465 | 50-5355 | 4115441 | 1544 |
| EmpRes at Seattle, LLC | Transitional Care Center of Seattle | 2611 South Dearborn Street Seattle, WA 98144 | 206-712-6500 | 604-595-856 | 1952921124 | Old 50-5511 | Old 2067068 New 2155326 | 1621 |
| EmpRes Home Health of Bellingham, LLC | Eden Home Health | Home Office: 316 E. McLeod Road Suite 101 Bellingham, WA 98226-6491 Branch Office: 1315 East Division Street Mount Vernon, WA 98273 | 360-734-5410 | 603-375-240 | 1316031230 | 50-7105 | 2046013 | IHS.FS.60491681 |
| EmpRes Home Care of Bellingham, LLC | Eden Home Care | 316 E. McLeod Road Suite 101 Bellingham, WA 98226-6491 | 360-734-5410 | 603-591-861 | 1831550144 | | | IHS.FS.60651755 |

| Legal Name | DBA | Address | Phone | UBI | NPI | Medicare | Medicaid | State Nursing Home License |
|---|--|--|--------------|-------------|------------|----------|-----------|----------------------------|
| Eden Home Health of King County, LLC | Eden Home Health | Parkade Plaza 733 7th Avenue Suite 110 Kirkland, WA 98033 | 206-717-8161 | 604-069-995 | 1003356403 | 50-7128 | 2145416 | IHS.FS.60871865 |
| Eden Home Health of Clark County, LLC | Eden Home Health | 8501 NE 8th Way Vancouver, WA 98664 | 360-253-6200 | 604-332-868 | 1538778295 | | | |
| Eden Home Health of Spokane County, LLC | Eden Home Health | 13305 E Trent Ave Spokane Valley, WA 99216 | 509-505-5315 | 604-331-802 | 1588212641 | 50-7999 | | |
| Eden Hospice at Whatcom County, LLC | Eden Hospice | 316 E. McLeod Road Suite 101 Bellingham, WA 98226-6491 | 360-734-5410 | 604-561-430 | 1275130098 | | | |
| WYOMING | | | | | | | | |
| EmpRes at Rock Springs, LLC | Sage View Care Center | 1325 Sage Street Rock Springs, WY 82901 | 307-362-3780 | 603-506-235 | 1760860241 | 53-5056 | 139993400 | 15198 |
| EmpRes at Cheyenne, LLC | Granite Rehabilitation and Wellness | 3128 Boxelder Drive Cheyenne, WY 82001 | 307-634-7901 | 603-527-290 | 1093190688 | 53-5013 | 141198500 | 15200 |
| EmpRes at Rawlins, LLC | Rawlins Rehabilitation and Wellness | 542 16th Street Rawlins, WY 82301 | 307-324-2759 | 603-527-306 | 1619352242 | 53-5036 | 141199300 | 15201 |
| EmpRes at Riverton, LLC | Wind River Rehabilitation and Wellness | 1002 Forest Drive Riverton WY 82501 | 307-856-9471 | 603-527-428 | 1508241977 | 53-5031 | 141200100 | 15199 |
| EmpRes at Thermopolis, LLC | Thermopolis Rehabilitation and Wellness | 1210 Canyon Hills Road Thermopolis, WY 82443 | 307-864-5591 | 604-055-180 | 1013459965 | 53-5051 | 145629600 | 15229 |
| EmpRes at Casper, LLC | Shepherd of the Valley Rehabilitation and Wellness | 60 Magnolia Street Casper, WY 82604 | 307-234-9381 | 604-362-960 | 1306318274 | 53-5042 | 152257400 | 15306 |
| Casper Independent Living, LLC | Maurice Griffith Manor Care | 77 Gardenia Street Casper, WY 82604 | 307-234-0572 | 604-348-075 | 1578035440 | | | 15307 |

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 9

MEDICAL DIRECTOR CONTRACT

Medical Director Independent Contractor Agreement

THIS MEDICAL DIRECTOR INDEPENDENT CONTRACTOR AGREEMENT (“Agreement”) is between Eden Hospice at Snohomish County, LLC d/ b/a Eden Hospice (“AGENCY”) and Dr. Gilson R. Giroto, DO, (“PROVIDER”). In consideration of the mutual promises set forth below in the body of this Agreement, the parties agree as follows:

1. TERM

The term of this Agreement shall commence on the date PROVIDER is licensed as a state certified hospice agency and shall continue for a period of one year thereafter, with automatic one-year renewals. AGENCY may terminate the use of PROVIDER’s services at any time, for any reason, upon 30 days advance written notice to PROVIDER, and without further obligations to PROVIDER except for payment due for services performed by PROVIDER prior to the contract termination date. PROVIDER may also terminate the contract at any time, for any reason, upon 30 days advance written notice to AGENCY; provided that PROVIDER agrees to continue to perform the agreed upon services for the 30 days leading up to the contract termination date. This Agreement may be terminated immediately upon the determination that any of the representations made by either party under this Agreement are false.

2. PROVIDER SERVICES

PROVIDER agrees to provide medical director services (“Services”) to AGENCY’s clients in accordance with all applicable requirements of federal, state or local laws, rules and/or regulations to include official interpretations of those requirements by the entities charged with implementing and enforcing them, including but not limited to the requirements of 42 C.F.R. § 418.102 and applicable CMS guidance regarding the same. PROVIDER will perform its services in accordance with accepted professional standards of practice and, in accordance with 42 C.F.R. 418.64, use only qualified duly licensed, certified or registered health care professionals in the performance of these services. PROVIDER understands and agrees that this Agreement is subject to the right of AGENCY clients, clients’ insurers or payors and clients’ physicians to choose services from another provider.

PROVIDER agrees to be responsible for (1) implementation of client care policies, and (2) the coordination of medical care at AGENCY.

With respect to the implementation of client care policies, PROVIDER agrees to provide clinical guidance and oversight regarding the implementation of client care policies, which includes collaborating with the AGENCY to help develop, implement and evaluate client care policies and procedures that reflect current standards of practice. “Client care policies and procedures” is further defined as the AGENCY’s goals, directives and governing Statements that direct the delivery of care and services to clients. Client care procedures describe the processes by which the AGENCY provides care to clients that are consistent with current standards of practice and AGENCY policies.

With respect to the coordination of medical care, PROVIDER shares responsibility with the AGENCY for assuring AGENCY is providing appropriate care as required, which involves

Page 1 – MEDICAL DIRECTOR INDEPENDENT CONTRACTOR AGREEMENT

(1) providing oversight and supervision of physician services and medical care of clients, and (2) helping the AGENCY identify, evaluate, and address/resolve medical and clinical issues that affect client care, medical care or quality of life, or are related to the provision of services by physicians and other health care practitioners. PROVIDER agrees to consult with clients or their attending physicians as needed to ensure adequate care is being provided. PROVIDER will attend client care conferences and advise AGENCY on pertinent ethical and clinical issues. PROVIDER will participate in utilization reviews of AGENCY services and participate in periodic, random reviews of records for AGENCY client services.

PROVIDER shall abide by applicable AGENCY policies and procedures to contractors, respond to AGENCY's requests for services in a timely manner, and provide accurate and timely documentation to AGENCY of services provided to AGENCY's clients. PROVIDER will provide clinical input and guidance, as required, in AGENCY's hiring of and clinical evaluation of AGENCY's Director of Nursing Services or AGENCY's clinical evaluation of other health care personnel as requested. PROVIDER will also provide clinical input and guidance into other quality monitoring programs established by AGENCY, which may include periodic attendance at the AGENCY's Continuous Quality Improvement Committee and Care Planning Committee meetings.

PROVIDER shall act as AGENCY's medical representative in the community (including medical staff, referring physicians, hospitals and community and professional organizations) and be familiar with policies and programs of public health agencies that may affect client care management. PROVIDER shall communicate with federal, state and county agencies regarding AGENCY programs.

PROVIDER shall participate as a member of AGENCY's OIG Compliance Committee.

PROVIDER shall participate in clinical education programs at the AGENCY, including the in-service clinical education of AGENCY personnel and continuing client/family and community education.

PROVIDER and AGENCY understand and agree that, while PROVIDER may also serve as an attending physician to clients of the AGENCY, PROVIDER's roles and functions as a Medical Director under this Agreement are separate from PROVIDER's roles and functions as an attending physician, which involves primary responsibility for the medical care of individual clients.

3. COMPENSATION

INVOICE FOR WORK PROVIDED PAYABLE NET 30. PROVIDER will be paid for Services on a monthly basis at the rate of \$200.00 per hour which will be billed at ¼ hour increments rounded up to the closest ¼ hour. All payments will be made net 30 days of receipt of an invoice for Services provided under this Agreement. Invoices shall indicate services

Page 2 – MEDICAL DIRECTOR INDEPENDENT CONTRACTOR AGREEMENT

rendered and the time expended to provide said services during the preceding month in accordance with the rates and fees set forth above, as well as sufficient documentation in support of the services provided. Payment of PROVIDER is conditioned on PROVIDER complying with all material provisions of this Agreement, providing an acceptable quality of service consistent with the requirements of all applicable federal and state requirements, and providing the AGENCY accurate and complete documentation of such services.

The parties warrant and acknowledge that the above rate of compensation constitutes fair market value for PROVIDER's services and is consistent with PROVIDER's customary services, if any.

Any and all professional service fees or retainers due to PROVIDER in his or her capacity as an attending physician or any fees owed to PROVIDER associated with any visitations, examinations or consultations to clients of AGENCY shall be the complete and sole responsibility of PROVIDER and not of AGENCY.

4. CIVIL RIGHTS

PROVIDER shall comply with Title VI and VII of the Civil Rights Act of 1964, Sections 503 and 504 of the Rehabilitation Act of 1973, and all requirements imposed by or pursuant to the regulations of the Department of Health and Human Services and any other applicable agencies issued pursuant to these Acts.

5. RECORDS

5.1 AGENCY and PROVIDER will each prepare and maintain complete and detailed clinical records concerning AGENCY's clients receiving Services under this Agreement, in accordance with prudent record-keeping procedures and as required by applicable federal and state laws, regulations and program guidelines. Each clinical record shall completely, timely and accurately document all services provided to, and events concerning, each patient (including evaluations, treatments, and progress notes) (collectively, "Clinical Records") and will remain confidential. The Clinical Records, records relating to billing and payment and other records relating to this Agreement shall be retained by AGENCY and PROVIDER for 8 years from the date said service was provided.

5.2 To the extent the value or services furnished under this Agreement, or a subcontract of this Agreement, exceed \$10,000 over a 12-month period, PROVIDER will make available to the Secretary of the Department of Health and Human Services, the Comptroller General, or their authorized representatives, a copy of this Agreement and such books, documents and records that are necessary to certify the nature and extent of the costs incurred by AGENCY under this Agreement for a period of four years after the furnishing of such services. PROVIDER agrees to notify AGENCY within 3 days of the nature and scope of any request for access and to provide, or make available, copies of any books, records or documents proposed to be provided. Any disclosure under this paragraph shall not be construed as a waiver of any other legal rights to which such party may be entitled.

6. QUALIFICATIONS

6.1 AGENCY represents and warrants that it is duly licensed and certified. PROVIDER represents and warrants that it has, and will maintain at all times throughout the term of this Agreement, all the necessary qualifications, certifications and/or licenses required by applicable federal, state and local laws and regulations to provide the Services covered by this Agreement. PROVIDER will provide AGENCY with a copy of its license in effect on the effective date of this Agreement and at each successive renewal. PROVIDER shall provide notice of any changes in certifications or licensing within 15 days.

6.2 PROVIDER agrees that it shall be responsible for conducting criminal background checks on those of its employees it assigns to AGENCY, including all costs relating to conducting such investigations and testing. PROVIDER further agrees that it shall not assign any of its employees to AGENCY who have been convicted of the following crimes: theft, sexually deviant behavior, assault and/or battery, abuse of the elderly, children or vulnerable individuals or other criminal conviction related to the services being provided to the AGENCY. PROVIDER further agrees that it shall not assign any of its employees to AGENCY who are determined (after appropriate alcohol and drug testing if necessary) to be engaged in the possession, distribution, dispensation, manufacture, sale or use of alcohol or illegal drugs in the workplace (whether that workplace is the AGENCY or elsewhere). For purposes of this Agreement, the term "illegal drugs" includes the abuse or misuse of prescription medication and the use or abuse of medical and/or recreational marijuana.

6.3 PROVIDER acknowledges and agrees that investigations into criminal backgrounds (a) will cover the previous seven years, (b) shall be conducted in accordance with applicable state and federal law, and (c) must be based on information provided by the appropriate state or local law enforcement agency if so required by applicable state law.

6.4 Each party represents and warrants that it is currently eligible for Medicare and Medicaid participation and not subject to any sanction or exclusion. The Parties agree to regularly verify such status of themselves and their employees and immediately disclose any actual or threatened federal, state or local investigations or imposed sanctions of any kind, in progress or initiated subsequent to the date of entering into this Agreement. Each party further represents and warrants that it has not been sanctioned under any applicable state or federal fraud and abuse statutes, including exclusion from any state or federal health care program. If, during the term of this Agreement, either party, any parent company of either party, or any officer, director or owner of either party, receives such a sanction or notice of a proposed sanction and the period of its duration within 15 days. Each party reserves the right to terminate the Agreement immediately upon receipt of notice that the other party, has been sanctioned under fraud and abuse statutes and/or any other federal, state or local regulation. Each party agrees to indemnify and hold the other harmless from any and all liability, loss or expenses incurred directly or indirectly as a result of such sanctions or investigations against the indemnifying party.

7. INSURANCE AND INDEMNITY

7.1 PROVIDER shall arrange and maintain in full force and effect at all times during the term of this Agreement malpractice insurance with a carrier reasonably satisfactory to AGENCY

in an amount not less than \$1,000,000 per occurrence and \$3,000,000 in the aggregate. Such insurance shall cover the professional medical services provided by PROVIDER in private practice, and, PROVIDER'S Services as Medical Director pursuant to this Agreement. PROVIDER represents and warrants that such insurance is in effect on the date of execution of this Agreement and shall remain in effect during the term of this Agreement. The policy shall provide that AGENCY shall be given not less than 30 days prior written notice of any reduction in coverage or any cancellation of the policy. In addition, PROVIDER shall notify AGENCY of any lapse in coverage. Prior to the commencement of this Agreement and at least 10 days prior to the expiration of any then effective policy, PROVIDER shall provide AGENCY with satisfactory written evidence of the coverage required by this paragraph.

7.2 AGENCY shall obtain and maintain in full force and effect, its own general and professional liability insurance in amounts not less than \$1,000,000 per occurrence and \$3,000,000, in the aggregate, either through a commercial carrier or through an adequate selfinsurance program, covering its operations of the AGENCY. AGENCY represents and warrants that such insurance is in effect on the date of execution of this Agreement and shall remain in effect during the term of this Agreement.

7.3 PROVIDER agrees to save, indemnify and hold harmless AGENCY from and against any and all losses, malpractice actions, claims, suits, damages, liabilities and expenses based upon, arising out of or attributable to the negligent performance or nonperformance of their respective obligations under this Agreement.

8. EQUIPMENT AND SUPPLIES

PROVIDER is expected to use its own equipment and/or supplies whenever feasible. When PROVIDER uses equipment and/or supplies provided by AGENCY, PROVIDER shall use such equipment and supplies properly and is solely responsible for injuries or damages resulting from any misuse. In addition, PROVIDER shall notify AGENCY in writing whenever equipment or supplies provided by AGENCY and used by PROVIDER for providing Services need repair or replacement. When PROVIDER uses its own equipment and/or supplies, PROVIDER agrees to save, indemnify and hold AGENCY harmless of and from the use, misuse or failure of such equipment or supplies. The parties shall maintain their equipment and/or supplies in good operating condition and repair and in accordance with manufacturer's recommendations and all applicable federal, state and local laws.

9. MASTER LIST

Pursuant to 42 CFR 411.357(d)(1)(ii) a master list of contracts which reflects all arrangements and/or agreements between AGENCY and PROVIDER or PROVIDER's immediate family members, to the extent any such arrangements or agreements exists, is provided by PROVIDER to AGENCY and maintained by AGENCY.

10. INDEPENDENT CONTRACTOR

This Agreement does not constitute a hiring of PROVIDER as an employee of

AGENCY. It is the parties' intention that PROVIDER shall be an independent contractor and not AGENCY's employee. PROVIDER shall retain discretion and judgment regarding the manner and means of providing Services to AGENCY subject to all applicable laws, regulations and AGENCY's policies. AGENCY assumes professional and administrative responsibility for the services rendered only to the extent that AGENCY will assure itself that (1) PROVIDER is qualified by education and/or experience to render the services contracted for; and (2) PROVIDER is satisfying the obligations set forth herein in a timely manner. This Agreement shall not be construed as a partnership, and AGENCY shall not be liable for any obligations incurred by PROVIDER.

The parties hereto agree that payments to be made by AGENCY to PROVIDER are for services as an independent contractor. AGENCY shall not make any deduction from the fees to be paid PROVIDER including, but not limited to, social security, withholding taxes, business taxes, unemployment insurance, and other such deductions. PROVIDER assumes full responsibility, on an independent contractor basis, for all such taxes, contributions, and assessments and for worker's compensation insurance, agrees to indemnify AGENCY with respect thereto and agrees to meet all requirements with enforcement of any relevant state or federal act or regulation. PROVIDER agrees to obtain and maintain any and all business licenses as may be required under any applicable federal or state laws for independent contractors or consultants and to provide AGENCY with proof of same immediately upon request.

PROVIDER acknowledges that since he is not an employee of the Company, the Company will not provide health insurance or any other fringe benefit of any kind to PROVIDER.

11. CONFIDENTIALITY

PROVIDER agrees to respect and abide by all federal, state and local laws pertaining to confidentiality and disclosure with regard to all information and records obtained or reviewed in the course of providing services to AGENCY and/or its clients.

12. ATTORNEY'S FEES

If suit is brought to enforce any of the terms or conditions of this Agreement, the prevailing party shall be entitled to recover such sums as the court may fix as costs and reasonable attorney's fees, in addition to any other relief to which it may be entitled.

13. NOTICES

Any notice required to be provided to any party to this Agreement shall be in writing and shall be considered effective three (3) days after the date of deposit with the United States Postal Service by certified or registered mail, first class postage prepaid, return receipt requested.

14. NON-ASSIGNABILITY

Neither this Agreement nor any of the Services or obligations of PROVIDER hereunder shall be assigned or delegated by PROVIDER without prior written consent of AGENCY.

15. WASHINGTON LAW AND VENUE

This Agreement shall be governed by the laws of the State of Washington. If any suit or action is filed by any party to enforce or interpret this Agreement, venue shall be in the federal or state courts of Clark County, Washington.

16. COMPLETE AGREEMENT

This Agreement and the accompanying Business Associate Agreement supersedes all previous agreements, oral or written, between the parties and embodies the complete Agreement between the parties. This Agreement may only be amended or modified by written agreement signed by both parties.

17. COMPLIANCE CERTIFICATION

PROVIDER acknowledges AGENCY’s Corporate Compliance Program and receipt of AGENCY’s Code of Conduct. PROVIDER represents and warrants that each of its employees who provide patient care to Federal health care program beneficiaries at AGENCY shall read and review AGENCY’s Code of Conduct prior to commencement of services under this Agreement. PROVIDER agrees to obtain and retain a signed certification from its employees that they have received, read and understand AGENCY’s Code of Conduct and agree to abide by the requirements of AGENCY’s Corporate Compliance Program. Such certification shall be obtained prior to commencement of services under this Agreement, shall be maintained by PROVIDER and shall be made available for review by AGENCY or AGENCY’s agents upon reasonable request.

18. COMPENSATION NOT BASED ON REFERRALS

The parties acknowledge that none of the benefits granted to PROVIDER under this Agreement or in relation to the performance of services hereunder is conditioned on any requirement that PROVIDER make referrals to, be in a position to make or influence referrals to, or otherwise generate business for the AGENCY or the affiliates of the AGENCY by common ownership. The parties further acknowledge that, except as may otherwise be provided in this Agreement, PROVIDER is not restricted from establishing staff privileges at, referring any services to, or otherwise generating any business for any other entity of PROVIDER’S choosing.

IN WITNESS WHEREOF, the parties by their duly authorized representatives have entered into thus Agreement s of the date first above written.

AGENCY PROVIDER by its Manager, EmpRes
Healthcare Management, LLC,

By: _____ By: _____

Name: Michael Miller Name: _____

Title: CFO

Title: _____

Date: _____

Date: _____

UPIN #: _____

REQUIRED DOCUMENTS FOR CONTRACT COMPLETION

Copy of Liability/Malpractice Insurance - \$1M / \$3M Liability Limits

Office Address and Phone Number

Copy of Current State of Practice License;

PROVIDER-signed Business Associate Agreement

(360) 816-1652

ATTN: PAUL JOHNSON

FROM: GILSON GIROTTO, DO



Eden Hospice at Snohomish County, LLC

733 7th Ave., Ste. 110, Kirkland, WA 98033 | Phone: 206-717-8161 | Fax: 206-899-1641

January 4, 2021

Re: Letter of Intent

This letter of intent is to confirm that Eden Hospice at Snohomish County, LLC and Dr. Gilson R. Giroto, DO intend to fully execute the Medical Director Independent Contractor Agreement and the Medical Director Job Description presented in Appendix 9 and Appendix 10 of the Certificate of Need (CON) application CN 20-37 upon the approval of the CON.

Eden Hospice at Snohomish County, LLC and Dr. Gilson R. Giroto, DO acknowledge that the signed agreements would be submitted as a condition of approval of the CON and that any changes in the terms of the two documents would require review and approval prior to the CON being approved and issued.

AGENCY
by its Manager, EmpRes Healthcare
Management, LLC,

PROVIDER

By: 

By: 

Name: Michael Miller

Name: GILSON R. GIROTO, DO

Title: CFO

Title: Physician

Date: 01-13-2021

Date: 1/11/2021

UPIN #: H 40154

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 10

MEDICAL DIRECTOR JOB DESCRIPTION

JOB TITLE: Medical Director
REPORTS TO: Administration, Board of Directors
SUPERVISES:

AGENCY NAME:
DISTRIBUTION CODE: N/A
FSLA STATUS:

JOB SUMMARY

The Medical Director provides overall management of medical care of Agency patients and makes sure provision of Hospice services reflects Eden philosophy and standards. The Medical Director adheres to all federal, state, and local rules and regulations, as well as accrediting organization standards. He or she works in conjunction with the patient's attending physician and provides direct patient care. The Medical Director establishes relationships with the medical community in order to increase awareness and provide education about hospice and palliative care, and participates in the Agency's performance improvement program.

Note: Medical staff is privileged and credentialed according to the rules and regulations of the specific Agency. The medical staff of each Agency is responsible for peer review activities to promote continuous improvement of the quality of patient care provided by the medical staff in all departments of the Agency. See *Eden's Medical Staff Bylaws and Rules and Regulations* to define these processes.

ESSENTIAL FUNCTIONS

1. Directs and coordinates medical care for the Agency.
2. Participates in administrative decision making and establishes policies, procedures, and guidelines designed to provide adequate, comprehensive care.
3. Communicates with patients' attending physicians and other healthcare providers regarding the Agency's policies, procedures, and standards.
4. Develops and implements rules, regulations, and policies that govern the attending physicians that admit patients to the Agency, in conjunction with the administration.
5. Monitors the clinical practice of the attending physicians; may intervene as needed on the patient's behalf.
6. Assists in developing procedures for the emergency treatment of patients. May assume care of the patient if the attending physician is not available or the patient does not have an attending physician.
7. Assists with the development of policies and procedures for the admission, transfer, or discharge of patients to other facilities when necessary.
8. Participates in patient comprehensive care planning.
9. Participates in the development and implementation of educational programs for nursing and other healthcare professionals of the Agency.
10. Provides clear, concise documentation in medical record as it relates to reimbursement guidelines and Agency policy and procedure.
11. Reviews and evaluates incident reports and identifies hazards to health and safety to provide a safe and sanitary environment for patients. Makes relevant recommendations to Administration.

The above Job Description is intended to describe the general content and requirements for the performance of this particular position. It is not to be construed as an exhaustive statement of duties, responsibilities, or requirements, nor is it to be construed as a contract for employment.

12. Helps create environment that optimizes patient safety and reduces the likelihood of medical/health care errors.
13. Supports and maintains a culture of safety and quality.
14. Advocates on behalf of the patient to meet the patient's medical and psychosocial needs.
15. Develops, revises, and implements policies and procedures for patient care, infection prevention and control, performance improvement, and patient rights.
16. Establishes performance improvement monitoring programs and standards to make sure the Agency maintains accreditation, licensing, and quality patient care.
17. Monitors and evaluates the quality and appropriateness of medical services as an integral part of the overall performance improvement program.
18. Treats patients and their families with respect and dignity.
19. Identifies and addresses psychosocial needs of patients and their families.
20. Demonstrates extensive knowledge of hospice and palliative care.
21. Demonstrates knowledge of current pain management protocols.
22. Effectively and consistently communicates administrative directives to physicians and staff and encourages interactive meetings and discussions.
23. Presents periodic reports reflecting the medical services of the Agency and such special reports as may be required by the Board.
24. Develops educational classes for healthcare professionals and the community regarding hospice and palliative care.
25. Acts as the Agency's medical representative in the community.
26. Provides direct patient medical care:
 - a. Approves Patient Admittance
 - b. Confirms Patient Diagnosis and Prognosis
 - c. Recertifies Patients for Each Benefit Period
 - d. Pain Management
 - e. Symptom Management
 - f. Palliative Care
 - g. Inpatient Rounds
 - h. Home Visits
 - i. On Call
 - j. Prescribes Medications and Other Regulated Medical Devices

PROFESSIONAL REQUIREMENTS

1. Adheres to dress code; appearance is neat and clean.
2. Reports to work on time and as scheduled.
3. Wears identification while on duty.
4. Attends annual review and departmental inservices, as appropriate.
5. Represents the organization in a positive and professional manner.
6. Completes quarterly/annual education requirements.

The above Job Description is intended to describe the general content and requirements for the performance of this particular position. It is not to be construed as an exhaustive statement of duties, responsibilities, or requirements, nor is it to be construed as a contract for employment.

7. Maintains regulatory requirements, including federal, state, local regulations, and accrediting organization standards.
8. Maintains patient confidentiality.
9. Works at maintaining a good rapport and a cooperative working relationship with physicians, departments, and staff.
10. Attends committee, QAPI, management meetings, and other required meetings as appropriate.
11. Adheres to payroll, billing, and documentation policies and procedures.
12. Guarantees compliance with policies and procedures regarding operations, fire safety, emergency management, grievance and concerns, adverse events, incident reporting and infection prevention and control.
13. Complies with organizational policies regarding ethical business practices.
14. Demonstrates effective time management and organizational skills.
15. Communicates the mission, ethics, and goals of the organization. **KNOWLEDGE, SKILLS, AND**

ABILITIES

1. Understands regulations/standards applicable to Hospice.
2. Thorough knowledge and understanding of the functions of a Hospice Agency.
3. Demonstrates knowledge of the dying patient and pain control measures.
4. Exhibits genuine interest in and compassion for patients and families dealing with end-of-life issues.
5. Understands hospice philosophy and issues of death and dying.
6. Ability to be flexible, organized, and function under stressful situations
7. Able to communicate effectively in English, both verbally and in writing.
8. Excellent interpersonal skills.
9. Excellent writing and presentation skills.
10. Knowledge of general modalities and scope of practice within the state of Agency operation.
11. Candidate should be self-directed and can work in the field with minimum supervision.
12. A valid driver's license, reliable auto, and current auto insurance.
13. Basic computer knowledge. **EDUCATION AND EXPERIENCE**

-
1. Doctorate in Medicine or Osteopathy.
 2. Currently licensed to practice medicine in the state of employment.
 3. Current Board Certification in specialty area. Board certified by the American Academy of Hospice and Palliative Medicine preferred.
 4. Drug Enforcement Administration Registration.
 5. Presentation of Certificate of Insurance.
 6. Experience in hospice and palliative care required.
 7. Administrative experience preferred. **REPORTING RELATIONSHIPS**

The above Job Description is intended to describe the general content and requirements for the performance of this particular position. It is not to be construed as an exhaustive statement of duties, responsibilities, or requirements, nor is it to be construed as a contract for employment.

1. This position reports directly to Administration and the Board of Directors.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

1. Ability to work under stress and in emergency situations.
2. Ability to work under conditions requiring sitting, standing, walking, reaching, pushing, pulling, and grasping with potential exposure to communicable diseases.

PHYSICAL DEMANDS ANALYSIS

See attached Physical Demands Analysis, if applicable.

SIGNATURES

I have read and reviewed this job description and fully understand the requirements set forth therein. I am able to perform the essential functions of this job with or without reasonable accommodation. I agree to perform the tasks outlined in this job description in a safe manner and in accordance with the company's established processes.

Employee Signature

Date

Supervisor Signature

Date

The above Job Description is intended to describe the general content and requirements for the performance of this particular position. It is not to be construed as an exhaustive statement of duties, responsibilities, or requirements, nor is it to be construed as a contract for employment.

JOB TITLE: Medical Director
REPORTS TO: Administrator, Board of Directors
SUPERVISES:

AGENCY NAME:
DISTRIBUTION CODE: N/A
FSLA STATUS:

PHYSICAL DEMANDS

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

On-the-job time is spent in the following physical activities:

Standing: Remaining on one's feet in an upright position at a workstation without moving about.

LEVEL: Matted/even surface (linoleum, carpet, mats)

TIME: 3.00 hours per day

REPETITION: Occasionally

Sitting: Remaining in the seated position.

LEVEL: Casual, flexible, discretionary position.

TIME: 2.00 hours per day

REPETITION: Occasionally

Walking: Moving about on foot.

LEVEL: Casual, discretionary movement on matted/even surface (linoleum, carpet, mats). TIME: 3.00 hours per day

REPETITION: Frequently

Lifting: Raising or lowering an object from one level to another.

LEVEL: Medium, 50lbs maximum, frequent lifting/carrying 25lbs or less.

TIME: 1.00 hours per day

REPETITION: Occasionally

Bending: Moving the body downward and forward by bending the spine at the waist. LEVEL: Moderate bend (45 degrees).

TIME: 2.00 hours per day

REPETITION: Occasionally

Reaching: Extending the hands and arms in any direction.

LEVEL: Dominant hand and arm.

LEVEL: Both hands and arms.

TIME: 4.00 hours per day

TIME: 2.00 hours per day

REPETITION: Frequently

REPETITION: Occasionally

Handling: Seizing, holding, grasping, turning, or otherwise working with the hand or hands (with or without significant weight resistance).

LEVEL: Dominant hand and arm.

LEVEL: Both hands and arms.

TIME: 4.00 hours per day TIME: 4.50 hours per day

REPETITION: Frequently

REPETITION: Frequently

Fingering: Picking and pinching or otherwise working with the fingers primarily.

LEVEL: Dominant hand. LEVEL: Both hands. TIME: 4.00 hours per day

TIME: 2.50 hours per day

REPETITION: Frequently

REPETITION: Occasionally

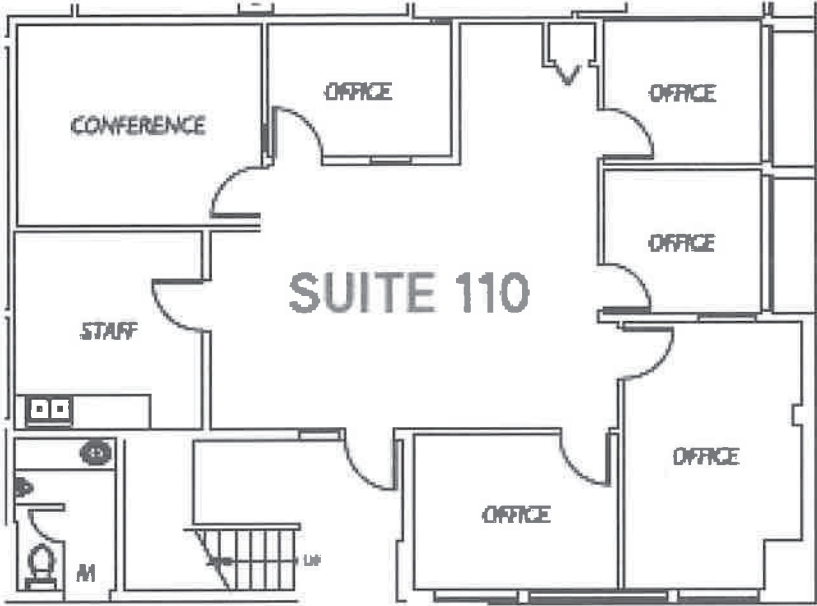
Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 11

SINGLE LINE DRAWINGS OF HOSPICE HOME HEALTH CO-LOCATION

EXHIBIT A
[Floor Plan/Outline of the Premises]



Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 12

**EDEN HOSPICE AT SNOHOMISH
PRO FORMA**

Projected Statement of Operations
Eden Hospice at Snohomish County, LLC

| CENSUS | 2022 | 2023 | 2024 |
|------------------------------------|----------------|------------------|------------------|
| Patient Days | 4,875 | 11,019 | 16,888 |
| Average Daily Census | 13.36 | 30.19 | 46.27 |
| REVENUE | | | |
| Medicare | 874,947 | 1,977,703 | 3,031,132 |
| Medicaid | 46,857 | 105,914 | 162,329 |
| Commercial/Other | 46,857 | 105,914 | 162,329 |
| TOTAL GROSS REVENUE | 968,661 | 2,189,531 | 3,355,790 |
| Deductions from Revenue | | | |
| Contractual Allowances | (17,499) | (39,554) | (60,623) |
| Bad Debt | (19,373) | (43,791) | (67,116) |
| Charity Care Adj | (14,530) | (32,843) | (50,337) |
| TOTAL NET REVENUE | 917,259 | 2,073,344 | 3,177,715 |
| DIRECT CARE EXPENSE | | | |
| Ancillary Expenses | | | |
| Pharmacy Expense | 24,374 | 55,094 | 84,440 |
| Lab Expense | 585 | 1,322 | 2,027 |
| Xray Expense | 390 | 882 | 1,351 |
| Ambulance/Transportation Expense | 1,950 | 4,408 | 6,755 |
| DME Expense | 25,593 | 57,849 | 88,662 |
| TOTAL ANCILLARY EXPENSES | 52,891 | 119,554 | 183,235 |
| Home Services Expense | | | |
| Mileage Expense | 40,558 | 91,677 | 140,508 |
| Medical Supplies | 9,750 | 22,038 | 33,776 |
| RN Expense | 138,898 | 313,961 | 481,193 |
| Hospice Aide Expense | 61,115 | 138,143 | 211,725 |
| Spiritual Counselor Expense | 58,240 | 58,240 | 101,920 |
| QA Nurse Expense | 45,000 | 45,000 | 45,000 |
| GIP Expense | 21,071 | 47,629 | 72,998 |
| Respite Expense | 9,289 | 20,997 | 32,181 |
| SNF Room & Board Expense | 6,988 | 15,795 | 24,208 |
| Social Services Expense | 35,188 | 79,537 | 121,902 |
| Payroll Taxes & Benefits | 101,532 | 190,464 | 288,522 |
| TOTAL HOME SERVICES EXPENSE | 527,629 | 1,023,479 | 1,553,934 |
| Contract Labor | | | |
| Medical Director | 34,124 | 77,132 | 118,216 |
| Physical Therapy | 244 | 551 | 844 |
| Occupational Therapy | 146 | 331 | 507 |
| Speech Therapy | 244 | 551 | 844 |
| Dietary Consulting | 439 | 992 | 1,520 |
| TOTAL CONTRACT LABOR | 35,196 | 79,556 | 121,932 |
| TOTAL DIRECT CARE EXPENSES | 615,717 | 1,222,589 | 1,859,100 |

Projected Statement of Operations
Eden Hospice at Snohomish County, LLC

| | 2022 | 2023 | 2024 |
|-------------------------------------|------------------|------------------|------------------|
| A&G EXPENSE | | | |
| Administrative Compensation | | | |
| Administrator | 75,000 | 75,000 | 75,000 |
| Director of Patient Care Services | - | - | - |
| Clinical Manager | 42,500 | 42,500 | 42,500 |
| Business Office Manager | 27,040 | 27,040 | 27,040 |
| Clinical Support Specialist | 54,080 | 54,080 | 81,120 |
| Volunteer/Bereavement Coord | - | - | 52,000 |
| Community Liaison | 40,000 | 40,000 | 80,000 |
| Payroll Taxes & Benefits | 71,586 | 71,586 | 107,298 |
| TOTAL ADMIN COMP EXPENSES | 310,206 | 310,206 | 464,958 |
| Administrative Expenses | | | |
| Contract Services | 11,052 | 11,052 | 11,052 |
| Office Supplies | 4,200 | 4,800 | 4,800 |
| Recruiting | 4,800 | 4,800 | 4,800 |
| Telephone/Internet | 8,512 | 17,728 | 26,532 |
| Licenses/Permits | 1,642 | 1,642 | 1,642 |
| Business Taxes | 17,428 | 39,394 | 60,377 |
| Bank Fees | 1,376 | 3,110 | 4,767 |
| Office Cleaning | - | - | - |
| Marketing Expense | 7,200 | 7,200 | 7,200 |
| TOTAL | 56,210 | 89,726 | 121,169 |
| TOTAL A&G EXPENSE | 366,416 | 399,932 | 586,127 |
| INSURANCE EXPENSE | 6,879 | 15,550 | 23,833 |
| TOTAL OPERATING EXPENSES | 989,012 | 1,638,071 | 2,469,060 |
| MANAGEMENT FEES | 45,863 | 103,667 | 158,886 |
| BUILDING LEASE | 26,334 | 26,400 | 26,400 |
| EBITDA | (143,950) | 305,205 | 523,369 |
| TOTAL DEPRECIATION & AMORTIZATIC | - | - | - |
| INTEREST EXPENSE | - | - | - |
| TOTAL NON OPERATING EXPENSES | 72,197 | 130,067 | 185,286 |
| TOTAL EXPENSES | 1,061,209 | 1,768,138 | 2,654,346 |
| NET INCOME (LOSS) | (143,950) | 305,205 | 523,369 |

Balance Sheet
Eden Hospice at Snohomish County, LLC

| ASSETS | 2022 | 2023 | 2024 |
|--------------------------------------|----------------|----------------|------------------|
| Current Assets | | | |
| Cash & Cash Equivalents | 76,978 | 315,466 | 783,869 |
| Accounts Receivable (net) | 76,438 | 172,779 | 264,810 |
| Prepaid Expenses | - | - | - |
| Total Current Assets | 153,416 | 488,245 | 1,048,678 |
| Property and Equipment | | | |
| Fixed Assets | - | - | - |
| Accumulated Depreciation | - | - | - |
| Total Property and Equipment | - | - | - |
| Other Assets | | | |
| Intangibles | - | - | - |
| Loan Fees | - | - | - |
| Accumulated Amortization | - | - | - |
| Total Other Assets | - | - | - |
| TOTAL ASSETS | 153,416 | 488,245 | 1,048,678 |
| LIABILITIES AND CAPITAL | | | |
| Current Liabilities | | | |
| Accounts Payable & Accrued Expenses | 11,542 | 22,978 | 33,855 |
| Accrued Payroll & Related Payables | 32,947 | 51,134 | 77,322 |
| Notes Payable | - | - | - |
| Current Portion LT Debt | - | - | - |
| Total Current Liabilities | 44,489 | 74,113 | 111,177 |
| Long-Term Liabilities | | | |
| Long-Term Note Payable | - | - | - |
| Less: Current Portion of LTD | - | - | - |
| Total Long-Term Liabilities | - | - | - |
| TOTAL LIABILITIES | 44,489 | 74,113 | 111,177 |
| Capital | 100,000 | | |
| Retained Earnings | - | | |
| Shareholder Equity | (15,409) | 414,132 | 937,501 |
| Total Capital | 84,591 | 414,132 | 937,501 |
| TOTAL LIABILITIES AND CAPITAL | 153,416 | 488,245 | 1,048,678 |

APPENDIX 12 PRO FORMA ASSUMPTIONS

The following table provides key methodology and assumptions used for calculating revenue and labor expenses. revenue, costs, and expenses for the proposed Snohomish County hospice. Assumptions underlying more detailed line items are provided as part of Appendix 12. Where items are based on costs Per Patient Day (PPD), per month, or per year, these averages from experience in Eden Health's Nevada, Idaho and Arizona Hospice operations combined with adjustments based on cost experience in Snohomish County under Eden Health's Home Health operation in Whatcom, Skagit, Snohomish, Island and King Counties

| Revenue Assumptions & Staffing Summary | | | | | |
|--|---------------|-------------|--------------|--------------|------------------------------|
| Eden Hospice at Snohomish County, LLC | | | | | |
| | | 2022 | 2023 | 2024 | |
| STAFFING SUMMARY FTE | | | | | |
| CLINICAL OPERATIONS | SALARY | | | | |
| QAPI Nurse | 90,000 | 0.50 | 0.50 | 0.50 | Split between HH and HOS |
| Registered Nurse | 104,000 | 1.34 | 3.02 | 4.63 | 1 per 10 ADC |
| Medical Social Worker | 79,040 | 0.45 | 1.01 | 1.54 | 1 per 30 ADC |
| Hospice Aide | 45,760 | 1.34 | 3.02 | 4.63 | 1 per 10 ADC |
| Spiritual Care Coord | 58,240 | 1.00 | 1.00 | 2.00 | Vol/bereavement until ADC 30 |
| TOTAL | | 4.62 | 8.54 | 13.30 | |
| ADMINISTRATIVE | | | | | |
| Administrator | 150,000 | 0.50 | 0.50 | 0.50 | Split between HH and HOS |
| Director of Patient Care | 120,000 | - | - | - | |
| Clinical Manager | 85,000 | 0.50 | 0.50 | 0.50 | Split between HH and HOS |
| Business Office Manager | 54,080 | 0.50 | 0.50 | 0.50 | Split between HH and HOS |
| Clinical Support Specialist | 54,080 | 1.00 | 1.00 | 1.50 | Split between HH and HOS |
| Volunteer/Bereavement Coord | 52,000 | - | - | 1.00 | |
| Community Liaison | 80,000 | 0.50 | 0.50 | 1.00 | Split between HH and HOS |
| TOTAL | | 3.00 | 3.00 | 5.00 | |
| TOTAL FTE'S | | 7.62 | 11.54 | 18.30 | |

Projected Statement of Operations
Eden Hospice at Snohomish County, LLC
Volume Based Assumptions

| DESCRIPTION | 2022 | 2023 | 2024 |
|--|-------------|-------------|-------------|
| Calendar Days by Month, Sum to 12 Months | | | |
| ADMISSIONS | | | |
| HOSPICE CENSUS | | | |
| Medicare | 90% | 90% | 90% |
| Insurance | 5% | 5% | 5% |
| Medicaid | 5% | 5% | 5% |
| HOSPICE TOTAL ADC | 100% | 100% | 100% |
| HOSPICE PPD | | | |
| Medicare | | | |
| Insurance | | | |
| Medicaid | | | |
| HOSPICE TOTAL PATIENT DAYS | | | |
| HOSPICE PPD BY LOC | | | |
| Routine 0-60 | 46.0% | 46.0% | 46.0% |
| Routine 61+ | 52.0% | 52.0% | 52.0% |
| Respite | 1.0% | 1.0% | 1.0% |
| GIP | 0.5% | 0.5% | 0.5% |
| Continuous | 0.5% | 0.5% | 0.5% |
| HOSPICE TOTAL PATIENT DAYS | 100% | 100% | 100% |
| REVENUE | | | |
| PATIENT CARE REVENUE | | | |
| HOSP REV-MCR Lvl 1 | 209 | 209 | 209 |
| HOSP REV-MCR Lvl 2 | 165 | 165 | 165 |
| HOSP REV-MCR Lvl 3 | 480 | 480 | 480 |
| HOSP REV-MCR Lvl 4 | 1,079 | 1,079 | 1,079 |
| HOSP REV-MCR Lvl 5 | 62 | 62 | 62 |
| HOSP REV-MCD Lvl 1 | 209 | 209 | 209 |
| HOSP REV-MCD Lvl 2 | 165 | 165 | 165 |
| HOSP REV-MCD Lvl 3 | 480 | 480 | 480 |
| HOSP REV-MCD Lvl 4 | 1,079 | 1,079 | 1,079 |
| HOSP REV-MCD Lvl 5 | 62 | 62 | 62 |
| HOSP REV-INS Lvl 1 | 209 | 209 | 209 |
| HOSP REV-INS Lvl 2 | 165 | 165 | 165 |
| HOSP REV-INS Lvl 3 | 480 | 480 | 480 |
| HOSP REV-INS Lvl 4 | 1,079 | 1,079 | 1,079 |
| HOSP REV-INS Lvl 5 | 62 | 62 | 62 |
| GROSS REVENUE | | | |
| BAD DEBT (2% OF GROSS REVENUE) | 2% | 2% | 2% |
| SEQ 2% PART-A DEDUCT (MEDICARE REV.) | 2% | 2% | 2% |
| CHARITY ADJ(1.5% OF GROSS REVENUE) | 1.5% | 1.5% | 1.5% |
| TOTAL ADJUSTMENTS | | | |
| NET REVENUE | | | |

Projected Statement of Operations
Eden Hospice at Snohomish County, LLC
Volume Based Assumptions

| DESCRIPTION | 2022 | 2023 | 2024 |
|--|--------|--------|--------|
| EXPENSES | | | |
| ANCILLARY EXPENSES PER DAYS OF CARE | | | |
| HH PHARM EXPENSE | 5.00 | 5.00 | 5.00 |
| LAB EXPENSE | 0.12 | 0.12 | 0.12 |
| XRAY EXPENSE | 0.08 | 0.08 | 0.08 |
| PATIENT TRANSPORT/AMB | 0.40 | 0.40 | 0.40 |
| HH EQUIP RENT EXPENSE | 5.25 | 5.25 | 5.25 |
| TOTAL ANCILLARY EXPENSES | | | |
| HH MILEAGE-NURSE | 3.22 | 3.22 | 3.22 |
| HH MEDICAL SUPPLIES | 2.00 | 2.00 | 2.00 |
| HOSPICE RN WAGES-Reg | | | |
| HOSP CERT AIDE WAGE-Reg | | | |
| HOSP SPIRITUAL COUNSELG-Reg | | | |
| HOSP QUALITY ASSUR-Reg | | | |
| HOSP GIP EXPENSE | 864.5 | 864.5 | 864.5 |
| HOSP RESPITE EXPENSE | 381.11 | 381.11 | 381.11 |
| HOSP SNF R&B EXPENSE | 229.35 | 229.35 | 229.35 |
| HOSP MILES-SPRTL/BEREAVMT | 4.50 | 4.50 | 4.50 |
| SOCIAL SVCS SAL/WAGE- Reg | | | |
| HH MILEAGE-SOC SVCS | 0.60 | 0.60 | 0.60 |
| TOTAL EMPLOYEE BENEFITS & TAXES- DIREI | 30% | 30% | 30% |
| TOTAL HOME SERVICES | | | |
| PHYSICAL THERAPY EXPENSE | 0.05 | 0.05 | 0.05 |
| OCCUPATIONAL THERAPY EXPENSE | 0.03 | 0.03 | 0.03 |
| SPEECH THERAPY EXPENSE | 0.05 | 0.05 | 0.05 |
| DIETARY EXPENSE | 0.09 | 0.09 | 0.09 |
| MEDICAL DIRECTOR FEES | 7.00 | 7.00 | 7.00 |
| TOTAL CONTRACT EXPENSE | | | |
| TOTAL DIRECT CARE EXPENSES | | | |
| OPERATING SUPPORT EXPENSES | | | |
| NATURAL GAS | | | |
| ELECTRICITY | | | |
| WATER/SEWER | | | |
| TOTAL UTILITIES | | | |

Projected Statement of Operations
Eden Hospice at Snohomish County, LLC
Volume Based Assumptions

| DESCRIPTION | 2022 | 2023 | 2024 |
|--|-------|-------|-------|
| TOTAL ADMIN COMPENSATION EXPENSES | | | |
| PER DAYS OF CARE | | | |
| CONTRACT SERVICES | | | |
| OFFICE SUPPLIES | | | |
| EMP.RECRUITMT-NET&SVCS | | | |
| TELEPHONE & COMMUNICATONS | 1.50 | 1.50 | 1.50 |
| TELEPHONE: INTERNET | | | |
| LICENSES/PERMITS | 1,642 | 1,642 | 1,642 |
| BUSINESS TAXES | 1.90% | 1.90% | 1.90% |
| BANK CHARGES | 0.15% | 0.15% | 0.15% |
| HSKPG/LAUNDRY PURCH'D SVCS | | | |
| MARKETING EXPENSE | | | |
| PUBLIC RELATIONS | | | |
| TOTAL ADMIN GENERAL EXPENSES | | | |
| TOTAL ADMIN & GENERAL EXPENSE | | | |
| PROP/CASUALTY INSURANCE | 0.05% | 0.05% | 0.05% |
| LIABILITY INSURANCE | 0.70% | 0.70% | 0.70% |
| TOTAL PROPERTY RELATED EXPENSES | | | |
| TOTAL OPERATING EXPENSES | | | |
| EBITDARM | | | |
| EBITDAM | | | |
| MGMNT FEES- EHC FAC | 5% | 5% | 5% |

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 13

**EDEN HOSPICE AT SNOHOMISH
PRO FORMA WITHOUT EDEN HOSPICE
AT SNOHOMISH COUNTY**

**WITH EDEN HOSPICE
AT SNOHOMISH COUNTY**

APPENDIX 13

Projected Statement of Operations

EXISTING OVERALL HOSPICE OPERATIONS 3 YEAR HISTORICAL AND CURRENT YEAR (UPDATE)

| | 2017 | 2018 | 2019 | 2020* | 2021** |
|---------------------|-------------|-------------|-------------|--------------|---------------|
| Total Gross Revenue | 3,493,043 | 4,751,449 | 6,454,531 | 8,564,368 | 11,325,400 |
| Total Net Revenue | 3,442,004 | 4,656,503 | 6,341,272 | 7,302,089 | 9,538,467 |
| Total Expenses | 3,063,631 | 4,035,188 | 5,701,665 | 5,982,176 | 7,945,353 |
| Net Income | 378,373 | 621,315 | 639,607 | 974,477 | 1,593,114 |
| % Net Income | 11% | 13% | 10% | 11% | 14% |

***2020 is Annualized using Jan - Oct data annualized by dividing Each figure by 0.8333 (2 months)**

**** 2021 Projected Year to Provide Continuous Projections**

| EDEN EXISTING-HOSPICE PRO FORMA PROJECTIONS | | | |
|--|-------------|-------------|-------------|
| Projected Summary Statement of Operations Without Snohomish Hospice at Shohomish County | | | |
| | 2022 | 2023 | 2024 |
| Total Gross Revenue | 15,879,373 | 22,548,540 | 31,318,476 |
| Total Net Revenue | 13,339,456 | 18,934,704 | 26,112,043 |
| Total Expenses | 10,844,707 | 15,160,145 | 20,578,898 |
| Net Income | 2,494,749 | 3,774,559 | 5,533,145 |

| Balance Sheet | | | |
|---|------------------|------------------|-------------------|
| Projected Eden Hospices Without Eden Hospice at Snohomish County | | | |
| ASSETS | 2022 | 2023 | 2024 |
| Current Assets | | | |
| Cash & Cash Equivalents | 2,058,073 | 5,185,419 | 9,876,626 |
| Accounts Receivable (net) | 2,223,243 | 3,155,784 | 4,352,007 |
| Prepaid Expenses | - | - | - |
| Total Current Assets | 4,281,316 | 8,341,203 | 14,228,633 |
| Property and Equipment | | | |
| Fixed Assets | 124,904 | 124,904 | 124,904 |
| Accumulated Depreciation | 93,678 | 109,291 | 124,904 |
| Total Property and Equipment | 31,226 | 15,613 | - |
| Other Assets | | | |
| Intangibles | - | - | - |
| Loan Fees | - | - | - |
| Accumulated Amortization | - | - | - |
| Total Other Assets | - | - | - |
| TOTAL ASSETS | 4,312,542 | 8,356,816 | 14,228,633 |
| LIABILITIES AND CAPITAL | | | |
| Current Liabilities | | | |
| Accounts Payable & Accrued Expenses | 451,863 | 631,673 | 857,454 |
| Accrued Payroll & Related Payables | 225,931 | 315,836 | 428,727 |
| Notes Payable | - | - | - |
| Current Portion LT Debt | - | - | - |
| Total Current Liabilities | 677,794 | 947,509 | 1,286,181 |
| Long-Term Liabilities | | | |
| Long-Term Note Payable | - | - | - |
| Less: Current Portion of LTD | - | - | - |
| Total Long-Term Liabilities | - | - | - |
| TOTAL LIABILITIES | 677,794 | 947,509 | 1,286,181 |
| Capital | | | |
| Capital | - | - | - |
| Retained Earnings | - | - | - |
| Shareholder Equity | 3,634,748 | 7,409,307 | 12,942,452 |
| Total Capital | 3,634,748 | 7,409,307 | 12,942,452 |
| TOTAL LIABILITIES AND CAPITA | 4,312,542 | 8,356,816 | 14,228,633 |
| Diff. Between Assets & Liab+Equity | - | - | - |

| EDEN HOSPICE PRO FORMA PROJECTIONS | | | | | | | | |
|---|---|------|------|------|------|------|------|------|
| Projected Summary Statement of Operations Without Eden Hospice of King County | | | | | | | | |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Revenue and Expense Assumptions | | | | | | | | |
| Total Gross Revenue | Gross Revenue grew by annual rate of 34%, a combination of volume increase and annual rate increases. CoN wants to remove annual inflation and MedPac indicates profit among all hospices is 13% and among for profits is 15% -- both increasing. Existing hospices were increased by 21% per year and the pro forma for Whatcom and King were directly input. Whatcom was increased by 21% for 2024. | | | | | | | |
| Total Net Revenue | Net Revenue grew by an annual rate of 28%, a combination of volume increase and annual rate increases. CoN wants to remove annual inflation and MedPac indicates profit among all hospices is 13% and among for profits is 15% -- both increasing. Existing hospices were increased by 18% annually per year and the pro forma for Whatcom and King were directly input. Whatcom was increased by 18% from 2023 - 2024. | | | | | | | |
| Total Expenses | Total Expense grew by an annual rate of 25%, a combination of volume increase and annual rate increases. CoN wants to remove annual inflation and MedPac indicates profit among all hospices is 13% and among for profits is 15% -- both increasing. Existing hospices were increased by 16% annually and the pro forma for Whatcom and King were directly input. Whatcom was increased by 16% from 2023 - 24. | | | | | | | |
| Net Income | Net Income grew by an annual rate of 37% from 2017 - 2020. Net Income was calculated by subtracting Total Expenses from Net Revenue. The percent profit was calculated and controlled to remain in the 12% - 18% range consistent with MedPac which is how the annual increases in revenue and expense were calculated. | | | | | | | |
| Balance Sheet Assumptions | | | | | | | | |
| Accounts Receivable | Accounts receivable at set at 80.83 days of net revenue (365 / 6) | | | | | | | |
| Annual Depreciation | Annual depreciation is set at existing annual rate of \$15,613 declining to \$0 in 2024 | | | | | | | |
| Accounts Payable | Accounts payable set at 60,83 days (365/12) Accounts payable represent 50% of expense. | | | | | | | |
| Accrued Payroll | Accrued payroll set at 15.208 days (365/24). Accrued payroll represents 50% of expense. | | | | | | | |
| Capital Contribution | Working capital for the Eden Hospice of King County and Snohomish County, LLC is set at \$100,000 each. | | | | | | | |

| Projected Statement of Operations | | | |
|--|-------------|-------------|-------------|
| EXISTING HOSPICES WITH EDEN HOSPICE OF SNOHOMISH COUNTY | | | |
| | 2022 | 2023 | 2024 |
| Total Gross Revenue | 16,848,034 | 25,910,151 | 38,741,816 |
| Total Net Revenue | 14,256,715 | 22,090,413 | 33,013,495 |
| Total Expenses | 11,905,916 | 18,159,285 | 26,712,247 |
| Net Income | 2,350,799 | 3,931,128 | 6,301,248 |

| Balance Sheet | | | |
|--|------------------|------------------|-------------------|
| Eden Hospices With Eden Hospice At Snohomish County | | | |
| | | | |
| ASSETS | 2022 | 2023 | 2024 |
| Current Assets | | | |
| Cash & Cash Equivalents | 1,927,573 | 4,806,656 | 9,311,612 |
| Accounts Receivable (net) | 2,376,119 | 3,681,736 | 5,502,249 |
| Prepaid Expenses | - | - | - |
| Total Current Assets | 4,303,692 | 8,488,392 | 14,813,861 |
| | | | |
| Property and Equipment | | | |
| Fixed Assets | 124,904 | 124,904 | 124,904 |
| Accumulated Depreciation | 93,678 | 109,291 | 124,904 |
| Total Property and Equipment | 31,226 | 15,613 | - |
| | | | |
| Other Assets | | | |
| Intangibles | - | - | - |
| Loan Fees | - | - | - |
| Accumulated Amortization | - | - | - |
| Total Other Assets | - | - | - |
| | | | |
| TOTAL ASSETS | 4,334,918 | 8,504,005 | 14,813,861 |
| | | | |
| LIABILITIES AND CAPITAL | | | |
| Current Liabilities | | | |
| Accounts Payable & Accrued Expenses | 496,080 | 756,637 | 1,113,010 |
| Accrued Payroll & Related Payables | 248,040 | 378,318 | 556,505 |
| Notes Payable | - | - | - |
| Current Portion LT Debt | - | - | - |
| Total Current Liabilities | 744,120 | 1,134,955 | 1,669,515 |
| | | | |
| Long-Term Liabilities | | | |
| Long-Term Note Payable | - | - | - |
| Less: Current Portion of LTD | - | - | - |
| Total Long-Term Liabilities | - | - | - |
| | | | |
| TOTAL LIABILITIES | 744,120 | 1,134,955 | 1,669,515 |
| | | | |
| Capital | 100,000 | | |
| Retained Earnings | - | | |
| Shareholder Equity | 3,490,798 | 7,369,049 | 13,144,346 |
| Total Capital | 3,590,798 | 7,369,049 | 13,144,346 |
| | | | |
| TOTAL LIABILITIES AND CAPITA | 4,334,918 | 8,504,005 | 14,813,861 |
| | | | |
| Diff. Between Assets & Liab+Equity | - | - | - |

| Projected Statement of Operations | | | |
|---|-------------|-------------|-------------|
| EXISTING HOSPICES WITH EDEN HOSPICE OF KING COUNTY | | | |
| | 2022 | 2023 | 2024 |
| Total Gross Revenue | 16,848,034 | 25,910,151 | 38,741,816 |
| Total Net Revenue | 14,256,715 | 22,090,413 | 33,013,495 |
| Total Expenses | 11,905,916 | 18,159,285 | 26,712,247 |
| Net Income | 2,350,799 | 3,931,128 | 6,301,248 |

| Balance Sheet | | | |
|---|------------------|------------------|-------------------|
| Eden Hospices With Eden Hospice At King County | | | |
| | | | |
| ASSETS | 2022 | 2023 | 2024 |
| Current Assets | | | |
| Cash & Cash Equivalents | 1,927,573 | 4,806,656 | 9,311,612 |
| Accounts Receivable (net) | 2,376,119 | 3,681,736 | 5,502,249 |
| Prepaid Expenses | - | - | - |
| Total Current Assets | 4,303,692 | 8,488,392 | 14,813,861 |
| | | | |
| Property and Equipment | | | |
| Fixed Assets | 124,904 | 124,904 | 124,904 |
| Accumulated Depreciation | 93,678 | 109,291 | 124,904 |
| Total Property and Equipment | 31,226 | 15,613 | - |
| | | | |
| Other Assets | | | |
| Intangibles | - | - | - |
| Loan Fees | - | - | - |
| Accumulated Amortization | - | - | - |
| Total Other Assets | - | - | - |
| | | | |
| TOTAL ASSETS | 4,334,918 | 8,504,005 | 14,813,861 |
| | | | |
| LIABILITIES AND CAPITAL | | | |
| Current Liabilities | | | |
| Accounts Payable & Accrued Expenses | 496,080 | 756,637 | 1,113,010 |
| Accrued Payroll & Related Payables | 248,040 | 378,318 | 556,505 |
| Notes Payable | - | - | - |
| Current Portion LT Debt | - | - | - |
| Total Current Liabilities | 744,120 | 1,134,955 | 1,669,515 |
| | | | |
| Long-Term Liabilities | | | |
| Long-Term Note Payable | - | - | - |
| Less: Current Portion of LTD | - | - | - |
| Total Long-Term Liabilities | - | - | - |
| | | | |
| TOTAL LIABILITIES | 744,120 | 1,134,955 | 1,669,515 |
| | | | |
| Capital | 100,000 | | |
| Retained Earnings | - | | |
| Shareholder Equity | 3,490,798 | 7,369,049 | 13,144,346 |
| Total Capital | 3,590,798 | 7,369,049 | 13,144,346 |
| | | | |
| TOTAL LIABILITIES AND CAPITA | 4,334,918 | 8,504,005 | 14,813,861 |
| | | | |
| Diff. Between Assets & Liab+Equity | - | - | - |

| Projected Statement of Operations | | | |
|---|-------------|-------------|-------------|
| EXISTING HOSPICES WITH EDEN HOSPICES AT SNOHOMISH COUNTY AND KING COUNTY | | | |
| | 2022 | 2023 | 2024 |
| Total Gross Revenue | 17,816,696 | 28,112,903 | 42,903,832 |
| Total Net Revenue | 15,173,974 | 24,136,041 | 36,920,022 |
| Total Expenses | 12,967,125 | 20,206,239 | 30,376,028 |
| Net Income | 2,206,849 | 3,929,802 | 6,543,995 |

| Balance Sheet | | | |
|--|------------------|------------------|-------------------|
| Eden Hospices With Eden Hospice of King County & Snohomish County | | | |
| | | | |
| ASSETS | 2022 | 2023 | 2024 |
| Current Assets | | | |
| Cash & Cash Equivalents | 1,797,072 | 4,701,253 | 9,765,809 |
| Accounts Receivable (net) | 2,376,119 | 3,681,736 | 5,502,249 |
| Prepaid Expenses | - | - | - |
| Total Current Assets | 4,173,191 | 8,382,989 | 15,268,058 |
| Property and Equipment | | | |
| Fixed Assets | 124,904 | 124,904 | 124,904 |
| Accumulated Depreciation | 93,678 | 109,291 | 124,904 |
| Total Property and Equipment | 31,226 | 15,613 | - |
| Other Assets | | | |
| Intangibles | - | - | - |
| Loan Fees | - | - | - |
| Accumulated Amortization | - | - | - |
| Total Other Assets | - | - | - |
| TOTAL ASSETS | 4,204,417 | 8,398,602 | 15,268,058 |
| LIABILITIES AND CAPITAL | | | |
| Current Liabilities | | | |
| Accounts Payable & Accrued Expenses | 540,297 | 841,927 | 1,265,668 |
| Accrued Payroll & Related Payables | 270,148 | 420,963 | 632,834 |
| Notes Payable | - | - | - |
| Current Portion LT Debt | - | - | - |
| Total Current Liabilities | 810,445 | 1,262,890 | 1,898,502 |
| Long-Term Liabilities | | | |
| Long-Term Note Payable | - | - | - |
| Less: Current Portion of LTD | - | - | - |
| Total Long-Term Liabilities | - | - | - |
| TOTAL LIABILITIES | 810,445 | 1,262,890 | 1,898,502 |
| Capital | 200,000 | | |
| Retained Earnings | - | | |
| Shareholder Equity | 3,193,972 | 7,135,712 | 13,369,557 |
| Total Capital | 3,393,972 | 7,135,712 | 13,369,557 |
| TOTAL LIABILITIES AND CAPITA | 4,204,417 | 8,398,602 | 15,268,058 |
| Diff. Between Assets & Liab+Equity | - | - | - |

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 14

PATIENT RIGHTS & GRIEVANCE POLICY

| | |
|----------------------|------------|
| Reference# | 19003 |
| Effective: | 04/17/2014 |
| Last Revised: | 08/14/2020 |

PATIENT CONCERNS AND GRIEVANCES POLICY

PURPOSE:

- To support and respect patients' rights to have concerns/grievances about their care, treatment, and/or services heard, reviewed, and when possible, resolved, thereby promoting positive patient outcomes.
- To promote positive patient outcomes and meet patient/family needs for quality care, treatment, and services.
- To provide an efficient and effective complaint resolution process.

POLICY:

1. Eden Health thoroughly investigates complaints made by a patient, the patient's representative (if any), and the patient's caregivers and family. Including but not limited to:
 - a. Treatment or care that is (or fails to be) furnished, is furnished inconsistently, or is furnished inappropriately.
 - b. Lack of respect for property and/or person by anyone who is furnishing services on behalf of the agency.
 - c. Mistreatment, neglect, or verbal, mental, sexual, and physical abuse, including injuries of unknown source, and/or misappropriation of patient property by anyone furnishing services on behalf of the agency.
2. Patients serviced by Eden Health and their families are informed verbally and in writing prior to the initiation of care, treatment, and/or services of their rights to voice concerns/grievances about care, treatment, and/or services.
3. Agency staff are instructed in the Agency's *Patient Concerns and Grievances Policies and Procedures* during orientation, annually and whenever changes/updates occur.

PROCEDURE:

1. The admitting clinician informs the patient/family verbally and in writing before the start of care, treatment, and/or services of:
 - a. Patients' rights to voice concerns/grievances.
 - b. The Agency's complaint resolution process and other resources for registering complaints, including, but not limited to, the State Hotline for the state in which the patient is receiving care, treatment, and/or services.
2. This information is included in the *Admission Packet* that remains in the patient's home.

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| Reference# | 19003 |
| Effective: | 04/17/2014 |
| Last Revised: | 08/14/2020 |

3. A concern/grievance received from a patient or family is forwarded in writing to the Director of Patient Care Services, Administrator, or his/her designee using the Complaint Form.
 - a. Steps are taken to prevent further potential violations, including retaliation, while the complaint is being investigated using root cause analysis.
4. Agency staff are responsible to listen to the patient and/or family complaint, apologize for the issue, and assure them that it will be given to a manager for further follow up.
5. The concern/grievance investigation commences when it is reported to staff; staff or manager will initiate the *Complaint Form*.
6. A concern/grievance received after-hours is reported to the Director of Patient Care Services/manager the following day, or sooner, if the complaint is of an urgent nature. Concerns/grievances are documented as soon as possible on the *Complaint Form*.
7. The Agency is responsible for evaluating, reviewing, and investigating patient concerns/grievances and for giving feedback to the patient and Administration.
8. A record of the concern/grievance, investigation, follow-up action, and response to the patient is documented using the *Complaint Form*.
9. The investigation is completed timely and follow up is given to the patient and or family.
10. Patient/family is informed that if he/she is not satisfied with the resolution of the concern/grievance, the decision may be appealed directly to the State Health Hotline.
11. A record of the concern/grievance, investigation, follow-up action, and response to the patient is documented using the *Complaint Form* and is retained by the Business Office. This form is initiated by the person receiving the concern/grievance.
12. The investigation is completed within 14 days unless circumstances prevent finalization within that time period.
13. Patient grievances are trended and reported through the Quality Assurance/Performance Improvement (QAPI) Committee. A summary of the concerns/grievances and the outcomes is reported quarterly to the QAPI Committee and the Governing Body.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 15

ADMISSIONS AND ADMISSIONS CRITERIA PROCESS (INTAKE & NON-DISCRIMINATION)



| | |
|----------------------|----------|
| Reference# | 1003 |
| Effective: | 12/01/14 |
| Last Revised: | 10/18/19 |

INTAKE/REFERRAL POLICY

PURPOSE:

- The Hospice intake process is an important first step in a potential hospice patient's experience, to guarantee the Agency can provide applicable care, treatment, and services to the patient.

POLICY:

1. The Agency's intake process functions 24 hours a day, seven days a week.
2. This process strives to enable same day admissions.

PROCEDURE:

1. Intake receives referrals by way of multiple referral methods including:
 - a. Telephone
 - b. Facsimile
 - c. Written Order
 - d. E-mail
 - e. Direct Contact
2. Intake referral sources:
 - a. Physicians of medicine, osteopathy, podiatry, dental surgery, psychiatrists, or dentists.
 - b. Office staff representing the physician.
 - c. Discharge planners from inpatient and/or outpatient services.
 - d. Social Service agencies.
 - e. Individual patients, their family members, or caregiver(s).
 - f. Case managers and/or insurance company representatives.
 - g. Other home health or hospice organizations.
3. Intake during scheduled working hours:
 - a. Clinical or office staff may obtain referral information, requesting patient demographics, diagnosis, services needed, the name of the physician, hospitalization, etc.
 - b. The Director of Patient Care Services, Clinical Manager, or designee decides whether the patient meets the eligibility criteria.
 - c. Patient insurance is verified and authorization is received as appropriate. Ongoing authorization is obtained as required. Payment Method: Eden Hospice accepts most private healthcare insurance (please refer to the Agency brochure for further details), Medicare, and Medicaid.
 - d. If the referral call is not from a physician, staff contacts the physician to confirm service needs, medications, and to obtain verbal orders for an evaluation and admission visit.
 - e. Referrals containing verbal orders are given to the designated professional for verification and documentation of verbal orders.



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| Reference# | 1003 |
| Effective: | 12/01/14 |
| Last Revised: | 10/18/19 |

- f. Staff may ask for verification of physician certification.
 - g. Staff contacts patient, family, or caregiver to schedule an initial meeting to assess the patient for admission into the Agency and provide information on the Agency's services and program.
4. Patients are accepted by the Hospice Medical Director for care and services based on eligibility criteria listed below:
- a. The care and services required by the patient are consistent with the Agency's mission, scope of service, and availability of services to meet patient's needs.
 - b. The patient resides within the geographical area served by the Agency.
 - c. The patient has adequate support at the place of residence.
 - d. The patient is certified as being terminally ill as required by payer source.
 - e. There is a reasonable expectation that the patient's care and service needs can be met adequately in his/her residence.
5. If it is determined that the Agency cannot reasonably accommodate the patient's needs, or if the patient does not meet the admission criteria, the patient/family/referral source is notified and provided with information about other providers and referrals are made when appropriate.
6. The hospice maintains a record of referrals.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 16

CHARITY CARE POLICY



| | |
|----------------------|----------|
| Reference# | 2023 |
| Effective: | 08/30/19 |
| Last Revised: | 01/31/20 |

CHARITY CARE POLICY

POLICY:

1. Patients may be eligible for charity care at the time of admission to Eden Home Health or during the period when they receive home health services, consistent with the Income Guidelines set out below.
2. Admitted Patients can appeal charity care determinations according to the Patient Concerns and Grievances policy.
3. Eligibility for charity care under this policy is at all times contingent upon the patient's cooperation with the application process, including the timely submission of all information that Eden Home Health deems necessary or appropriate to enable it to make a charity care determination.
4. Patients' eligibility for free or discounted care is based on household income and family size as identified in Exhibit 1, which is updated annually, and is based on eligible services.

Income Level of 200% or less — 100% discount level
 Income Level of 201% to 300% — 75% discount level
 Income Level of 301% to 400% — 50% discount level

EXHIBIT 1

National Federal Poverty Guidelines 2020

| Household Size | 100% - 199% | 200% | 300% | 400% |
|----------------|-------------|---------|---------|---------|
| 1 | \$12,760 | 25,520 | 38,280 | 51,040 |
| 2 | \$17,240 | 34,480 | 51,720 | 68,960 |
| 3 | \$21,720 | 43,440 | 65,160 | 86,880 |
| 4 | \$26,200 | 52,400 | 78,600 | 104,800 |
| 5 | \$30,680 | 61,360 | 92,040 | 122,720 |
| 6 | \$35,160 | 70,320 | 105,480 | 140,640 |
| 7 | \$39,640 | 79,280 | 118,920 | 158,560 |
| 8 | \$44,120 | 88,240 | 132,360 | 176,480 |
| 9 | \$48,600 | 97,200 | 145,800 | 194,400 |
| 10 | \$53,080 | 106,160 | 159,240 | 212,320 |

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 17

VOLUNTEER SERVICES POLICY



| | |
|---------------|----------|
| Reference# | 3021 |
| Effective: | 12/01/14 |
| Last Revised: | 04/05/18 |

VOLUNTEER SERVICES POLICY

PURPOSE:

- The Agency has qualified volunteers to help meet the patient's needs and to follow the interdisciplinary plan of care.

POLICY:

1. The Agency has volunteer services under the direction of the Agency's Volunteer Department. The Volunteer coordinator is the coordinator of volunteers providing Hospice services.
2. The Agency uses volunteers to provide assistance with ancillary and office activities, as well as indirect patient care services, and/or to help patients and families with household chores, shopping, transportation, and companionship.
3. Volunteers may work in a variety of capacities, including:
 - a. Patient care volunteers provide emotional support and practical assistance that enhance the comfort and quality of life for patients/families/caregivers. These services include being available for companionship, listening, simply "being there," and preparing meals.
 - b. Bereavement volunteers provide anticipatory counseling and bereavement support to families and caregivers.
 - c. Errands and transportation volunteers offer a type of practical support often needed by Hospice patients, families, and caregivers. These duties may include picking up needed prescriptions or supplies or grocery shopping.
 - d. Office volunteers lend their services working in Hospice's office. These activities may include assembling information packets, filing, photocopying, and assisting with mailings.
4. Volunteers who are qualified to provide professional services must meet standards associated with their specialty area. If licensure or registration is required by the state, the volunteer is licensed or registered.
5. The Agency documents and maintains a volunteer staff sufficient to provide administrative or direct patient care in an amount that, at a minimum, equals five percent (5%) of the total patient care hours of paid Agency employees and contract staff.
 - a. Expansion of care and services achieved through the use of volunteers, including the types of services and the time worked, is recorded.

PROCEDURE:

1. The Volunteer Coordinator arranges for volunteers to provide support to the patient, family, or caregiver according to the Interdisciplinary Plan of Care.
2. The Agency documents active and ongoing efforts to recruit and retain volunteers.
 - a. Documentation includes evidence such as advertisements in local newspapers, bulletins, or flyers.

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| Reference# | 3021 |
| Effective: | 12/01/14 |
| Last Revised: | 04/05/18 |

3. Volunteers work under the supervision of an Agency staff member.
4. Required volunteer training is consistent with the specific tasks performed.
5. Volunteers receive orientation before being assigned to a patient/family in the following areas:
 - a. The duties and responsibilities of the volunteer position.
 - b. To whom the volunteer reports.
 - c. The person(s) to contact if assistance is needed and instructions regarding the performance of their duties and responsibilities.
 - d. Hospice goals, services, and philosophy.
 - e. Confidentiality and protection of the patient's and family's rights.
 - f. Documentation.
 - g. Family dynamics, coping mechanisms, and psychological issues surrounding terminal illness, death, and bereavement.
 - h. Procedures followed in an emergency, or following the death of the patient.
 - i. Infection prevention and control (e.g. hand hygiene).
6. Attendance at orientation and inservices is maintained in the volunteer's Human Resources file.
7. Volunteers document their activities on the Volunteer Progress Note and submit this documentation for the patient's clinical records.
8. The Agency documents the cost savings achieved through the use of volunteers, specifically identifying the positions which are occupied by volunteers, and collect the work time spent by the volunteers occupying those positions.
 - a. The Volunteer Coordinator estimates the dollar costs which Agency would have incurred if paid Agency staff occupied the identified positions.
9. The Volunteer Coordinator develops, implements, and evaluates the volunteer services program regularly and at least annually.

VOLUNTEER HOURS:

1. Volunteers submit their documentation for services and time to the Volunteer Coordinator on a weekly basis.
2. The Volunteer Coordinator composes and analyzes the data monthly.
3. Monthly and annual statistical reports determine the percentage of services given by volunteers in relationship to the other disciplines.
4. Based on the reports, the Volunteer Coordinator determines the cost savings achieved through the use of Hospice volunteers.
5. Reports are submitted to the Executive Director as requested and at least on an annual basis.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 18

EMPLOYEE RECRUITMENT, TRAINING & DEVELOPMENT POLICY



| | |
|----------------------|----------|
| Reference# | 15025 |
| Effective: | 04/17/14 |
| Last Revised: | 04/11/18 |

RECRUITMENT POLICY

PURPOSE:

- Eden Health believes that hiring qualified individuals to fill positions at the company contributes to the overall strategic success of the organization. Each employee, while employed, is hired to make significant contributions to Eden Health.

HIRING PROCESS AND PROCEDURES:

1. Personnel requisitions must be completed to fill Eden Health positions. Requisitions must be initiated by the department supervisor/manager and forwarded to the Eden Health Recruiting Department. This is done by the completion of the *New Open Position Form*. Once completed, the form is forwarded to the recruiting department via email.
2. Personnel requisitions should indicate the following:
 - a. Date, Eden Location, and Agency number
 - b. Discipline if applicable
 - c. Position title
 - d. Position's hours/shifts
 - e. Hourly rate/Salary/Per visit
 - f. Territory Coverage (specific)
 - g. Hiring manager and names of interviewers
 - h. Any additional information about the posting/position that will assist the recruiter

JOB POSTINGS:

1. All regular exempt and nonexempt job openings are posted on the Eden Health website within 24 hours of receipt of the submitted *New Open Position form*. The job posting will also be advertised automatically on various applicable job posting websites. Jobs will remain posted until the position(s) is filled.
2. Positions are advertised externally based on need and budget requirements.
3. The Recruiting Department is responsible for placing all recruitment advertising.
4. Unless otherwise noted by the supervisor/manager who submits the *New Open Position form*, all jobs will be posted on the Eden Health website as well as various applicable job posting websites.

RECRUITMENT:

1. The Recruiting Department reviews all applicants. The applicants that best fit the open position are contacted by the recruiter and screened for a possible interview. The interview is then scheduled with the manager if the applicant passes the screening.



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| Reference# | 15025 |
| Effective: | 04/17/14 |
| Last Revised: | 04/11/18 |

2. After three (3) weeks of the initial job posting, the recruiting team re-evaluates the position if no candidates have applied and partners with the supervisor/manager for plan of action. Adjustments are made accordingly to obtain candidates for the position.

ACTIONS BY AGENCY:

1. Upon completion of the interview by the Agency, the interviewer is to make contact with the recruiter within 24 hours of the interview to give some feedback on how the interview and provide thoughts on next steps.

JOB OFFER MADE TO APPLICANT:

1. Upon receipt of written approval from the hiring manager/supervisor, the Recruiting Department will make an initial verbal offer to the applicant. The recruiter will also advise the applicant that once the background information form is completed, the recruiter will then follow up with a formal offer letter. The offer letter will be drafted to note that employment is contingent upon satisfactory completion of reference checks, motor vehicle and criminal background checks. The Recruiting Department will establish a start date in coordination with the Agency and the applicant.
2. The Recruiting Department is responsible to notify applicants who are not selected for positions at Eden Health.

INTERNAL TRANSFERS:

1. Employees who have been in their current position for at least one year may apply for internal job openings. This requirement may be waived with the consent of the employee's manager.
2. Employees must complete the Internal Job Opening Request Form. The form must be completed and submitted to the Recruiting Department within one week after the job is posted.
3. All applicants for a posted vacancy will be considered on the basis of their qualifications and ability to perform the job successfully. Internal candidates who are not selected will be notified by the Recruiting Department.

EMPLOYEE REFERRALS:

1. Employees are eligible for a referral bonus if they have referred an applicant that is hired for a full time position. The referral bonus will vary depending on the position and this will be outlined in the Referral Bonus program on the Eden Health website. The employee is to complete the Referral form provided on our website and submit the form prior to the applicant having an interview. In addition, the applicant should specify on the Eden Health application, the referring Eden employee's name. The Eden Health employee will then be eligible for the referral bonus once the applicant is hired in a full time position and has worked for a minimum of 90 days.



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| Reference# | 15025 |
| Effective: | 04/17/14 |
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REFERENCE CHECKS, CRIMINAL BACKGROUND CHECKS, AND FINAL DOCUMENTS FORWARDED TO AGENCY:

1. The Recruiting Department will submit a request for a background check and will check references for all hired candidates.

2. Once the Recruiting Department has the following documents for the candidate:
 - a. New Hire Approval
 - b. Completed Application
 - c. Completed Background Check
 - d. Completed Motor Vehicle Check
 - e. Resume
 - f. Completed Reference checks
 - g. Signed Offer Letter

3. The Recruiting Department will then scan all the documents and forward them via email to the BOM (Business Office Manager) located at the Agency.



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| Reference# | 10104 |
| Effective: | 12/01/14 |
| Last Revised: | 01/01/16 |

CONTINUING EDUCATION PROGRAMS POLICY

PURPOSE:

- To provide planned ongoing educational activities for Eden Hospice employees that:
 - Develop and enhance employees' skills.
 - Broaden and increase employee's knowledge base.
 - Maintain and improve staff competency.

POLICY:

1. This Agency provides educational programs appropriate to the staff's patient care, treatment, and services responsibilities specific to the needs of the patient population served, and as required by applicable laws, regulations, and standards.
 2. Educational programs are provided to those staff members whose responsibilities have changed.
 3. Hospice Aides receive a minimum of 12 hours of inservice training every 12 months. Inservice training may occur when an aide is furnishing care to a patient under the supervision of an RN.
 4. Staff are evaluated annually and as needed to identify educational needs.
 5. Patient care, treatment, and services staff are required to attend or produce evidence of having attended the appropriate number of continuing education programs required by law and regulation to maintain currency of licensure and/or certification.
 6. Supervisors are encouraged to attend on-going education programs to improve their supervisory skills.
 7. An annual educational program is planned and implemented based on identified staff needs and regulatory requirements including, but limited to:
 - Emergency/disaster training
 - How to handle complaints/grievances
 - Infection control training
 - Cultural diversity
 - Communication barriers
 - Ethics training
 - Workplace (OSHA), patient safety and components of HSP7-2A.01
 - Methods for coping with work related issues of grief, loss, and change
 - Patient Right and Responsibilities
 - Compliance Program
 - Pain and symptom management
- Safety training:
- Body mechanics
 - Fire
 - Evacuation

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| Reference# | 10104 |
| Effective: | 12/01/14 |
| Last Revised: | 01/01/16 |

- Security
 - Office Equipment
 - Environmental hazards
 - In-home safety
 - Personal safety techniques
8. Non-direct care personnel have a minimum of 8 hours of on-going education per year. Direct care personnel have a minimum of 12 hours of on-going education during each 12-month period.
 9. Hospice administration retains the right to designate other inservice programs as mandatory programs.

INSERVICE RESPONSIBILITIES:

1. Each department manager is responsible for providing current and factual information to his/her employees regarding performance of their job duties. New processes, procedures, or policies governing such duties are conveyed to the employees in a manner that is understandable and reasonable to those involved. Records of such programs are retained as described in this policy.
2. The administration provides up-to-date and factual information to employees regarding policies, procedures, and benefits. In most cases, policies and procedures are conveyed to department managers who convey such information to their employees.

PROCEDURE - INSERVICE ATTENDANCE:

1. Mandatory Inservice Meetings: Those meetings which have been determined necessary for employees within a particular department or group of common interest are considered to be mandatory. Mandatory attendance is at the discretion of the department manager with approval of the Executive Director/Administrator.
 - a. Mandatory meetings are generally those which provide vital and necessary information to the employees involved, and attendance is requested with prior notice to those required to attend. Employees receive their regular rate of pay for attendance at mandatory meetings, unless their attendance is not specifically requested. If attendance at a mandatory meeting involve overtime for an employee during that work week, specific approval from the department manager is required if an alternate attendance time cannot be arranged.
2. Voluntary Inservice Meetings: Those meetings for which attendance is not deemed necessary and vital to a particular department or group of common interest are considered voluntary. Attendance at voluntary meetings is at the discretion of the employee, based on his/her interest in the subject being presented.
3. Credit for Attendance at Inservice Programs:
 - a. In order to receive appropriate attendance credit, participants:
 - i. Attend the entire program.

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| Reference# | 10104 |
| Effective: | 12/01/14 |
| Last Revised: | 01/01/16 |

- ii. Sign the attendance sheet.
 - iii. Complete an evaluation form.
4. Continuing Education Credits:
- a. Programs for which continuing education credits are offered are advertised as such.
 - b. The number of credit hours is listed with the program information.
 - c. In order to receive appropriate continuing education credits and a certificate, participants:
 - i. Attend the entire program.
 - ii. Sign the attendance sheet.
 - iii. Complete an evaluation form.
5. Internal Scheduling of Inservice Programs:
- a. Equipment and Supplies: Audiovisual and other inservice equipment is maintained by the Education Department. Those who desire use of this equipment submit a written request as early in advance as possible.
 - i. Supplies necessary for inservice programs are the responsibility of the individual conducting the program. Prior administrative approval is required for expenditures made for inservice program supplies.
 - b. Meeting Room Availability: Meeting rooms are reserved in advance as early as possible through administration.
6. Record Keeping for Education Programs:
- a. Records of education programs are maintained in a central location (e.g. Education Department, Hospice Clinical Nurse Manager, or administration). Proper record keeping contains the following information:
 - i. Names and signatures of employees who attended the program.
 - ii. Title of the program, name of the individual conducting the program, dates, and times the program was conducted, and the location of the program.
 - iii. A description of the content of the program, its relation to the department and/or employees, and voluntary/mandatory status of the program.
 - b. Results of education program evaluation are compiled and summarized by the Education Department.
 - c. Summary reports are evaluated monthly to determine the quality and appropriateness of the education provided and to develop and/or modify future educational programs.
 - d. Summary reports of educational activities and the results of program evaluations are submitted to the Performance Improvement Committee quarterly.
 - e. Education records for individual employees are considered valid on either a card made for that employee showing dates and subjects of programs attended, or on a written form or other sheet of paper containing such information placed in the employee's personnel file.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 19

QUALITY ASSESSMENT & IMPROVEMENT PROGRAM

| | |
|---------------|----------|
| Reference# | 16001 |
| Effective: | 12/01/14 |
| Last Revised: | 12/27/17 |

QUALITY ASSURANCE PERFORMANCE IMPROVEMENT (QAPI) POLICY

PURPOSE:

1. The Agency's Quality Assurance Performance Improvement (QAPI) plan is designed to:
 - a. Delineate expectations and plan and manage processes to measure, assess, and improve Eden Hospice's Agency's governance, management, clinical, and support activities.
 - b. Promote positive patient outcomes through the application of optimal patient care, treatment, and services based on clinically sound principles and current knowledge.
 - c. Identify, on an ongoing basis and in a coordinated and collaborative manner, areas for improvement in the quality of care, treatment, and services.
 - d. Evaluate, monitor, improve, and resolve areas of concern.
2. The Quality Assurance Performance Improvement (QAPI) plan, established by the senior management of the organization in collaboration with staff members and the Performance Improvement Committee, with the support and approval of the Governing Body, is comprehensive in scope and provides a vehicle to monitor patient care, treatment, and services with the goal of identifying and resolving processes, functions, and services that may adversely impact patient care, treatment, and services, while striving to continuously facilitate positive patient outcomes.

POLICY:

1. The Hospice Agency develops implements and maintains an ongoing, effective, data driven Quality Assurance Performance Improvement (QAPI) program.
2. The Governing Body guarantees the following;
 - a. The program reflects the complexity of its organization and services.
 - b. Involves all Hospice agency services (including those under contract or arrangement).
 - c. Focuses on indicators related to improved outcomes including;
 - i. Use of emergency care services,
 - ii. Hospital admissions and readmissions,
 - iii. Takes actions that address the performance across the spectrum of care,
 - iv. Prevention and re-education of medical errors.
3. Eden Hospice's Quality Assurance Performance Improvement (QAPI) plan is evaluated at least annually and revised as necessary.
4. The Quality Assurance Performance Improvement (QAPI) activities are planned in a collaborative, interdisciplinary manner throughout the organization.

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| Reference# | 16001 |
| Effective: | 12/01/14 |
| Last Revised: | 12/27/17 |

5. In keeping with the organization’s mission of providing quality, cost-effective patient care, treatment, and services, the Quality Assurance Performance Improvement (QAPI) plan allows for a systematic, coordinated, and continuous approach to improving performance, focusing upon the process and functions that address these principles.

GOALS:

1. The primary goals of the organizational Quality Assurance Performance Improvement (QAPI) Plan are to continually and systematically plan, design, measure, assess, and improve performance of organization-wide key functions and processes relative to patient care, treatment, and services.
2. To achieve this goal, the plan strives to:
 - a. Incorporate quality planning throughout the organization.
 - b. Collect data to monitor performance.
 - c. Provide a systematic mechanism for the organization’s appropriate individuals, departments, and professions to function collaboratively in their Quality Assurance Performance Improvement (QAPI) efforts providing feedback and learning throughout the Agency.
 - d. Provide for an organization-wide program that assures the Agency designs processes (with special emphasis on design of new or revisions in established services) well and systematically measures, assesses, and improves its performance to achieve optimal patient health outcomes in a collaborative, cross-departmental, interdisciplinary approach. These processes include mechanisms to assess the needs and expectations of patients and their families, staff, and others. Process design contains the following focus elements:
 - i. Consistency with the organization’s mission, vision, values, goals, and objectives and plans.
 - ii. Meets the needs of individuals served, staff, and others.
 - iii. Fosters the safety of patients and the quality of care, treatment, and services.
 - iv. Supports a culture of safety and quality.
 - v. Use of clinically sound and current data sources (e.g. use of practice/clinical guidelines, information from relevant literature and clinical standards).
 - vi. Is based upon best practices as evidenced by accrediting bodies.
 - vii. Incorporates available information from internal sources and other organizations about the occurrence of medical errors and sentinel events to reduce the risk of similar events in this organization.
 - viii. Utilizes reports generated from OASIS data, including the following OASIS reports:
 - Outcome-Based Quality Monitoring (OBQM) Potentially Avoidable Events Report and Patient Listing.
 - Outcome-Based Quality Improvement (OBQI) Outcome Report.
 - Error Summary Report.

| | |
|---------------|----------|
| Reference# | 16001 |
| Effective: | 12/01/14 |
| Last Revised: | 12/27/17 |

- ix. Utilizes the results of Quality Assurance Performance Improvement (QAPI), patient safety and risk reduction activities.
 - x. Management of change and Quality Assurance Performance Improvement (QAPI) supports both safety and quality through the Agency.
 - e. The organization incorporates information related to these elements, when available and relevant, in the design or redesign of processes, functions, or services.
 - f. Assure that the improvement process is organization-wide, monitoring, assessing, and evaluating the quality and appropriateness of patient care, treatment, and services, patient safety practices, and clinical performance to resolve identified problems and improve performance.
 - g. Appropriate reporting of information to the Governing Body to provide the leaders with the information they need in fulfilling their responsibility for the quality of patient care, treatment, and services, and safety is a required mandate of this plan.
3. Necessary information is communicated among departments/services when opportunities to improve patient care, treatment, and/or services and patient/staff safety practices impact more than one department/service.
 4. The status of identified problems is monitored to assure improvement or resolution.
 5. Information from departments/services and the findings of discrete Quality Assurance Performance Improvement (QAPI) activities are analyzed to detect trends, patterns of performance, or potential problems that may impact more than one department/service.
 6. The objectives, scope, organization, and mechanisms for overseeing the effectiveness of monitoring, assessing, evaluation, and problem-solving activities in the Quality Assurance Performance Improvement (QAPI) program are evaluated at least annually and revised as necessary.
 7. Important key aspects of care to the health and safety of patients are identified. Included are those that occur frequently or affect large numbers of patients; place patients at risk of serious consequences of deprivation of substantial benefit if care is not provided correctly or not provided when indicated; or care provided is not indicated, or those tending to produce problems for patients, their families, or staff.
 8. Internal structures can adapt to changes in the environment.

SCOPE OF ACTIVITIES:

1. Eden Hospice measures, analyzes, and tracks quality indicators to enable the agency to assess processes of care, services, and operations.
2. The scope of the organizational Quality Assurance Performance Improvement (QAPI) program includes an overall assessment of the efficacy of Quality Assurance Performance Improvement (QAPI) activities with a focus on continually improving care, treatment, and services, and patient and staff safety practices.

| | |
|---------------|----------|
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3. The Hospice agency's performance improvement activities must;
 - a. Focus on high risk, high volume, or problem-prone areas;
 - b. Consider incidence, prevalence, and severity of problems in those areas;
 - c. Lead to an immediate correction of any identified problem that directly or potentially threaten the health and safety of patients.
4. Performance activities must track adverse patient events, analyze their causes, and implement preventative actions.
5. Assessment of the performance of the following patient care and organizational functions may include but not limited to:
 - a. Environment of Care.
 - b. Emergency Management, including:
 - c. Review of the annual emergency management planning reviews.
 - d. Review of emergency response exercises.
 - e. Review of response to actual emergencies.
 - f. Human Resources.
 - g. Infection Prevention and Control.
 - h. Information Management.
 - i. Leadership.
 - j. Medication Management.
 - k. Provision of Care, Treatment, and Services.
 - l. Performance Improvement.
 - m. Record of Care, Treatment, and Services.
 - n. Rights and Responsibilities of the Individual.
 - o. Waived Testing.

PERFORMANCE IMPROVEMENT PROJECTS:

1. Hospice Agencies must conduct performance improvement projects.
2. The number and scope of distinct improvement projects conducted annually must reflect the scope, complexity, and past performance of the Hospice Agencies services and operations.
3. The Hospice Agency must document the quality improvement projects undertaken, the reasons for conducting these projects, and the measureable progress achieved on these projects.

ORGANIZATION:

1. To achieve fulfillment of the objectives, goals, and scope of the organizational Quality Assurance Performance Improvement (QAPI) plan, the organizational structure of the program is designed to facilitate an effective system of monitoring, assessment, and evaluation of the care, treatment, and services provided within the Agency.
 - a. The Governing Body is ultimately responsible for the quality of patient care, treatment, and services provided.
 - i. The Governing Body requires staff, through the Performance Improvement Committee and Administration, to implement and report

| | |
|----------------------|----------|
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| Last Revised: | 12/27/17 |

on the activities and the mechanisms for monitoring, assessing, and evaluating patient safety practices and the quality of patient care, treatment, and services, for identifying and resolving problems and for identifying opportunities to improve patient care, treatment, and services or performance throughout the organization. This process addresses those departments/disciplines that have a direct or indirect effect on patient care, treatment, and services, including management and administrative functions.

- ii. The Governing Body, through the VP of Hospice and Hospice, Director of Clinical Service, and the Agency Administrator/Executive Director, provide for resources and support systems for the Quality Assurance Performance Improvement (QAPI) functions and risk management functions related to patient care, treatment, and services and safety.
- b. The governing body is responsible for guaranteeing;
 - i. The ongoing program for quality improvement and patient safety is defined, implemented, and maintained.
 - ii. The Hospice Agency wide quality assessment and performance improvement efforts address priorities for improved quality of care and patient safety, and that all improved actions are evaluated for effectiveness.
 - iii. That clear expectations for patient safety are established, implemented, and maintained.
 - iv. That any findings of fraud or waste are appropriately addressed

ANNUAL EVALUATION AND APPROVAL:

1. The organizational Quality Assurance Performance Improvement (QAPI) program is evaluated for effectiveness at least annually and revised as necessary to assure appropriateness of the approach to planning processes of improvement: setting priorities for improvement; assessing performance systematically; using statistically valid methods; implementing improvement activities on the basis of assessment; and sustaining achieved improvements.

CONFIDENTIALITY:

1. Information related to Quality Assurance Performance Improvement (QAPI) activities in accordance with this plan is confidential.
 - a. Confidential information may include, but is not limited to, staff committee meetings, Quality Assurance Performance Improvement (QAPI) Executive Report, electronic data gathering and reporting, medical record reviews, and untoward incident reporting.
 - b. Some information may be disseminated on a "need to know basis" as required by agencies such as federal review agencies, regulatory bodies, or another organization with a proven "need to know basis" as approved by the Agency's Administration and/or the Governing Body.

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 20

**DOH 2019-2020 HOSPICE NUMERIC
NEED METHODOLOGY**

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WAC246-310-290(8)(a) Step 1:

Calculate the following two statewide predicted hospice use rates using department of health survey and vital statistics data:

WAC 246-310-290(8)(a)(i) The percentage of patients age sixty-five and over who will use hospice services. This percentage is calculated by dividing the average number of unduplicated admissions over the last three years for patients sixty five and over by the average number of past three years statewide total deaths age sixty-five and over.

WAC246-310-290(8)(a)(ii) The percentage of patients under sixty-five who will use hospice services. This percentage is calculated by dividing the average number of unduplicated admissions over the last three years for patients under sixty-five by the average number of past three years statewide total of deaths under sixty-five.

| Hospice admissions ages 0-64 | |
|------------------------------|------------|
| Year | Admissions |
| 2017 | 3,757 |
| 2018 | 4,114 |
| 2019 | 3,699 |
| average: 3,857 | |

| Deaths ages 0-64 | |
|------------------------|--------|
| Year | Deaths |
| 2017 | 14,113 |
| 2018 | 14,055 |
| 2019 | 14,047 |
| average: 14,072 | |

| Use Rates | |
|-----------|--------|
| 0-64 | 27.41% |
| 65+ | 60.52% |

| Hospice admissions ages 65+ | |
|-----------------------------|------------|
| Year | Admissions |
| 2017 | 26,365 |
| 2018 | 26,207 |
| 2019 | 26,017 |
| average: 26,196 | |

| Deaths ages 65+ | |
|------------------------|--------|
| Year | Deaths |
| 2017 | 42,918 |
| 2018 | 42,773 |
| 2019 | 44,159 |
| average: 43,283 | |

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WAC246-310-290(8)(b) Step 2:

Calculate the average number of total resident deaths over the last three years for each planning area by age cohort.

| 0-64 | | | | |
|--------------|-------|-------|-------|--------------------------|
| County | 2017 | 2018 | 2019 | 2017-2019 Average Deaths |
| Adams | 38 | 28 | 35 | 34 |
| Asotin | 49 | 52 | 54 | 52 |
| Benton | 385 | 331 | 346 | 354 |
| Chelan | 124 | 130 | 137 | 130 |
| Clallam | 180 | 191 | 186 | 186 |
| Clark | 883 | 874 | 887 | 881 |
| Columbia | 19 | 6 | 7 | 11 |
| Cowlitz | 351 | 300 | 294 | 315 |
| Douglas | 71 | 51 | 63 | 62 |
| Ferry | 30 | 28 | 20 | 26 |
| Franklin | 133 | 145 | 123 | 134 |
| Garfield | 6 | 5 | 5 | 5 |
| Grant | 203 | 195 | 197 | 198 |
| Grays Harbor | 238 | 227 | 251 | 239 |
| Island | 166 | 135 | 167 | 156 |
| Jefferson | 69 | 64 | 72 | 68 |
| King | 3,256 | 3,264 | 3,275 | 3,265 |
| Kitsap | 485 | 515 | 557 | 519 |
| Kittitas | 91 | 68 | 90 | 83 |
| Klickitat | 63 | 58 | 46 | 56 |
| Lewis | 210 | 227 | 210 | 216 |
| Lincoln | 20 | 25 | 25 | 23 |
| Mason | 169 | 158 | 167 | 165 |
| Okanogan | 119 | 103 | 119 | 114 |
| Pacific | 88 | 64 | 66 | 73 |
| Pend Oreille | 34 | 43 | 31 | 36 |
| Pierce | 1,936 | 1,964 | 1,911 | 1,937 |
| San Juan | 18 | 19 | 20 | 19 |
| Skagit | 271 | 231 | 229 | 244 |
| Skamania | 16 | 27 | 19 | 21 |
| Snohomish | 1,483 | 1,533 | 1,533 | 1,516 |
| Spokane | 1,147 | 1,177 | 1,143 | 1,156 |
| Stevens | 96 | 113 | 112 | 107 |
| Thurston | 530 | 554 | 525 | 536 |
| Wahkiakum | 3 | 13 | 11 | 9 |
| Walla Walla | 123 | 110 | 118 | 117 |
| Whatcom | 367 | 360 | 394 | 374 |
| Whitman | 57 | 66 | 47 | 57 |
| Yakima | 586 | 601 | 555 | 581 |

| 65+ | | | | |
|--------------|--------|-------|--------|--------------------------|
| County | 2017 | 2018 | 2019 | 2017-2019 Average Deaths |
| Adams | 78 | 72 | 93 | 81 |
| Asotin | 190 | 214 | 222 | 209 |
| Benton | 1,081 | 1,125 | 1,154 | 1,120 |
| Chelan | 556 | 573 | 626 | 585 |
| Clallam | 842 | 871 | 955 | 889 |
| Clark | 2,579 | 2,767 | 2,987 | 2,778 |
| Columbia | 116 | 43 | 52 | 70 |
| Cowlitz | 917 | 840 | 951 | 903 |
| Douglas | 232 | 255 | 270 | 252 |
| Ferry | 60 | 55 | 64 | 60 |
| Franklin | 284 | 278 | 313 | 292 |
| Garfield | 17 | 30 | 21 | 23 |
| Grant | 509 | 524 | 508 | 514 |
| Grays Harbor | 622 | 647 | 659 | 643 |
| Island | 630 | 675 | 642 | 649 |
| Jefferson | 308 | 336 | 338 | 327 |
| King | 10,039 | 9,917 | 10,213 | 10,056 |
| Kitsap | 1,780 | 1,713 | 1,811 | 1,768 |
| Kittitas | 237 | 239 | 266 | 247 |
| Klickitat | 151 | 158 | 160 | 156 |
| Lewis | 721 | 730 | 722 | 724 |
| Lincoln | 105 | 94 | 89 | 96 |
| Mason | 550 | 526 | 548 | 541 |
| Okanogan | 350 | 332 | 358 | 347 |
| Pacific | 262 | 279 | 265 | 269 |
| Pend Oreille | 133 | 130 | 125 | 129 |
| Pierce | 5,019 | 4,926 | 5,002 | 4,982 |
| San Juan | 115 | 114 | 127 | 119 |
| Skagit | 1,007 | 1,001 | 1,018 | 1,009 |
| Skamania | 65 | 56 | 87 | 69 |
| Snohomish | 4,118 | 4,055 | 4,081 | 4,085 |
| Spokane | 3,527 | 3,556 | 3,545 | 3,543 |
| Stevens | 376 | 373 | 345 | 365 |
| Thurston | 1,768 | 1,823 | 1,908 | 1,833 |
| Wahkiakum | 37 | 33 | 53 | 41 |
| Walla Walla | 501 | 445 | 450 | 465 |
| Whatcom | 1,329 | 1,252 | 1,461 | 1,347 |
| Whitman | 236 | 199 | 219 | 218 |
| Yakima | 1,471 | 1,517 | 1,451 | 1,480 |

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WAC246-310-290(8)(c) Step 3.

Multiply each hospice use rate determined in Step 1 by the planning areas' average total resident deaths determined in Step 2, separated by age cohort.

| 0-64 | | |
|--------------|--------------------------|--------------------------------------|
| County | 2017-2019 Average Deaths | Projected Patients: 27.38% of Deaths |
| Adams | 34 | 9 |
| Asotin | 52 | 14 |
| Benton | 354 | 97 |
| Chelan | 130 | 36 |
| Clallam | 186 | 51 |
| Clark | 881 | 242 |
| Columbia | 11 | 3 |
| Cowlitz | 315 | 86 |
| Douglas | 62 | 17 |
| Ferry | 26 | 7 |
| Franklin | 134 | 37 |
| Garfield | 5 | 1 |
| Grant | 198 | 54 |
| Grays Harbor | 239 | 65 |
| Island | 156 | 43 |
| Jefferson | 68 | 19 |
| King | 3,265 | 895 |
| Kitsap | 519 | 142 |
| Kittitas | 83 | 23 |
| Klickitat | 56 | 15 |
| Lewis | 216 | 59 |
| Lincoln | 23 | 6 |
| Mason | 165 | 45 |
| Okanogan | 114 | 31 |
| Pacific | 73 | 20 |
| Pend Oreille | 36 | 10 |
| Pierce | 1,937 | 531 |
| San Juan | 19 | 5 |
| Skagit | 244 | 67 |
| Skamania | 21 | 6 |
| Snohomish | 1,516 | 416 |
| Spokane | 1,156 | 317 |
| Stevens | 107 | 29 |
| Thurston | 536 | 147 |
| Wahkiakum | 9 | 2 |
| Walla Walla | 117 | 32 |
| Whatcom | 374 | 102 |
| Whitman | 57 | 16 |
| Yakima | 581 | 159 |

| 65+ | | |
|--------------|--------------------------|--------------------------------------|
| County | 2017-2019 Average Deaths | Projected Patients: 61.04% of Deaths |
| Adams | 81 | 49 |
| Asotin | 209 | 126 |
| Benton | 1,120 | 678 |
| Chelan | 585 | 354 |
| Clallam | 889 | 538 |
| Clark | 2,778 | 1,681 |
| Columbia | 70 | 43 |
| Cowlitz | 903 | 546 |
| Douglas | 252 | 153 |
| Ferry | 60 | 36 |
| Franklin | 292 | 177 |
| Garfield | 23 | 14 |
| Grant | 514 | 311 |
| Grays Harbor | 643 | 389 |
| Island | 649 | 393 |
| Jefferson | 327 | 198 |
| King | 10,056 | 6,086 |
| Kitsap | 1,768 | 1,070 |
| Kittitas | 247 | 150 |
| Klickitat | 156 | 95 |
| Lewis | 724 | 438 |
| Lincoln | 96 | 58 |
| Mason | 541 | 328 |
| Okanogan | 347 | 210 |
| Pacific | 269 | 163 |
| Pend Oreille | 129 | 78 |
| Pierce | 4,982 | 3,015 |
| San Juan | 119 | 72 |
| Skagit | 1,009 | 610 |
| Skamania | 69 | 42 |
| Snohomish | 4,085 | 2,472 |
| Spokane | 3,543 | 2,144 |
| Stevens | 365 | 221 |
| Thurston | 1,833 | 1,109 |
| Wahkiakum | 41 | 25 |
| Walla Walla | 465 | 282 |
| Whatcom | 1,347 | 815 |
| Whitman | 218 | 132 |
| Yakima | 1,480 | 896 |

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WAC246-310-290(8)(d) Step 4:

Using the projected patients calculated in Step 3, calculate a use rate by dividing projected patients by the three-year historical average population by county. Use this rate to determine the potential volume of hospice use by the projected population by age cohort using Office of Financial Management (OFM) data.

| 0-64 | | | | | | | | |
|--------------|--------------------|------------------------------|---------------------------|---------------------------|---------------------------|-----------------------|-----------------------|-----------------------|
| County | Projected Patients | 2017-2019 Average Population | 2020 projected population | 2021 projected population | 2022 projected population | 2020 potential volume | 2021 potential volume | 2022 potential volume |
| Adams | 9 | 18,029 | 18,291 | 18,456 | 18,622 | 9 | 9 | 10 |
| Asotin | 14 | 16,779 | 16,652 | 16,596 | 16,540 | 14 | 14 | 14 |
| Benton | 97 | 166,554 | 169,415 | 171,026 | 172,638 | 99 | 100 | 101 |
| Chelan | 36 | 61,991 | 62,463 | 62,512 | 62,562 | 36 | 36 | 36 |
| Clallam | 51 | 52,550 | 52,439 | 52,233 | 52,027 | 51 | 51 | 50 |
| Clark | 242 | 405,282 | 417,273 | 421,901 | 426,529 | 249 | 251 | 254 |
| Columbia | 3 | 2,863 | 2,780 | 2,745 | 2,710 | 3 | 3 | 3 |
| Cowlitz | 86 | 85,717 | 85,917 | 85,843 | 85,769 | 87 | 86 | 86 |
| Douglas | 17 | 34,732 | 35,527 | 35,803 | 36,080 | 17 | 17 | 18 |
| Ferry | 7 | 5,680 | 5,577 | 5,541 | 5,506 | 7 | 7 | 7 |
| Franklin | 37 | 85,922 | 90,102 | 92,443 | 94,784 | 38 | 39 | 40 |
| Garfield | 1 | 1,602 | 1,560 | 1,541 | 1,522 | 1 | 1 | 1 |
| Grant | 54 | 84,909 | 87,158 | 88,240 | 89,322 | 56 | 56 | 57 |
| Grays Harbor | 65 | 57,817 | 56,958 | 56,679 | 56,401 | 64 | 64 | 64 |
| Island | 43 | 62,964 | 63,264 | 63,280 | 63,296 | 43 | 43 | 43 |
| Jefferson | 19 | 20,688 | 20,722 | 20,636 | 20,550 | 19 | 19 | 19 |
| King | 895 | 1,863,482 | 1,906,749 | 1,918,470 | 1,930,192 | 916 | 921 | 927 |
| Kitsap | 142 | 217,040 | 220,035 | 220,614 | 221,192 | 144 | 145 | 145 |
| Kittitas | 23 | 37,892 | 39,015 | 39,286 | 39,556 | 23 | 24 | 24 |
| Klickitat | 15 | 15,828 | 15,575 | 15,439 | 15,304 | 15 | 15 | 15 |
| Lewis | 59 | 62,398 | 63,001 | 63,164 | 63,327 | 60 | 60 | 60 |
| Lincoln | 6 | 7,923 | 7,805 | 7,751 | 7,698 | 6 | 6 | 6 |
| Mason | 45 | 50,142 | 51,122 | 51,397 | 51,672 | 46 | 46 | 47 |
| Okanogan | 31 | 32,545 | 32,183 | 32,087 | 31,991 | 31 | 31 | 31 |
| Pacific | 20 | 14,688 | 14,403 | 14,322 | 14,242 | 20 | 19 | 19 |
| Pend Oreille | 10 | 9,905 | 9,812 | 9,769 | 9,727 | 10 | 10 | 10 |
| Pierce | 531 | 747,538 | 765,139 | 769,918 | 774,696 | 543 | 547 | 550 |
| San Juan | 5 | 10,974 | 10,753 | 10,730 | 10,707 | 5 | 5 | 5 |
| Skagit | 67 | 100,076 | 101,537 | 101,887 | 102,236 | 68 | 68 | 68 |
| Skamania | 6 | 9,254 | 9,242 | 9,223 | 9,205 | 6 | 6 | 6 |
| Snohomish | 416 | 694,793 | 716,781 | 721,527 | 726,273 | 429 | 432 | 434 |
| Spokane | 317 | 421,066 | 425,447 | 426,740 | 428,033 | 320 | 321 | 322 |
| Stevens | 29 | 34,226 | 33,992 | 33,917 | 33,841 | 29 | 29 | 29 |
| Thurston | 147 | 234,880 | 241,500 | 243,867 | 246,235 | 151 | 153 | 154 |
| Wahkiakum | 2 | 2,555 | 2,441 | 2,405 | 2,368 | 2 | 2 | 2 |
| Walla Walla | 32 | 50,546 | 50,981 | 51,028 | 51,075 | 32 | 32 | 32 |
| Whatcom | 102 | 183,023 | 187,812 | 189,267 | 190,722 | 105 | 106 | 107 |
| Whitman | 16 | 43,137 | 43,308 | 43,315 | 43,322 | 16 | 16 | 16 |
| Yakima | 159 | 221,051 | 224,497 | 225,822 | 227,147 | 162 | 163 | 164 |

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WAC246-310-290(8)(d) Step 4:

Using the projected patients calculated in Step 3, calculate a use rate by dividing projected patients by the three-year historical average population by county. Use this rate to determine the potential volume of hospice use by the projected population by age cohort using Office of Financial Management (OFM) data.

| 65+ | | | | | | | | |
|---------------|---------------------------|-------------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------|------------------------------|------------------------------|
| County | Projected Patients | 2017-2019 Average Population | 2020 projected population | 2021 projected population | 2022 projected population | 2020 potential volume | 2021 potential volume | 2022 potential volume |
| Adams | 49 | 2,114 | 2,341 | 2,383 | 2,424 | 54 | 55 | 56 |
| Asotin | 126 | 5,619 | 6,005 | 6,175 | 6,344 | 135 | 139 | 143 |
| Benton | 678 | 29,821 | 32,150 | 33,373 | 34,597 | 731 | 759 | 786 |
| Chelan | 354 | 15,343 | 16,408 | 17,052 | 17,695 | 379 | 393 | 408 |
| Clallam | 538 | 21,334 | 22,267 | 22,901 | 23,535 | 562 | 578 | 594 |
| Clark | 1681 | 75,085 | 82,125 | 85,686 | 89,247 | 1,839 | 1,918 | 1,998 |
| Columbia | 43 | 1,202 | 1,269 | 1,287 | 1,304 | 45 | 46 | 46 |
| Cowlitz | 546 | 21,326 | 22,969 | 23,719 | 24,470 | 588 | 608 | 627 |
| Douglas | 153 | 7,595 | 8,358 | 8,666 | 8,974 | 168 | 174 | 180 |
| Ferry | 36 | 2,095 | 2,241 | 2,289 | 2,337 | 39 | 39 | 40 |
| Franklin | 177 | 8,765 | 9,610 | 10,083 | 10,557 | 194 | 203 | 213 |
| Garfield | 14 | 633 | 658 | 669 | 680 | 14 | 15 | 15 |
| Grant | 311 | 14,244 | 15,477 | 16,071 | 16,665 | 338 | 351 | 364 |
| Grays Harbor | 389 | 15,594 | 16,653 | 17,133 | 17,612 | 415 | 427 | 439 |
| Island | 393 | 19,701 | 20,777 | 21,412 | 22,047 | 414 | 427 | 440 |
| Jefferson | 198 | 11,252 | 11,924 | 12,323 | 12,722 | 210 | 217 | 224 |
| King | 6086 | 296,484 | 324,660 | 337,771 | 350,881 | 6,665 | 6,934 | 7,203 |
| Kitsap | 1070 | 51,788 | 55,878 | 58,185 | 60,492 | 1,155 | 1,202 | 1,250 |
| Kittitas | 150 | 7,351 | 7,943 | 8,266 | 8,589 | 162 | 168 | 175 |
| Klickitat | 95 | 5,570 | 6,088 | 6,268 | 6,448 | 103 | 106 | 110 |
| Lewis | 438 | 16,398 | 17,219 | 17,697 | 18,175 | 460 | 473 | 486 |
| Lincoln | 58 | 2,823 | 2,959 | 3,039 | 3,119 | 61 | 63 | 64 |
| Mason | 328 | 15,311 | 16,499 | 17,167 | 17,836 | 353 | 367 | 382 |
| Okanogan | 210 | 10,050 | 10,901 | 11,210 | 11,519 | 228 | 234 | 240 |
| Pacific | 163 | 6,584 | 6,910 | 7,035 | 7,159 | 171 | 174 | 177 |
| Pend Oreille | 78 | 3,742 | 4,107 | 4,239 | 4,371 | 86 | 89 | 91 |
| Pierce | 3015 | 125,262 | 136,114 | 142,422 | 148,729 | 3,277 | 3,429 | 3,580 |
| San Juan | 72 | 5,545 | 5,991 | 6,174 | 6,357 | 78 | 80 | 82 |
| Skagit | 610 | 26,595 | 29,168 | 30,314 | 31,460 | 670 | 696 | 722 |
| Skamania | 42 | 2,542 | 2,798 | 2,923 | 3,048 | 46 | 48 | 50 |
| Snohomish | 2472 | 113,447 | 125,219 | 131,978 | 138,737 | 2,729 | 2,876 | 3,023 |
| Spokane | 2144 | 84,343 | 91,361 | 94,670 | 97,979 | 2,323 | 2,407 | 2,491 |
| Stevens | 221 | 10,884 | 11,837 | 12,214 | 12,591 | 240 | 248 | 255 |
| Thurston | 1109 | 48,683 | 52,832 | 54,900 | 56,967 | 1,204 | 1,251 | 1,298 |
| Wahkiakum | 25 | 1,441 | 1,565 | 1,580 | 1,595 | 27 | 27 | 27 |
| Walla Walla | 282 | 10,944 | 11,068 | 11,350 | 11,632 | 285 | 292 | 299 |
| Whatcom | 815 | 39,164 | 42,640 | 44,217 | 45,794 | 888 | 921 | 953 |
| Whitman | 132 | 5,237 | 5,815 | 6,008 | 6,201 | 146 | 151 | 156 |
| Yakima | 896 | 36,670 | 38,391 | 39,475 | 40,559 | 938 | 964 | 991 |

Source:
 Self-Report Provider Utilization Surveys for Years 2017-2019
 Vital Statistics Death Data for Years 2017-2019
 Prepared by DOH Program Staff

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WAC246-310-290(8)(e) Step 5:

Combine the two age cohorts. Subtract the average of the most recent three years hospice capacity in each planning area from the projected volumes calculated in Step 4 to determine the number of projected admissions beyond the planning area capacity.

| County | 2020 potential volume | 2021 potential volume | 2022 potential volume | Current Supply of Hospice Providers | 2020 Unmet Need Admissions* | 2021 Unmet Need Admissions* | 2022 Unmet Need Admissions* |
|--------------|-----------------------|-----------------------|-----------------------|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Adams | 64 | 65 | 66 | 45.33 | 18 | 19 | 20 |
| Asotin | 149 | 153 | 157 | 99.67 | 49 | 53 | 57 |
| Benton | 829 | 858 | 887 | 976.67 | (147) | (118) | (90) |
| Chelan | 415 | 430 | 444 | 398.67 | 16 | 31 | 46 |
| Clallam | 613 | 628 | 644 | 273.63 | 339 | 355 | 371 |
| Clark | 2,087 | 2,170 | 2,252 | 2,396.97 | (310) | (227) | (145) |
| Columbia | 48 | 48 | 49 | 23.33 | 24 | 25 | 26 |
| Cowlitz | 675 | 694 | 713 | 794.00 | (119) | (100) | (81) |
| Douglas | 185 | 192 | 198 | 147.67 | 38 | 44 | 50 |
| Ferry | 46 | 46 | 47 | 36.33 | 9 | 10 | 11 |
| Franklin | 232 | 242 | 253 | 171.33 | 61 | 71 | 82 |
| Garfield | 16 | 16 | 16 | 3.33 | 12 | 13 | 13 |
| Grant | 394 | 407 | 421 | 281.00 | 113 | 126 | 140 |
| Grays Harbor | 480 | 491 | 503 | 277.33 | 202 | 214 | 226 |
| Island | 457 | 470 | 483 | 389.67 | 68 | 80 | 93 |
| Jefferson | 229 | 236 | 243 | 188.00 | 41 | 48 | 55 |
| King | 7,580 | 7,855 | 8,130 | 7,517.23 | 63 | 338 | 613 |
| Kitsap | 1,299 | 1,347 | 1,395 | 1,303.97 | (5) | 43 | 91 |
| Kittitas | 185 | 192 | 199 | 171.67 | 13 | 20 | 27 |
| Klickitat | 118 | 121 | 124 | 277.57 | (159) | (156) | (153) |
| Lewis | 520 | 533 | 546 | 451.00 | 69 | 82 | 95 |
| Lincoln | 67 | 69 | 70 | 28.67 | 39 | 40 | 42 |
| Mason | 399 | 414 | 428 | 222.67 | 176 | 191 | 206 |
| Okanogan | 258 | 265 | 271 | 177.67 | 81 | 87 | 93 |
| Pacific | 190 | 193 | 196 | 107.00 | 83 | 86 | 89 |
| Pend Oreille | 96 | 98 | 101 | 64.33 | 31 | 34 | 37 |
| Pierce | 3,820 | 3,975 | 4,131 | 3,739.67 | 80 | 236 | 391 |
| San Juan | 83 | 85 | 87 | 79.00 | 4 | 6 | 8 |
| Skagit | 737 | 764 | 790 | 729.00 | 8 | 35 | 61 |
| Skamania | 52 | 54 | 56 | 27.00 | 25 | 27 | 29 |
| Snohomish | 3,157 | 3,308 | 3,458 | 2,950.87 | 207 | 357 | 507 |
| Spokane | 2,643 | 2,728 | 2,813 | 2,671.83 | (29) | 56 | 141 |
| Stevens | 269 | 277 | 284 | 150.00 | 119 | 127 | 134 |
| Thurston | 1,355 | 1,404 | 1,452 | 1,247.57 | 108 | 156 | 205 |
| Wahkiakum | 29 | 30 | 30 | 6.33 | 23 | 23 | 23 |
| Walla Walla | 317 | 324 | 332 | 285.00 | 32 | 39 | 47 |
| Whatcom | 993 | 1,027 | 1,060 | 1,042.97 | (50) | (16) | 17 |
| Whitman | 162 | 167 | 172 | 203.83 | (42) | (37) | (32) |
| Yakima | 1,099 | 1,127 | 1,154 | 1,182.67 | (83) | (56) | (29) |

*a negative number indicates existing hospice service capacity exceeds the projected utilization based on the statewide use rate.

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WAC246-310-290(8)(f) Step 6:

Multiply the unmet need from Step 5 by the statewide average length of stay as determined by CMS to determine unmet need patient days in the projection years.

| County | 2020 Unmet Need Admissions* | 2021 Unmet Need Admissions* | 2022 Unmet Need Admissions* | Step 6 (Admits * ALOS) = Unmet Patient Days | | | |
|--------------|-----------------------------|-----------------------------|-----------------------------|---|-------------------------------|-------------------------------|-------------------------------|
| | | | | Statewide ALOS | 2020 Unmet Need Patient Days* | 2021 Unmet Need Patient Days* | 2022 Unmet Need Patient Days* |
| Adams | 18 | 19 | 20 | 62.66 | 1,148 | 1,214 | 1,280 |
| Asotin | 49 | 53 | 57 | 62.66 | 3,092 | 3,328 | 3,564 |
| Benton | (147) | (118) | (90) | 62.66 | (9,222) | (7,421) | (5,620) |
| Chelan | 16 | 31 | 46 | 62.66 | 1,000 | 1,932 | 2,864 |
| Clallam | 339 | 355 | 371 | 62.66 | 21,238 | 22,228 | 23,217 |
| Clark | (310) | (227) | (145) | 62.66 | (19,394) | (14,226) | (9,057) |
| Columbia | 24 | 25 | 26 | 62.66 | 1,532 | 1,568 | 1,605 |
| Cowlitz | (119) | (100) | (81) | 62.66 | (7,461) | (6,261) | (5,061) |
| Douglas | 38 | 44 | 50 | 62.66 | 2,362 | 2,758 | 3,155 |
| Ferry | 9 | 10 | 11 | 62.66 | 582 | 631 | 681 |
| Franklin | 61 | 71 | 82 | 62.66 | 3,798 | 4,458 | 5,118 |
| Garfield | 12 | 13 | 13 | 62.66 | 774 | 788 | 802 |
| Grant | 113 | 126 | 140 | 62.66 | 7,055 | 7,911 | 8,766 |
| Grays Harbor | 202 | 214 | 226 | 62.66 | 12,688 | 13,418 | 14,147 |
| Island | 68 | 80 | 93 | 62.66 | 4,232 | 5,026 | 5,820 |
| Jefferson | 41 | 48 | 55 | 62.66 | 2,550 | 2,986 | 3,421 |
| King | 63 | 338 | 613 | 62.66 | 3,960 | 21,177 | 38,394 |
| Kitsap | (5) | 43 | 91 | 62.66 | (326) | 2,685 | 5,696 |
| Kittitas | 13 | 20 | 27 | 62.66 | 846 | 1,268 | 1,690 |
| Klickitat | (159) | (156) | (153) | 62.66 | (9,971) | (9,788) | (9,605) |
| Lewis | 69 | 82 | 95 | 62.66 | 4,325 | 5,135 | 5,945 |
| Lincoln | 39 | 40 | 42 | 62.66 | 2,414 | 2,515 | 2,616 |
| Mason | 176 | 191 | 206 | 62.66 | 11,053 | 11,965 | 12,877 |
| Okanogan | 81 | 87 | 93 | 62.66 | 5,058 | 5,456 | 5,855 |
| Pacific | 83 | 86 | 89 | 62.66 | 5,212 | 5,398 | 5,584 |
| Pend Oreille | 31 | 34 | 37 | 62.66 | 1,964 | 2,135 | 2,305 |
| Pierce | 80 | 236 | 391 | 62.66 | 5,039 | 14,766 | 24,493 |
| San Juan | 4 | 6 | 8 | 62.66 | 232 | 380 | 528 |
| Skagit | 8 | 35 | 61 | 62.66 | 520 | 2,183 | 3,847 |
| Skamania | 25 | 27 | 29 | 62.66 | 1,557 | 1,685 | 1,813 |
| Snohomish | 207 | 357 | 507 | 62.66 | 12,944 | 22,350 | 31,757 |
| Spokane | (29) | 56 | 141 | 62.66 | (1,834) | 3,498 | 8,830 |
| Stevens | 119 | 127 | 134 | 62.66 | 7,467 | 7,942 | 8,417 |
| Thurston | 108 | 156 | 205 | 62.66 | 6,736 | 9,782 | 12,827 |
| Wahkiakum | 23 | 23 | 23 | 62.66 | 1,440 | 1,454 | 1,468 |
| Walla Walla | 32 | 39 | 47 | 62.66 | 2,016 | 2,473 | 2,930 |
| Whatcom | (50) | (16) | 17 | 62.66 | (3,137) | (1,028) | 1,081 |
| Whitman | (42) | (37) | (32) | 62.66 | (2,616) | (2,310) | (2,005) |
| Yakima | (83) | (56) | (29) | 62.66 | (5,230) | (3,511) | (1,793) |

*a negative number indicates existing hospice service capacity exceeds the projected utilization based on the statewide use rate.

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WAC246-310-290(8)(g) Step 7:

Divide the unmet patient days from Step 6 by 365 to determine the unmet need ADC.

| County | | | | Step 7 (Patient Days / 365) = Unmet ADC | | |
|--------------|-------------------------------|-------------------------------|-------------------------------|---|----------------------|----------------------|
| | 2020 Unmet Need Patient Days* | 2021 Unmet Need Patient Days* | 2022 Unmet Need Patient Days* | 2020 Unmet Need ADC* | 2021 Unmet Need ADC* | 2022 Unmet Need ADC* |
| Adams | 1,148 | 1,214 | 1,280 | 3 | 3 | 4 |
| Asotin | 3,092 | 3,328 | 3,564 | 8 | 9 | 10 |
| Benton | (9,222) | (7,421) | (5,620) | (25) | (20) | (15) |
| Chelan | 1,000 | 1,932 | 2,864 | 3 | 5 | 8 |
| Clallam | 21,238 | 22,228 | 23,217 | 58 | 61 | 64 |
| Clark | (19,394) | (14,226) | (9,057) | (53) | (39) | (25) |
| Columbia | 1,532 | 1,568 | 1,605 | 4 | 4 | 4 |
| Cowlitz | (7,461) | (6,261) | (5,061) | (20) | (17) | (14) |
| Douglas | 2,362 | 2,758 | 3,155 | 6 | 8 | 9 |
| Ferry | 582 | 631 | 681 | 2 | 2 | 2 |
| Franklin | 3,798 | 4,458 | 5,118 | 10 | 12 | 14 |
| Garfield | 774 | 788 | 802 | 2 | 2 | 2 |
| Grant | 7,055 | 7,911 | 8,766 | 19 | 22 | 24 |
| Grays Harbor | 12,688 | 13,418 | 14,147 | 35 | 37 | 39 |
| Island | 4,232 | 5,026 | 5,820 | 12 | 14 | 16 |
| Jefferson | 2,550 | 2,986 | 3,421 | 7 | 8 | 9 |
| King | 3,960 | 21,177 | 38,394 | 11 | 58 | 105 |
| Kitsap | (326) | 2,685 | 5,696 | (1) | 7 | 16 |
| Kittitas | 846 | 1,268 | 1,690 | 2 | 3 | 5 |
| Klickitat | (9,971) | (9,788) | (9,605) | (27) | (27) | (26) |
| Lewis | 4,325 | 5,135 | 5,945 | 12 | 14 | 16 |
| Lincoln | 2,414 | 2,515 | 2,616 | 7 | 7 | 7 |
| Mason | 11,053 | 11,965 | 12,877 | 30 | 33 | 35 |
| Okanogan | 5,058 | 5,456 | 5,855 | 14 | 15 | 16 |
| Pacific | 5,212 | 5,398 | 5,584 | 14 | 15 | 15 |
| Pend Oreille | 1,964 | 2,135 | 2,305 | 5 | 6 | 6 |
| Pierce | 5,039 | 14,766 | 24,493 | 14 | 40 | 67 |
| San Juan | 232 | 380 | 528 | 1 | 1 | 1 |
| Skagit | 520 | 2,183 | 3,847 | 1 | 6 | 11 |
| Skamania | 1,557 | 1,685 | 1,813 | 4 | 5 | 5 |
| Snohomish | 12,944 | 22,350 | 31,757 | 35 | 61 | 87 |
| Spokane | (1,834) | 3,498 | 8,830 | (5) | 10 | 24 |
| Stevens | 7,467 | 7,942 | 8,417 | 20 | 22 | 23 |
| Thurston | 6,736 | 9,782 | 12,827 | 18 | 27 | 35 |
| Wahkiakum | 1,440 | 1,454 | 1,468 | 4 | 4 | 4 |
| Walla Walla | 2,016 | 2,473 | 2,930 | 6 | 7 | 8 |
| Whatcom | (3,137) | (1,028) | 1,081 | (9) | (3) | 3 |
| Whitman | (2,616) | (2,310) | (2,005) | (7) | (6) | (5) |
| Yakima | (5,230) | (3,511) | (1,793) | (14) | (10) | (5) |

*a negative number indicates existing hospice service capacity exceeds the projected utilization based on the statewide use rate.

Source:
 Self-Report Provider Utilization Surveys for Years 2017-2019
 Vital Statistics Death Data for Years 2017-2019
 Prepared by DOH Program Staff

Department of Health
2020-2021 Hospice Numeric Need Methodology
 Posted October 30, 2020



WAC246-310-290(8)(h) Step 8:
 Determine the number of hospice agencies in the planning area that could support the unmet need with an ADC of thirty-five.

| Application Year | | | Step 8 - Numeric Need | | |
|---|----------------------|----------------------|-----------------------|---------------|-----------------------------------|
| Step 7 (Patient Days / 365) = Unmet ADC | | | | | |
| County | 2020 Unmet Need ADC* | 2021 Unmet Need ADC* | 2022 Unmet Need ADC* | Numeric Need? | Number of New Agencies Needed?*** |
| Adams | 3 | 3 | 4 | FALSE | FALSE |
| Asotin | 8 | 9 | 10 | FALSE | FALSE |
| Benton | (25) | (20) | (15) | FALSE | FALSE |
| Chelan | 3 | 5 | 8 | FALSE | FALSE |
| Clallam | 58 | 61 | 64 | TRUE | 1 |
| Clark | (53) | (39) | (25) | FALSE | FALSE |
| Columbia | 4 | 4 | 4 | FALSE | FALSE |
| Cowlitz | (20) | (17) | (14) | FALSE | FALSE |
| Douglas | 6 | 8 | 9 | FALSE | FALSE |
| Ferry | 2 | 2 | 2 | FALSE | FALSE |
| Franklin | 10 | 12 | 14 | FALSE | FALSE |
| Garfield | 2 | 2 | 2 | FALSE | FALSE |
| Grant | 19 | 22 | 24 | FALSE | FALSE |
| Grays Harbor | 35 | 37 | 39 | TRUE | 1 |
| Island | 12 | 14 | 16 | FALSE | FALSE |
| Jefferson | 7 | 8 | 9 | FALSE | FALSE |
| King | 11 | 58 | 105 | TRUE | 3 |
| Kitsap | (1) | 7 | 16 | FALSE | FALSE |
| Kittitas | 2 | 3 | 5 | FALSE | FALSE |
| Klickitat | (27) | (27) | (26) | FALSE | FALSE |
| Lewis | 12 | 14 | 16 | FALSE | FALSE |
| Lincoln | 7 | 7 | 7 | FALSE | FALSE |
| Mason | 30 | 33 | 35 | TRUE | 1 |
| Okanogan | 14 | 15 | 16 | FALSE | FALSE |
| Pacific | 14 | 15 | 15 | FALSE | FALSE |
| Pend Oreille | 5 | 6 | 6 | FALSE | FALSE |
| Pierce | 14 | 40 | 67 | TRUE | 1 |
| San Juan | 1 | 1 | 1 | FALSE | FALSE |
| Skagit | 1 | 6 | 11 | FALSE | FALSE |
| Skamania | 4 | 5 | 5 | FALSE | FALSE |
| Snohomish | 35 | 61 | 87 | TRUE | 2 |
| Spokane | (5) | 10 | 24 | FALSE | FALSE |
| Stevens | 20 | 22 | 23 | FALSE | FALSE |
| Thurston | 18 | 27 | 35 | TRUE | 1 |
| Wahkiakum | 4 | 4 | 4 | FALSE | FALSE |
| Walla Walla | 6 | 7 | 8 | FALSE | FALSE |
| Whatcom | (9) | (3) | 3 | FALSE | FALSE |
| Whitman | (7) | (6) | (5) | FALSE | FALSE |
| Yakima | (14) | (10) | (5) | FALSE | FALSE |

*a negative number indicates existing hospice service capacity exceeds the projected utilization based on the statewide use rate.

**The numeric need methodology projects need for whole hospice agencies only - not partial hospice agencies. Therefore, the results are rounded down to the nearest whole number.

Department of Health
2020-2021 Hospice Numeric Need Methodology
0-64 Population Projection

| County | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Adams | 17,637 | 17,768 | 17,899 | 18,029 | 18,160 | 18,291 | 18,456 | 18,622 | 18,787 | 18,953 | 19,118 |
| Asotin | 16,969 | 16,906 | 16,842 | 16,779 | 16,715 | 16,652 | 16,596 | 16,540 | 16,485 | 16,429 | 16,373 |
| Benton | 162,262 | 163,693 | 165,123 | 166,554 | 167,984 | 169,415 | 171,026 | 172,638 | 174,249 | 175,861 | 177,472 |
| Chelan | 61,284 | 61,520 | 61,755 | 61,991 | 62,227 | 62,463 | 62,512 | 62,562 | 62,611 | 62,661 | 62,710 |
| Clallam | 52,716 | 52,661 | 52,605 | 52,550 | 52,494 | 52,439 | 52,233 | 52,027 | 51,821 | 51,615 | 51,409 |
| Clark | 387,296 | 393,291 | 399,287 | 405,282 | 411,278 | 417,273 | 421,901 | 426,529 | 431,158 | 435,786 | 440,414 |
| Columbia | 2,988 | 2,947 | 2,905 | 2,863 | 2,822 | 2,780 | 2,745 | 2,710 | 2,675 | 2,640 | 2,605 |
| Cowlitz | 85,417 | 85,517 | 85,617 | 85,717 | 85,817 | 85,917 | 85,843 | 85,769 | 85,695 | 85,621 | 85,547 |
| Douglas | 33,540 | 33,938 | 34,335 | 34,732 | 35,130 | 35,527 | 35,803 | 36,080 | 36,356 | 36,633 | 36,909 |
| Ferry | 5,834 | 5,782 | 5,731 | 5,680 | 5,628 | 5,577 | 5,541 | 5,506 | 5,470 | 5,435 | 5,399 |
| Franklin | 79,651 | 81,742 | 83,832 | 85,922 | 88,012 | 90,102 | 92,443 | 94,784 | 97,124 | 99,465 | 101,806 |
| Garfield | 1,665 | 1,644 | 1,623 | 1,602 | 1,581 | 1,560 | 1,541 | 1,522 | 1,502 | 1,483 | 1,464 |
| Grant | 81,535 | 82,660 | 83,784 | 84,909 | 86,033 | 87,158 | 88,240 | 89,322 | 90,403 | 91,485 | 92,567 |
| Grays Harbor | 59,105 | 58,675 | 58,246 | 57,817 | 57,387 | 56,958 | 56,679 | 56,401 | 56,122 | 55,844 | 55,565 |
| Island | 62,514 | 62,664 | 62,814 | 62,964 | 63,114 | 63,264 | 63,280 | 63,296 | 63,312 | 63,328 | 63,344 |
| Jefferson | 20,636 | 20,653 | 20,670 | 20,688 | 20,705 | 20,722 | 20,636 | 20,550 | 20,463 | 20,377 | 20,291 |
| King | 1,798,581 | 1,820,215 | 1,841,848 | 1,863,482 | 1,885,115 | 1,906,749 | 1,918,470 | 1,930,192 | 1,941,913 | 1,953,635 | 1,965,356 |
| Kitsap | 212,548 | 214,045 | 215,543 | 217,040 | 218,538 | 220,035 | 220,614 | 221,192 | 221,771 | 222,349 | 222,928 |
| Kittitas | 36,206 | 36,768 | 37,330 | 37,892 | 38,453 | 39,015 | 39,286 | 39,556 | 39,827 | 40,097 | 40,368 |
| Klickitat | 16,208 | 16,082 | 15,955 | 15,828 | 15,702 | 15,575 | 15,439 | 15,304 | 15,168 | 15,033 | 14,897 |
| Lewis | 61,494 | 61,796 | 62,097 | 62,398 | 62,700 | 63,001 | 63,164 | 63,327 | 63,491 | 63,654 | 63,817 |
| Lincoln | 8,101 | 8,042 | 7,982 | 7,923 | 7,864 | 7,805 | 7,751 | 7,698 | 7,644 | 7,591 | 7,537 |
| Mason | 48,672 | 49,162 | 49,652 | 50,142 | 50,632 | 51,122 | 51,397 | 51,672 | 51,946 | 52,221 | 52,496 |
| Okanogan | 33,087 | 32,906 | 32,726 | 32,545 | 32,364 | 32,183 | 32,087 | 31,991 | 31,896 | 31,800 | 31,704 |
| Pacific | 15,115 | 14,972 | 14,830 | 14,688 | 14,545 | 14,403 | 14,322 | 14,242 | 14,161 | 14,081 | 14,000 |
| Pend Oreille | 10,045 | 9,998 | 9,952 | 9,905 | 9,859 | 9,812 | 9,769 | 9,727 | 9,684 | 9,642 | 9,599 |
| Pierce | 721,137 | 729,937 | 738,738 | 747,538 | 756,339 | 765,139 | 769,918 | 774,696 | 779,475 | 784,253 | 789,032 |
| San Juan | 11,305 | 11,194 | 11,084 | 10,974 | 10,863 | 10,753 | 10,730 | 10,707 | 10,684 | 10,661 | 10,638 |
| Skagit | 97,885 | 98,616 | 99,346 | 100,076 | 100,807 | 101,537 | 101,887 | 102,236 | 102,586 | 102,935 | 103,285 |
| Skamania | 9,272 | 9,266 | 9,260 | 9,254 | 9,248 | 9,242 | 9,223 | 9,205 | 9,186 | 9,168 | 9,149 |
| Snohomish | 661,812 | 672,806 | 683,800 | 694,793 | 705,787 | 716,781 | 721,527 | 726,273 | 731,019 | 735,765 | 740,511 |
| Spokane | 414,493 | 416,684 | 418,875 | 421,066 | 423,256 | 425,447 | 426,740 | 428,033 | 429,326 | 430,619 | 431,912 |
| Stevens | 34,576 | 34,459 | 34,343 | 34,226 | 34,109 | 33,992 | 33,917 | 33,841 | 33,766 | 33,690 | 33,615 |
| Thurston | 224,951 | 228,261 | 231,571 | 234,880 | 238,190 | 241,500 | 243,867 | 246,235 | 248,602 | 250,970 | 253,337 |
| Wahkiakum | 2,726 | 2,669 | 2,612 | 2,555 | 2,498 | 2,441 | 2,405 | 2,368 | 2,332 | 2,295 | 2,259 |
| Walla Walla | 49,893 | 50,111 | 50,328 | 50,546 | 50,763 | 50,981 | 51,028 | 51,075 | 51,121 | 51,168 | 51,215 |
| Whatcom | 175,840 | 178,234 | 180,629 | 183,023 | 185,418 | 187,812 | 189,267 | 190,722 | 192,178 | 193,633 | 195,088 |
| Whitman | 42,880 | 42,965 | 43,051 | 43,137 | 43,222 | 43,308 | 43,315 | 43,322 | 43,330 | 43,337 | 43,344 |
| Yakima | 215,882 | 217,605 | 219,328 | 221,051 | 222,774 | 224,497 | 225,822 | 227,147 | 228,473 | 229,798 | 231,123 |

**2017-2019
Average
Population**

18,029
16,779
166,554
61,991
52,550
405,282
2,863
85,717
34,732
5,680
85,922
1,602
84,909
57,817
62,964
20,688
1,863,482
217,040
37,892
15,828
62,398
7,923
50,142
32,545
14,688
9,905
747,538
10,974
100,076
9,254
694,793
421,066
34,226
234,880
2,555
50,546
183,023
43,137
221,051

Department of Health
2020-2021 Hospice Numeric Need Methodology
65+ Population Projection

| County | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2017-2019 Average Population |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------------------------|
| Adams | 1,773 | 1,887 | 2,000 | 2,114 | 2,227 | 2,341 | 2,383 | 2,424 | 2,466 | 2,507 | 2,549 | 2,114 |
| Asotin | 5,041 | 5,233 | 5,426 | 5,619 | 5,812 | 6,005 | 6,175 | 6,344 | 6,514 | 6,683 | 6,853 | 5,619 |
| Benton | 26,328 | 27,492 | 28,657 | 29,821 | 30,986 | 32,150 | 33,373 | 34,597 | 35,820 | 37,044 | 38,267 | 29,821 |
| Chelan | 13,746 | 14,279 | 14,811 | 15,343 | 15,876 | 16,408 | 17,052 | 17,695 | 18,339 | 18,982 | 19,626 | 15,343 |
| Clallam | 19,934 | 20,401 | 20,867 | 21,334 | 21,800 | 22,267 | 22,901 | 23,535 | 24,168 | 24,802 | 25,436 | 21,334 |
| Clark | 64,524 | 68,044 | 71,564 | 75,085 | 78,605 | 82,125 | 85,686 | 89,247 | 92,807 | 96,368 | 99,929 | 75,085 |
| Columbia | 1,102 | 1,135 | 1,169 | 1,202 | 1,236 | 1,269 | 1,287 | 1,304 | 1,322 | 1,339 | 1,357 | 1,202 |
| Cowlitz | 18,863 | 19,684 | 20,505 | 21,326 | 22,148 | 22,969 | 23,719 | 24,470 | 25,220 | 25,971 | 26,721 | 21,326 |
| Douglas | 6,450 | 6,831 | 7,213 | 7,595 | 7,976 | 8,358 | 8,666 | 8,974 | 9,283 | 9,591 | 9,899 | 7,595 |
| Ferry | 1,876 | 1,949 | 2,022 | 2,095 | 2,168 | 2,241 | 2,289 | 2,337 | 2,386 | 2,434 | 2,482 | 2,095 |
| Franklin | 7,499 | 7,921 | 8,343 | 8,765 | 9,188 | 9,610 | 10,083 | 10,557 | 11,030 | 11,504 | 11,977 | 8,765 |
| Garfield | 595 | 607 | 620 | 633 | 645 | 658 | 669 | 680 | 692 | 703 | 714 | 633 |
| Grant | 12,395 | 13,011 | 13,628 | 14,244 | 14,861 | 15,477 | 16,071 | 16,665 | 17,258 | 17,852 | 18,446 | 14,244 |
| Grays Harbor | 14,005 | 14,535 | 15,064 | 15,594 | 16,123 | 16,653 | 17,133 | 17,612 | 18,092 | 18,571 | 19,051 | 15,594 |
| Island | 18,086 | 18,625 | 19,163 | 19,701 | 20,239 | 20,777 | 21,412 | 22,047 | 22,682 | 23,317 | 23,952 | 19,701 |
| Jefferson | 10,244 | 10,580 | 10,916 | 11,252 | 11,588 | 11,924 | 12,323 | 12,722 | 13,121 | 13,520 | 13,919 | 11,252 |
| King | 254,219 | 268,307 | 282,395 | 296,484 | 310,572 | 324,660 | 337,771 | 350,881 | 363,992 | 377,102 | 390,213 | 296,484 |
| Kitsap | 45,652 | 47,697 | 49,743 | 51,788 | 53,833 | 55,878 | 58,185 | 60,492 | 62,800 | 65,107 | 67,414 | 51,788 |
| Kittitas | 6,464 | 6,760 | 7,055 | 7,351 | 7,647 | 7,943 | 8,266 | 8,589 | 8,911 | 9,234 | 9,557 | 7,351 |
| Klickitat | 4,792 | 5,051 | 5,310 | 5,570 | 5,829 | 6,088 | 6,268 | 6,448 | 6,627 | 6,807 | 6,987 | 5,570 |
| Lewis | 15,166 | 15,576 | 15,987 | 16,398 | 16,808 | 17,219 | 17,697 | 18,175 | 18,652 | 19,130 | 19,608 | 16,398 |
| Lincoln | 2,619 | 2,687 | 2,755 | 2,823 | 2,891 | 2,959 | 3,039 | 3,119 | 3,200 | 3,280 | 3,360 | 2,823 |
| Mason | 13,528 | 14,123 | 14,717 | 15,311 | 15,905 | 16,499 | 17,167 | 17,836 | 18,504 | 19,173 | 19,841 | 15,311 |
| Okanogan | 8,773 | 9,198 | 9,624 | 10,050 | 10,475 | 10,901 | 11,210 | 11,519 | 11,827 | 12,136 | 12,445 | 10,050 |
| Pacific | 6,095 | 6,258 | 6,421 | 6,584 | 6,747 | 6,910 | 7,035 | 7,159 | 7,284 | 7,408 | 7,533 | 6,584 |
| Pend Oreille | 3,195 | 3,378 | 3,560 | 3,742 | 3,925 | 4,107 | 4,239 | 4,371 | 4,504 | 4,636 | 4,768 | 3,742 |
| Pierce | 108,983 | 114,409 | 119,836 | 125,262 | 130,688 | 136,114 | 142,422 | 148,729 | 155,037 | 161,344 | 167,652 | 125,262 |
| San Juan | 4,876 | 5,099 | 5,322 | 5,545 | 5,768 | 5,991 | 6,174 | 6,357 | 6,541 | 6,724 | 6,907 | 5,545 |
| Skagit | 22,735 | 24,021 | 25,308 | 26,595 | 27,881 | 29,168 | 30,314 | 31,460 | 32,607 | 33,753 | 34,899 | 26,595 |
| Skamania | 2,158 | 2,286 | 2,414 | 2,542 | 2,670 | 2,798 | 2,923 | 3,048 | 3,172 | 3,297 | 3,422 | 2,542 |
| Snohomish | 95,788 | 101,674 | 107,560 | 113,447 | 119,333 | 125,219 | 131,978 | 138,737 | 145,495 | 152,254 | 159,013 | 113,447 |
| Spokane | 73,817 | 77,325 | 80,834 | 84,343 | 87,852 | 91,361 | 94,670 | 97,979 | 101,288 | 104,597 | 107,906 | 84,343 |
| Stevens | 9,454 | 9,930 | 10,407 | 10,884 | 11,360 | 11,837 | 12,214 | 12,591 | 12,969 | 13,346 | 13,723 | 10,884 |
| Thurston | 42,459 | 44,534 | 46,608 | 48,683 | 50,757 | 52,832 | 54,900 | 56,967 | 59,035 | 61,102 | 63,170 | 48,683 |
| Wahkiakum | 1,254 | 1,316 | 1,379 | 1,441 | 1,503 | 1,565 | 1,580 | 1,595 | 1,611 | 1,626 | 1,641 | 1,441 |
| Walla Walla | 10,757 | 10,819 | 10,881 | 10,944 | 11,006 | 11,068 | 11,350 | 11,632 | 11,915 | 12,197 | 12,479 | 10,944 |
| Whatcom | 33,950 | 35,688 | 37,426 | 39,164 | 40,902 | 42,640 | 44,217 | 45,794 | 47,372 | 48,949 | 50,526 | 39,164 |
| Whitman | 4,370 | 4,659 | 4,948 | 5,237 | 5,526 | 5,815 | 6,008 | 6,201 | 6,395 | 6,588 | 6,781 | 5,237 |
| Yakima | 34,088 | 34,949 | 35,809 | 36,670 | 37,530 | 38,391 | 39,475 | 40,559 | 41,643 | 42,727 | 43,811 | 36,670 |

Department of Health
2020-2021 Hospice Numeric Need Methodology
Preliminary Death Data Updated October 12, 2020

| County | 0-64 | | | 65+ | | |
|--------------|-------|-------|-------|--------|-------|--------|
| | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 |
| ADAMS | 38 | 28 | 35 | 78 | 72 | 93 |
| ASOTIN | 49 | 52 | 54 | 190 | 214 | 222 |
| BENTON | 385 | 331 | 346 | 1,081 | 1,125 | 1,154 |
| CHELAN | 124 | 130 | 137 | 556 | 573 | 626 |
| CLALLAM | 180 | 191 | 186 | 842 | 871 | 955 |
| CLARK | 883 | 874 | 887 | 2,579 | 2,767 | 2,987 |
| COLUMBIA | 19 | 6 | 7 | 116 | 43 | 52 |
| COWLITZ | 351 | 300 | 294 | 917 | 840 | 951 |
| DOUGLAS | 71 | 51 | 63 | 232 | 255 | 270 |
| FERRY | 30 | 28 | 20 | 60 | 55 | 64 |
| FRANKLIN | 133 | 145 | 123 | 284 | 278 | 313 |
| GARFIELD | 6 | 5 | 5 | 17 | 30 | 21 |
| GRANT | 203 | 195 | 197 | 509 | 524 | 508 |
| GRAYS HARBOR | 238 | 227 | 251 | 622 | 647 | 659 |
| ISLAND | 166 | 135 | 167 | 630 | 675 | 642 |
| JEFFERSON | 69 | 64 | 72 | 308 | 336 | 338 |
| KING | 3,256 | 3,264 | 3,275 | 10,039 | 9,917 | 10,213 |
| KITSAP | 485 | 515 | 557 | 1,780 | 1,713 | 1,811 |
| KITTITAS | 91 | 68 | 90 | 237 | 239 | 266 |
| KLICKITAT | 63 | 58 | 46 | 151 | 158 | 160 |
| LEWIS | 210 | 227 | 210 | 721 | 730 | 722 |
| LINCOLN | 20 | 25 | 25 | 105 | 94 | 89 |
| MASON | 169 | 158 | 167 | 550 | 526 | 548 |
| OKANOGAN | 119 | 103 | 119 | 350 | 332 | 358 |
| PACIFIC | 88 | 64 | 66 | 262 | 279 | 265 |
| PEND OREILLE | 34 | 43 | 31 | 133 | 130 | 125 |
| PIERCE | 1,936 | 1,964 | 1,911 | 5,019 | 4,926 | 5,002 |
| SAN JUAN | 18 | 19 | 20 | 115 | 114 | 127 |
| SKAGIT | 271 | 231 | 229 | 1,007 | 1,001 | 1,018 |
| SKAMANIA | 16 | 27 | 19 | 65 | 56 | 87 |
| SNOHOMISH | 1,483 | 1,533 | 1,533 | 4,118 | 4,055 | 4,081 |
| SPOKANE | 1,147 | 1,177 | 1,143 | 3,527 | 3,556 | 3,545 |
| STEVENS | 96 | 113 | 112 | 376 | 373 | 345 |
| THURSTON | 530 | 554 | 525 | 1,768 | 1,823 | 1,908 |
| WAHIAKUM | 3 | 13 | 11 | 37 | 33 | 53 |
| WALLA WALLA | 123 | 110 | 118 | 501 | 445 | 450 |
| WHATCOM | 367 | 360 | 394 | 1,329 | 1,252 | 1,461 |
| WHITMAN | 57 | 66 | 47 | 236 | 199 | 219 |
| YAKIMA | 586 | 601 | 555 | 1,471 | 1,517 | 1,451 |

Department of Health
2020-2021 Hospice Numeric Need Methodology
Survey Responses

Note: Kindred Hospice in Whitman and Spokane Counties did not respond to the department's survey for 2018 data. As a result, the average of 2016 and 2017 data was used as a proxy for 2018.

| Agency Name | License Number | County | Year | 0-64 | 65+ |
|--|-----------------|--------------|------|------|------|
| Assured Home Health and Hospice (Central Basin/Assured Hospice) | IHS.FS.60092413 | Adams | 2017 | 4 | 30 |
| Assured Home Health and Hospice (Central Basin/Assured Hospice) | IHS.FS.60092413 | Grant | 2017 | 44 | 209 |
| Assured Home Health and Hospice (Central Basin/Assured Hospice) | IHS.FS.60092413 | Lincoln | 2017 | 3 | 22 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Clallam | 2017 | 14 | 143 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Jefferson | 2017 | 1 | 14 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Lewis | 2017 | 17 | 257 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Mason | 2017 | 8 | 43 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Thurston | 2017 | 39 | 235 |
| Astria Home Health and Hospice (Yakima Regional Home Health and Hospice) | IHS.FS.60097245 | Yakima | 2017 | 11 | 48 |
| Central Washington Hospital Home Care Services | IHS.FS.00000250 | Chelan | 2017 | 44 | 319 |
| Central Washington Hospital Home Care Services | IHS.FS.00000250 | Douglas | 2017 | 18 | 119 |
| Community Home Health and Hospice CHHH Community Home Care Hospice | IHS.FS.00000262 | Clark | 2017 | 67 | 419 |
| Community Home Health and Hospice CHHH Community Home Care Hospice | IHS.FS.00000262 | Cowlitz | 2017 | 116 | 630 |
| Community Home Health and Hospice CHHH Community Home Care Hospice | IHS.FS.00000262 | Wahkiakum | 2017 | 1 | 4 |
| Elite Home Health and Hospice | IHS.FS.60384078 | Asotin | 2017 | 7 | 85 |
| Elite Home Health and Hospice | IHS.FS.60384078 | Garfield | 2017 | 1 | 1 |
| Evergreen Health Home Care Services | IHS.FS.00000278 | Island | 2017 | 0 | 7 |
| Evergreen Health Home Care Services | IHS.FS.00000278 | King | 2017 | 272 | 2393 |
| Evergreen Health Home Care Services | IHS.FS.00000278 | Snohomish | 2017 | 82 | 478 |
| Franciscan Hospice | IHS.FS.00000287 | King | 2017 | 90 | 1115 |
| Franciscan Hospice | IHS.FS.00000287 | Kitsap | 2017 | 64 | 796 |
| Franciscan Hospice | IHS.FS.00000287 | Pierce | 2017 | 181 | 2242 |
| Frontier Home Health and Hospice (Okanogan Regional) | IHS.FS.60379608 | Douglas | 2017 | 1 | 10 |
| Frontier Home Health and Hospice (Okanogan Regional) | IHS.FS.60379608 | Grant | 2017 | 0 | 7 |
| Frontier Home Health and Hospice (Okanogan Regional) | IHS.FS.60379608 | Okanogan | 2017 | 34 | 132 |
| Gentiva Hospice (Odyssey Hospice) | IHS.FS.60330209 | King | 2017 | 14 | 375 |
| Harbors Home Health and Hospice | IHS.FS.00000306 | Grays Harbor | 2017 | 72 | 292 |
| Harbors Home Health and Hospice | IHS.FS.00000306 | Pacific | 2017 | 17 | 106 |
| Heart of Hospice | IHS.FS.00000185 | Skamania | 2017 | 2 | 11 |
| Heart of Hospice | IHS.FS.00000185 | Klickitat | 2017 | 1 | 20 |
| Heartlinks Hospice and Palliative Care (Lower Valley Hospice) | IHS.FS.00000369 | Benton | 2017 | 12 | 130 |
| Heartlinks Hospice and Palliative Care (Lower Valley Hospice) | IHS.FS.00000369 | Yakima | 2017 | 28 | 197 |
| Home Health Care of Whidbey General Hospital (Whidbey General) | IHS.FS.00000323 | Island | 2017 | 21 | 248 |
| PeaceHealth Homecare and Hospice Southwest (Hospice SW) | IHS.FS.60331226 | Clark | 2017 | 165 | 1064 |
| PeaceHealth Homecare and Hospice Southwest (Hospice SW) | IHS.FS.60331226 | Cowlitz | 2017 | 7 | 47 |
| PeaceHealth Homecare and Hospice Southwest (Hospice SW) | IHS.FS.60331226 | Skamania | 2017 | 0 | 0 |
| Horizon Hospice | IHS.FS.00000332 | Spokane | 2017 | 35 | 420 |
| Hospice of Kitsap County | IHS.FS.00000335 | Kitsap | 2017 | 0 | 0 |
| Hospice of Spokane | IHS.FS.00000337 | Ferry | 2017 | 7 | 37 |
| Hospice of Spokane | IHS.FS.00000337 | Lincoln | 2017 | 0 | 0 |
| Hospice of Spokane | IHS.FS.00000337 | Pend Oreille | 2017 | 8 | 55 |
| Hospice of Spokane | IHS.FS.00000337 | Spokane | 2017 | 340 | 1722 |
| Hospice of Spokane | IHS.FS.00000337 | Stevens | 2017 | 25 | 128 |
| Hospice of Spokane | IHS.FS.00000337 | Whitman | 2017 | 0 | 1 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | Island | 2017 | 11 | 77 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | San Juan | 2017 | 3 | 70 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | Skagit | 2017 | 61 | 616 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | Snohomish | 2017 | 7 | 83 |
| Jefferson Healthcare Home Health and Hospice (Hospice of Jefferson County) | IHS.FS.00000349 | Jefferson | 2017 | 13 | 153 |
| Kaiser Permanente Continuing Care Services | IHS.FS.00000353 | Clark | 2017 | 50 | 415 |
| Kaiser Permanente Continuing Care Services | IHS.FS.00000353 | Cowlitz | 2017 | 1 | 18 |
| Kaiser Permanente Continuing Care Services | IHS.FS.00000353 | Skamania | 2017 | 0 | 0 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | King | 2017 | 38 | 487 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | Kitsap | 2017 | 7 | 107 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | Pierce | 2017 | 27 | 189 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | Snohomish | 2017 | 2 | 68 |
| Kindred Hospice (Gentiva Hospice) | IHS.FS.60308060 | Spokane | 2017 | 22 | 325 |
| Kindred Hospice (Gentiva Hospice) | IHS.FS.60308060 | Whitman | 2017 | 29 | 247 |
| Kittitas Valley Home Health and Hospice | IHS.FS.00000320 | Kittitas | 2017 | 46 | 134 |
| Klickitat Valley Home Health & Hospice (Klickitat Valley Health) | IHS.FS.00000361 | Klickitat | 2017 | 11 | 33 |
| Kline Galland Community Based Services | IHS.FS.60103742 | King | 2017 | 13 | 301 |
| Memorial Home Care Services | IHS.FS.00000376 | Yakima | 2017 | 149 | 717 |
| MultiCare Home Health, Hospice and Palliative Care | IHS.FS.60639376 | King | 2017 | 42 | 149 |
| MultiCare Home Health, Hospice and Palliative Care | IHS.FS.60639377 | Kitsap | 2017 | 33 | 253 |
| MultiCare Home Health, Hospice and Palliative Care | IHS.FS.60639378 | Pierce | 2017 | 211 | 925 |
| Providence Hospice (Hospice of the Gorge) | IHS.FS.60201476 | Klickitat | 2017 | 5 | 29 |
| Providence Hospice (Hospice of the Gorge) | IHS.FS.60201476 | Skamania | 2017 | 2 | 10 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | Island | 2017 | 3 | 32 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | King | 2017 | 5 | 14 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | Snohomish | 2017 | 238 | 1440 |
| Providence Hospice of Seattle | IHS.FS.00000336 | King | 2017 | 387 | 1888 |
| Providence Hospice of Seattle | IHS.FS.00000336 | Snohomish | 2017 | 10 | 15 |
| Providence SoundHomeCare and Hospice | IHS.FS.00000420 | Lewis | 2017 | 28 | 163 |
| Providence SoundHomeCare and Hospice | IHS.FS.00000420 | Mason | 2017 | 26 | 189 |
| Providence SoundHomeCare and Hospice | IHS.FS.00000420 | Thurston | 2017 | 105 | 664 |
| Tri-Cities Chaplaincy | IHS.FS.00000456 | Benton | 2017 | 98 | 745 |
| Tri-Cities Chaplaincy | IHS.FS.00000456 | Franklin | 2017 | 15 | 122 |

Department of Health
2020-2021 Hospice Numeric Need Methodology
Survey Responses

| | | | | | |
|--|-----------------|--------------|------|---------------|---------------|
| Walla Walla Community Hospice | IHS.FS.60480441 | Columbia | 2017 | 1 | 17 |
| Walla Walla Community Hospice | IHS.FS.60480441 | Walla Walla | 2017 | 45 | 276 |
| Wesley Homes | IHS.FS.60276500 | King | 2017 | 1 | 17 |
| Whatcom Hospice (Peacehealth) | IHS.FS.00000471 | Whatcom | 2017 | 139 | 766 |
| Assured Home Health and Hospice (Central Basin/Assured Hospice) | IHS.FS.60092413 | Adams | 2018 | 6 | 34 |
| Assured Home Health and Hospice (Central Basin/Assured Hospice) | IHS.FS.60092413 | Grant | 2018 | 40 | 254 |
| Assured Home Health and Hospice (Central Basin/Assured Hospice) | IHS.FS.60092413 | Lincoln | 2018 | 6 | 28 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Clallam | 2018 | 16 | 186 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Jefferson | 2018 | 1 | 11 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Lewis | 2018 | 35 | 280 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Mason | 2018 | 4 | 44 |
| Assured Home Health, Hospice & Home Care | IHS.FS.00000229 | Thurston | 2018 | 24 | 273 |
| Astria Home Health and Hospice (Yakima Regional Home Health and Hospice) | IHS.FS.60097245 | Yakima | 2018 | 41 | 8 |
| Central Washington Hospital Home Care Services | IHS.FS.00000250 | Chelan | 2018 | 34 | 386 |
| Central Washington Hospital Home Care Services | IHS.FS.00000250 | Douglas | 2018 | 10 | 133 |
| Community Home Health and Hospice CHHH Community Home Care Hospice | IHS.FS.00000262 | Clark | 2018 | 54 | 383 |
| Community Home Health and Hospice CHHH Community Home Care Hospice | IHS.FS.00000262 | Cowlitz | 2018 | 87 | 524 |
| Community Home Health and Hospice CHHH Community Home Care Hospice | IHS.FS.00000262 | Wahkiakum | 2018 | 2 | 5 |
| Elite Home Health and Hospice | IHS.FS.60384078 | Asotin | 2018 | 6 | 121 |
| Elite Home Health and Hospice | IHS.FS.60384078 | Garfield | 2018 | 1 | 2 |
| Evergreen Health Home Care Services | IHS.FS.00000278 | Island | 2018 | 1 | 9 |
| Evergreen Health Home Care Services | IHS.FS.00000278 | King | 2018 | 348 | 1989 |
| Evergreen Health Home Care Services | IHS.FS.00000278 | Snohomish | 2018 | 79 | 690 |
| Franciscan Hospice | IHS.FS.00000287 | King | 2018 | 102 | 921 |
| Franciscan Hospice | IHS.FS.00000287 | Kitsap | 2018 | 141 | 693 |
| Franciscan Hospice | IHS.FS.00000287 | Pierce | 2018 | 331 | 2110 |
| Frontier Home Health and Hospice (Okanogan Regional) | IHS.FS.60379608 | Douglas | 2018 | 0 | 3 |
| Frontier Home Health and Hospice (Okanogan Regional) | IHS.FS.60379608 | Grant | 2018 | 1 | 7 |
| Frontier Home Health and Hospice (Okanogan Regional) | IHS.FS.60379608 | Okanogan | 2018 | 21 | 148 |
| Gentiva Hospice (Odyssey Hospice) | IHS.FS.60330209 | King | 2018 | 37 | 180 |
| Harbors Home Health and Hospice | IHS.FS.00000306 | Grays Harbor | 2018 | 35 | 180 |
| Harbors Home Health and Hospice | IHS.FS.00000306 | Pacific | 2018 | 13 | 71 |
| Heart of Hospice | IHS.FS.00000185 | Skamania | 2018 | 0 | 10 |
| Heart of Hospice | IHS.FS.00000185 | Klickitat | 2018 | 1 | 23 |
| Heartlinks Hospice and Palliative Care (Lower Valley Hospice) | IHS.FS.00000369 | Benton | 2018 | 6 | 137 |
| Heartlinks Hospice and Palliative Care (Lower Valley Hospice) | IHS.FS.00000369 | Yakima | 2018 | 24 | 219 |
| Home Health Care of Whidbey General Hospital (Whidbey General) | IHS.FS.00000323 | Island | 2018 | 20 | 235 |
| Homecare and Hospice Southwest (Hospice SW) | IHS.FS.60331226 | Clark | 2018 | 243 | 1305 |
| Homecare and Hospice Southwest (Hospice SW) | IHS.FS.60331226 | Cowlitz | 2018 | 20 | 76 |
| Homecare and Hospice Southwest (Hospice SW) | IHS.FS.60331226 | Skamania | 2018 | 1 | 1 |
| Horizon Hospice | IHS.FS.00000332 | Spokane | 2018 | 31 | 389 |
| Hospice of Kitsap County | IHS.FS.00000335 | Kitsap | 2018 | 0 | 0 |
| Hospice of Spokane | IHS.FS.00000337 | Ferry | 2018 | 6 | 29 |
| Hospice of Spokane | IHS.FS.00000337 | Lincoln | 2018 | 1 | 1 |
| Hospice of Spokane | IHS.FS.00000337 | Pend Oreille | 2018 | 8 | 53 |
| Hospice of Spokane | IHS.FS.00000337 | Spokane | 2018 | 346 | 1593 |
| Hospice of Spokane | IHS.FS.00000337 | Stevens | 2018 | 30 | 121 |
| Hospice of Spokane | IHS.FS.00000337 | Whitman | 2018 | none reported | none reported |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | Island | 2018 | 6 | 60 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | San Juan | 2018 | 6 | 79 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | Skagit | 2018 | 48 | 680 |
| Hospice of the Northwest (Skagit Hospice Service) | IHS.FS.00000437 | Snohomish | 2018 | 2 | 67 |
| Jefferson Healthcare Home Health and Hospice (Hospice of Jefferson County) | IHS.FS.00000349 | Jefferson | 2018 | 20 | 144 |
| Kaiser Permanente Continuing Care Services | IHS.FS.00000353 | Clark | 2018 | 39 | 436 |
| Kaiser Permanente Continuing Care Services | IHS.FS.00000353 | Cowlitz | 2018 | none reported | none reported |
| Kaiser Permanente Continuing Care Services | IHS.FS.00000353 | Skamania | 2018 | none reported | none reported |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | King | 2018 | 25 | 416 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | Kitsap | 2018 | 14 | 96 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | Pierce | 2018 | 35 | 198 |
| Kaiser Permanente Home Health and Hospice (Group Health) | IHS.FS.00000305 | Snohomish | 2018 | 14 | 94 |
| Kindred Hospice (Gentiva Hospice) | IHS.FS.60308060 | Spokane | 2018 | 23 | 265.5 |
| Kindred Hospice (Gentiva Hospice) | IHS.FS.60308060 | Whitman | 2018 | 19 | 226.5 |
| Kittitas Valley Home Health and Hospice | IHS.FS.00000320 | Kittitas | 2018 | 15 | 135 |
| Klickitat Valley Home Health & Hospice (Klickitat Valley Health) | IHS.FS.00000361 | Klickitat | 2018 | 5 | 40 |
| Kline Galland Community Based Services | IHS.FS.60103742 | King | 2018 | 29 | 368 |
| Memorial Home Care Services | IHS.FS.00000376 | Yakima | 2018 | 183 | 750 |
| MultiCare Home Health, Hospice and Palliative Care | IHS.FS.60639376 | King | 2018 | 32 | 158 |
| MultiCare Home Health, Hospice and Palliative Care | IHS.FS.60639377 | Kitsap | 2018 | 25 | 232 |
| MultiCare Home Health, Hospice and Palliative Care | IHS.FS.60639378 | Pierce | 2018 | 177 | 867 |
| Providence Hospice (Hospice of the Gorge) | IHS.FS.60201476 | Klickitat | 2018 | 4 | 18 |
| Providence Hospice (Hospice of the Gorge) | IHS.FS.60201476 | Skamania | 2018 | 1 | 9 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | Island | 2018 | 11 | 44 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | King | 2018 | none reported | none reported |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | Snohomish | 2018 | 316 | 1772 |
| Providence Hospice of Seattle | IHS.FS.00000336 | King | 2018 | 407 | 1959 |
| Providence Hospice of Seattle | IHS.FS.00000336 | Snohomish | 2018 | 11 | 13 |
| Providence SoundHomeCare and Hospice | IHS.FS.00000420 | Lewis | 2018 | 21 | 140 |
| Providence SoundHomeCare and Hospice | IHS.FS.00000420 | Mason | 2018 | 10 | 117 |
| Providence SoundHomeCare and Hospice | IHS.FS.00000420 | Thurston | 2018 | 90 | 663 |
| Tri-Cities Chaplaincy | IHS.FS.00000456 | Benton | 2018 | 112 | 750 |
| Tri-Cities Chaplaincy | IHS.FS.00000456 | Franklin | 2018 | 30 | 155 |

Department of Health
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Survey Responses

| | | | | | |
|---|-----------------|--------------|------|-----|------|
| Walla Walla Community Hospice | IHS.FS.60480441 | Columbia | 2018 | 1 | 23 |
| Walla Walla Community Hospice | IHS.FS.60480441 | Walla Walla | 2018 | 24 | 227 |
| Wesley Homes | IHS.FS.60276500 | King | 2018 | 29 | 368 |
| Whatcom Hospice (Peacehealth) | IHS.FS.00000471 | Whatcom | 2018 | 117 | 770 |
| IRREGULAR-COMMUNITY HOME HEALTH & HOSPICE | IHS.FS.00000262 | Pacific | 2018 | 0 | 1 |
| IRREGULAR-MULTICARE | IHS.FS.60639376 | Clallam | 2018 | 0 | 1 |
| Alpha Home Health | IHS.FS.61032013 | Snohomish | 2019 | 0 | 0 |
| Alpowa Healthcare Inc. d/b/a Elite Home Health and Hospice | IHS.FS.60384078 | Asotin | 2019 | 9 | 71 |
| Alpowa Healthcare Inc. d/b/a Elite Home Health and Hospice | IHS.FS.60384078 | Garfield | 2019 | 1 | 4 |
| Central Washington Homecare Services | IHS.FS.00000250 | Chelan | 2019 | 28 | 385 |
| Central Washington Homecare Services | IHS.FS.00000250 | Douglas | 2019 | 19 | 125 |
| Chaplaincy Health Care 2018 | IHS.FS.00000456 | Benton | 2019 | 96 | 700 |
| Chaplaincy Health Care 2018 | IHS.FS.00000456 | Franklin | 2019 | 26 | 164 |
| Community Home Health/Hospice | IHS.FS.00000262 | Cowlitz | 2019 | 98 | 636 |
| Community Home Health/Hospice | IHS.FS.00000262 | Wahkiakum | 2019 | 0 | 7 |
| Community Home Health/Hospice | IHS.FS.00000262 | Clark | 2019 | 60 | 453 |
| Continuum Care of King LLC | IHS.FS.61058934 | King | 2019 | 0 | 0 |
| Continuum Care of Snohomish LLC | IHS.FS.61010090 | Snohomish | 2019 | 0 | 0 |
| Envision Hospice of Washington | IHS.FS.60952486 | Thurston | 2019 | 2 | 22 |
| EvergreenHealth | IHS.FS.00000278 | King | 2019 | 225 | 2025 |
| EvergreenHealth | IHS.FS.00000278 | Snohomish | 2019 | 53 | 471 |
| EvergreenHealth | IHS.FS.00000278 | Island | 2019 | 1 | 11 |
| Franciscan Hospice | IHS.FS.00000287 | King | 2019 | 92 | 921 |
| Franciscan Hospice | IHS.FS.00000287 | Kitsap | 2019 | 118 | 757 |
| Franciscan Hospice | IHS.FS.00000287 | Pierce | 2019 | 364 | 2236 |
| Frontier Home Health & Hospice | IHS.FS.60379608 | Okanogan | 2019 | 27 | 171 |
| Frontier Home Health & Hospice | IHS.FS.60379608 | Douglas | 2019 | 0 | 5 |
| Frontier Home Health & Hospice | IHS.FS.60379608 | Grant | 2019 | 4 | 8 |
| Harbors Home Health and Hospice | IHS.FS.00000306 | Grays Harbor | 2019 | 41 | 212 |
| Harbors Home Health and Hospice | IHS.FS.00000306 | Pacific | 2019 | 15 | 98 |
| Heartlinks | IHS.FS.00000369 | Benton | 2019 | 7 | 137 |
| Heartlinks | IHS.FS.00000369 | Yakima | 2019 | 21 | 180 |
| Heartlinks | IHS.FS.00000369 | Franklin | 2019 | 0 | 2 |
| Horizon Hospice | IHS.FS.00000332 | Spokane | 2019 | 30 | 393 |
| Hospice of Jefferson County, Jefferson Healthcare | IHI.FS.00000349 | Jefferson | 2019 | 26 | 172 |
| Hospice of Spokane | IHS.FS.00000337 | Spokane | 2019 | 289 | 1692 |
| Hospice of Spokane | IHS.FS.00000337 | Stevens | 2019 | 20 | 126 |
| Hospice of Spokane | IHS.FS.00000337 | Ferry | 2019 | 5 | 25 |
| Hospice of Spokane | IHS.FS.00000337 | Pend Oreille | 2019 | 4 | 65 |
| Hospice of the Northwest | IHS.FS.00000437 | Island | 2019 | 14 | 56 |
| Hospice of the Northwest | IHS.FS.00000437 | San Juan | 2019 | 6 | 73 |
| Hospice of the Northwest | IHS.FS.00000437 | Skagit | 2019 | 77 | 705 |
| Hospice of the Northwest | IHS.FS.00000437 | Snohomish | 2019 | 5 | 58 |
| Inspiring Hospice Partners of Oregon dba Heart of Hospice | IHS.FS.60741443 | Skamania | 2019 | 0 | 17 |
| Inspiring Hospice Partners of Oregon dba Heart of Hospice | IHS.FS.60741443 | Klickitat | 2019 | 2 | 24 |
| Inspiring Hospice Partners of Oregon dba Heart of Hospice | IHS.FS.60741443 | Clark | 2019 | 0 | 3 |
| Inspiring Hospice Partners of Oregon dba Heart of Hospice | IHS.FS.60741443 | Snohomish | 2019 | 0 | 0 |
| Kaiser Continuing Care Services Hospice | IHS.FS.00000353 | Clark | 2019 | 43 | 387 |
| Kaiser Permanente Home Health and Hospice | IHS.FS.00000305 | King | 2019 | 37 | 489 |
| Kaiser Permanente Home Health and Hospice | IHS.FS.00000305 | Kitsap | 2019 | 18 | 123 |
| Kaiser Permanente Home Health and Hospice | IHS.FS.00000305 | Pierce | 2019 | 25 | 176 |
| Kaiser Permanente Home Health and Hospice | IHS.FS.00000305 | Snohomish | 2019 | 7 | 62 |
| Kindred Hospice | IHS.FS.60330209 | King | 2019 | 6 | 217 |
| Kittitas Valley Healthcare Home Health and Hospice | IHS.FS.00000320 | Kittitas | 2019 | 16 | 169 |
| Klickitat Valley Hospice | IHS.FS.00000361 | Klickitat | 2019 | 1 | 44 |
| Kline Galland Community Based Services | IHS.FS.60103742 | King | 2019 | 35 | 345 |
| Memorial Home Care Services | IHS.FS.00000376 | Yakima | 2019 | 148 | 730 |
| MultiCare Hospice | IHS.FS.60639376 | King | 2019 | 27 | 149 |
| MultiCare Hospice | IHS.FS.60639376 | Pierce | 2019 | 167 | 758 |
| MultiCare Hospice | IHS.FS.60639376 | Kitsap | 2019 | 37 | 194 |
| Northwest Healthcare Alliance, Inc. d/b/a Assured Home Health & Hospice | IHS.FS.00000229 | Clallam | 2019 | 23 | 234 |
| Northwest Healthcare Alliance, Inc. d/b/a Assured Home Health & Hospice | IHS.FS.00000229 | Jefferson | 2019 | 0 | 9 |
| Northwest Healthcare Alliance, Inc. d/b/a Assured Home Health & Hospice | IHS.FS.00000229 | Lewis | 2019 | 17 | 244 |
| Northwest Healthcare Alliance, Inc. d/b/a Assured Home Health & Hospice | IHS.FS.00000229 | Mason | 2019 | 6 | 45 |
| Northwest Healthcare Alliance, Inc. d/b/a Assured Home Health & Hospice | IHS.FS.00000229 | Thurston | 2019 | 22 | 240 |
| Olympic Medical Hospice | IHS.FS.00000393 | Clallam | 2019 | 0 | 0 |
| PeaceHealth Hospice | IHS.FS.60331226 | Clark | 2019 | 184 | 1217 |
| PeaceHealth Hospice | IHS.FS.60331226 | Cowlitz | 2019 | 23 | 99 |
| PeaceHealth Hospice | IHS.FS.60331226 | Skamania | 2019 | 0 | 1 |
| Providence Hospice | IHS.FS.60201476 | Klickitat | 2019 | 9 | 22 |
| Providence Hospice | IHS.FS.60201476 | Skamania | 2019 | 1 | 15 |
| Providence Hospice | IHS.FS.60201476 | Clark | 2019 | 0 | 0 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | Snohomish | 2019 | 272 | 1613 |
| Providence Hospice and Home Care of Snohomish County | IHS.FS.00000418 | Island | 2019 | 1 | 29 |
| Providence Hospice of Seattle | IHS.FS.00000336 | King | 2019 | 338 | 2083 |
| Providence Hospice of Seattle | IHS.FS.00000336 | Snohomish | 2019 | 5 | 10 |
| Providence Sound HomeCare and Hospice | IHS.FS.00000420 | Thurston | 2019 | 91 | 685 |
| Providence Sound HomeCare and Hospice | IHS.FS.00000420 | Mason | 2019 | 28 | 148 |
| Providence Sound HomeCare and Hospice | IHS.FS.00000420 | Lewis | 2019 | 33 | 118 |
| Puget Sound Hospice | IHS.FS.61032138 | Thurston | 2019 | 0 | 0 |
| Walla Walla Community Hospice | IHS.FS.60480441 | Walla Walla | 2019 | 41 | 242 |

Department of Health
2020-2021 Hospice Numeric Need Methodology
Survey Responses

| | | | | | |
|---|-----------------|-----------|------|-----|-----|
| Walla Walla Community Hospice | IHS.FS.60480441 | Columbia | 2019 | 3 | 25 |
| Washington HomeCare and Hospice of Central Basin, LLC d/b/a Assured Hospice | IHS.FS.60092413 | Adams | 2019 | 8 | 54 |
| Washington HomeCare and Hospice of Central Basin, LLC d/b/a Assured Hospice | IHS.FS.60092413 | Grant | 2019 | 41 | 228 |
| Washington HomeCare and Hospice of Central Basin, LLC d/b/a Assured Hospice | IHS.FS.60092413 | Lincoln | 2019 | 3 | 22 |
| WhidbeyHealth Home Health, Hospice | IHS.FS.00000323 | Island | 2019 | 27 | 245 |
| Yakima HMA Home Health, LLC | IHS.FS.60097245 | Yakima | 2019 | 6 | 88 |
| PeaceHealth Whatcom | | 0 Whatcom | 2019 | 138 | 995 |
| Wesley Homes | IHS.FS.60276500 | King | 2019 | 5 | 86 |
| Kindred Hospice | IHS.FS.60308060 | Spokane | 2019 | 10 | 90 |
| Kindred Hospice | IHS.FS.60308060 | Whitman | 2019 | 12 | 77 |

Department of Health
2020-2021 Hospice Numeric Need Methodology
Admissions - Summarized

0-64 Total Admissions by County

| Sum of 0-64 | Column Labels | | |
|--------------|---------------|-------|------|
| Row Labels | 2017 | 2018 | 2019 |
| Adams | 4 | 6 | 8 |
| Asotin | 7 | 6 | 9 |
| Benton | 110 | 118 | 103 |
| Chelan | 44 | 34 | 28 |
| Clallam | 14 | 16 | 23 |
| Clark | 282 | 336 | 287 |
| Columbia | 1 | 1 | 3 |
| Cowlitz | 124 | 107 | 121 |
| Douglas | 19 | 10 | 19 |
| Ferry | 7 | 6 | 5 |
| Franklin | 15 | 30 | 26 |
| Garfield | 1 | 1 | 1 |
| Grant | 44 | 41 | 45 |
| Grays Harbor | 72 | 35 | 41 |
| Island | 35 | 38 | 43 |
| Jefferson | 14 | 21 | 26 |
| King | 862 | 1,009 | 765 |
| Kitsap | 104 | 180 | 173 |
| Kittitas | 46 | 15 | 16 |
| Klickitat | 17 | 10 | 12 |
| Lewis | 45 | 56 | 50 |
| Lincoln | 3 | 7 | 3 |
| Mason | 34 | 14 | 34 |
| Okanogan | 34 | 21 | 27 |
| Pacific | 17 | 13 | 15 |
| Pend Oreille | 8 | 8 | 4 |
| Pierce | 419 | 543 | 556 |
| San Juan | 3 | 6 | 6 |
| Skagit | 61 | 48 | 77 |
| Skamania | 4 | 2 | 1 |
| Snohomish | 339 | 422 | 342 |
| Spokane | 397 | 400 | 329 |
| Stevens | 25 | 30 | 20 |
| Thurston | 144 | 114 | 115 |
| Wahkiakum | 1 | 2 | 0 |
| Walla Walla | 45 | 24 | 41 |
| Whatcom | 139 | 117 | 138 |
| Whitman | 29 | 19 | 12 |
| Yakima | 188 | 248 | 175 |

65+ Total Admissions by County

| Sum of 65+ | Column Labels | | |
|--------------|---------------|-------|-------|
| Row Labels | 2017 | 2018 | 2019 |
| Adams | 30 | 34 | 54 |
| Asotin | 85 | 121 | 71 |
| Benton | 875 | 887 | 837 |
| Chelan | 319 | 386 | 385 |
| Clallam | 143 | 187 | 234 |
| Clark | 1,898 | 2,124 | 2,060 |
| Columbia | 17 | 23 | 25 |
| Cowlitz | 695 | 600 | 735 |
| Douglas | 129 | 136 | 130 |
| Ferry | 37 | 29 | 25 |
| Franklin | 122 | 155 | 166 |
| Garfield | 1 | 2 | 4 |
| Grant | 216 | 261 | 236 |
| Grays Harbor | 292 | 180 | 212 |
| Island | 364 | 348 | 341 |
| Jefferson | 167 | 155 | 181 |
| King | 6,739 | 6,359 | 6,315 |
| Kitsap | 1,156 | 1,021 | 1,074 |
| Kittitas | 134 | 135 | 169 |
| Klickitat | 82 | 81 | 90 |
| Lewis | 420 | 420 | 362 |
| Lincoln | 22 | 29 | 22 |
| Mason | 232 | 161 | 193 |
| Okanogan | 132 | 148 | 171 |
| Pacific | 106 | 72 | 98 |
| Pend Oreille | 55 | 53 | 65 |
| Pierce | 3,356 | 3,175 | 3,170 |
| San Juan | 70 | 79 | 73 |
| Skagit | 616 | 680 | 705 |
| Skamania | 21 | 20 | 33 |
| Snohomish | 2,084 | 2,636 | 2,214 |
| Spokane | 2,467 | 2,248 | 2,175 |
| Stevens | 128 | 121 | 126 |
| Thurston | 899 | 936 | 947 |
| Wahkiakum | 4 | 5 | 7 |
| Walla Walla | 276 | 227 | 242 |
| Whatcom | 766 | 770 | 995 |
| Whitman | 248 | 227 | 77 |
| Yakima | 962 | 977 | 998 |

Total Admissions by County - Not Adjusted for New

| County | 2017 | 2018 | 2019 | Average |
|-------------|-------|-------|-------|----------------|
| Adams | 34 | 40 | 62 | 45.33 |
| Asotin | 92 | 127 | 80 | 99.67 |
| Benton | 985 | 1,005 | 940 | 976.67 |
| Chelan | 363 | 420 | 413 | 398.67 |
| Clallam | 157 | 203 | 257 | 205.67 |
| Clark | 2,180 | 2,460 | 2,347 | 2329.00 |
| Columbia | 18 | 24 | 28 | 23.33 |
| Cowlitz | 819 | 707 | 856 | 794.00 |
| Douglas | 148 | 146 | 149 | 147.67 |
| Ferry | 44 | 35 | 30 | 36.33 |
| Franklin | 137 | 185 | 192 | 171.33 |
| Garfield | 2 | 3 | 5 | 3.33 |
| Grant | 260 | 302 | 281 | 281.00 |
| Grays Harb | 364 | 215 | 253 | 277.33 |
| Island | 399 | 386 | 384 | 389.67 |
| Jefferson | 181 | 176 | 207 | 188.00 |
| King | 7,601 | 7,368 | 7,080 | 7349.67 |
| Kitsap | 1,260 | 1,201 | 1,247 | 1236.00 |
| Kittitas | 180 | 150 | 185 | 171.67 |
| Klickitat | 99 | 91 | 102 | 97.33 |
| Lewis | 465 | 476 | 412 | 451.00 |
| Lincoln | 25 | 36 | 25 | 28.67 |
| Mason | 266 | 175 | 227 | 222.67 |
| Okanogan | 166 | 169 | 198 | 177.67 |
| Pacific | 123 | 85 | 113 | 107.00 |
| Pend Oreill | 63 | 61 | 69 | 64.33 |
| Pierce | 3,775 | 3,718 | 3,726 | 3739.67 |
| San Juan | 73 | 85 | 79 | 79.00 |
| Skagit | 677 | 728 | 782 | 729.00 |
| Skamania | 25 | 22 | 34 | 27.00 |
| Snohomish | 2,423 | 3,058 | 2,556 | 2679.00 |
| Spokane | 2,864 | 2,648 | 2,504 | 2671.83 |
| Stevens | 153 | 151 | 146 | 150.00 |
| Thurston | 1,043 | 1,050 | 1,062 | 1051.67 |
| Wahkiakur | 5 | 7 | 7 | 6.33 |
| Walla Wall | 321 | 251 | 283 | 285.00 |
| Whatcom | 905 | 887 | 1,133 | 975.00 |
| Whitman | 277 | 246 | 89 | 203.83 |
| Yakima | 1,150 | 1,225 | 1,173 | 1182.67 |

Total Admissions by County - Adjusted for New

Adjusted Cells Highlighted in YELLOW

| County | 2017 | 2018 | 2019 | Average |
|-------------|-------|-------|-------|-----------------|
| Adams | 34 | 40 | 62 | 45.33 |
| Asotin | 92 | 127 | 80 | 99.67 |
| Benton | 985 | 1,005 | 940 | 976.67 |
| Chelan | 363 | 420 | 413 | 398.67 |
| Clallam | 157 | 203 | 461 | 273.63 |
| Clark | 2,180 | 2,460 | 2,551 | 2,396.97 |
| Columbia | 18 | 24 | 28 | 23.33 |
| Cowlitz | 819 | 707 | 856 | 794.00 |
| Douglas | 148 | 146 | 149 | 147.67 |
| Ferry | 44 | 35 | 30 | 36.33 |
| Franklin | 137 | 185 | 192 | 171.33 |
| Garfield | 2 | 3 | 5 | 3.33 |
| Grant | 260 | 302 | 281 | 281.00 |
| Grays Harb | 364 | 215 | 253 | 277.33 |
| Island | 399 | 386 | 384 | 389.67 |
| Jefferson | 181 | 176 | 207 | 188.00 |
| King | 7,787 | 7,368 | 7,397 | 7,517.23 |
| Kitsap | 1,260 | 1,201 | 1,451 | 1,303.97 |
| Kittitas | 180 | 150 | 185 | 171.67 |
| Klickitat | 282 | 271 | 280 | 277.57 |
| Lewis | 465 | 476 | 412 | 451.00 |
| Lincoln | 25 | 36 | 25 | 28.67 |
| Mason | 266 | 175 | 227 | 222.67 |
| Okanogan | 166 | 169 | 198 | 177.67 |
| Pacific | 123 | 85 | 113 | 107.00 |
| Pend Oreill | 63 | 61 | 69 | 64.33 |
| Pierce | 3,775 | 3,718 | 3,726 | 3,739.67 |
| San Juan | 73 | 85 | 79 | 79.00 |
| Skagit | 677 | 728 | 782 | 729.00 |
| Skamania | 25 | 22 | 34 | 27.00 |
| Snohomish | 2,423 | 3,058 | 3,372 | 2,950.87 |
| Spokane | 2,864 | 2,648 | 2,504 | 2,671.83 |
| Stevens | 153 | 151 | 146 | 150.00 |
| Thurston | 1,043 | 1,254 | 1,446 | 1,247.57 |
| Wahkiakun | 5 | 7 | 7 | 6.33 |
| Walla Wall | 321 | 251 | 283 | 285.00 |
| Whatcom | 905 | 887 | 1,337 | 1,042.97 |
| Whitman | 277 | 246 | 89 | 203.83 |
| Yakima | 1,150 | 1,225 | 1,173 | 1,182.67 |

Department of Health
2020-2021 Hospice Numeric Need Methodology
Admissions - Summarized

35 ADC * 365 days per year = 12,775 default patient days
12,775 patient days/62.66 ALOS = 203.9 default admissions
203.9 Default

For affected counties, the actual volumes from these recently approved agencies will be subtracted, and default values will be added.

Recent approvals showing default volumes:

Wesley Homes Hospice - King County. Approved in 2015, operational since 2017. 2018 volumes exceed "default" - no adjustment for 2018. Adjustments in 2017 and 2019.

Heart of Hospice - Klickitat County. Approved in August 2017. Operational since August 2017. Default volumes in 2017-2019.

Envision Hospice - Thurston County. Approved in September 2018. Default volumes in 2018-2019.

Continuum Care of Snohomish - Snohomish County. Approved in July 2019. Default volumes in 2019.

Olympic Medical Center - Clallam County. Approved in September 2019. Default volumes for 2019.

Symbol Healthcare - Thurston County. Approved in November 2019. Default volumes for 2019.

Heart of Hospice - Snohomish County. Approved in November 2019. Default volumes for 2019.

Envision Hospice - Snohomish County. Approved in November 2019. Default volumes for 2019.

Glacier Peak Healthcare - Snohomish County. Approved in November 2019. Default volumes for 2019.

Providence Hospice - Clark County. Approved in 2019. Default volumes in 2019.

Envision Hospice - King County. Approved in 2019. Default volumes for 2019.

EmpRes Healthcare Group - Whatcom County. Approved in 2019 review cycle. No adjustment possible for 2020, adjustment in 2019 as proxy.

Envision Hospice - Kitsap County. Approved in 2019 review cycle. No adjustment possible for 2020, adjustment in 2019 as proxy.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 21

UTILIZATION FORECAST 2022-2024

Appendix 21
Market Analysis/Utilization Analysis of Hospice Admissions, Length of Stay, Patient Days
and Average Daily Census

| SNOHOMISH COUNTY HOSPICE VOLUME PROJECTION | | Market Potential | 2022 | 2023 | 2024 |
|--|--|------------------|--------------|---------------|---------------|
| New Patient Referrals through Outreach | | | | | |
| FFS Dual -Eligible Medicare | Outreach to FMQCs -- 12 centers | Market Potential | 2022 | 2023 | 2024 |
| FFS Raise dual-eligible to national rate | 20% in 2022, 35% in 2023, 60% 2024, dual | 50 | 10 | 18 | 30 |
| FFS Reduce dual and non dual disparity in hospice rates | 10% in 2022, 35% in 2023, 60% 2024 dual | 18 | 2 | 6 | 11 |
| FFS Non-Dual Eligible rate raised to national rate | 10% in 2022,35% in 2023, 60% 2024, dual | 23 | 2 | 8 | 14 |
| Medicare Advantage | Non-dual to national rate: 2022, 2%; 2023, 8%,2024, 13% | 420 | 8 | 34 | 55 |
| Subtotal Medicare from Outreach | | 511 | 23 | 65 | 109 |
| Other Patient Referrals not Captured in Outreach to FMQCs on Dual-Eligible Outreach | | | | | |
| Medicaid patients from Outreach | Outreach to FMQCs -- 12 centers identifies 5.6% of dual eligible identified | 9 | 1 | 4 | 6 |
| Medicaid Patients Other | Medicaid patients from other referral sources consistent with pro forma | 9 | 2 | 4 | 6 |
| Subtotal: Medicaid | | 18 | 3 | 8 | 12 |
| Home health patients EmpRes | Based on Medicare FFS data base adj. for modest growth due to respite care | | 5 | 7 | 8 |
| SNF patients EmpRes | Based on Administrator report | | 5 | 15 | 20 |
| Subtotal Eden/EmpRes Pts. | | 0 | 10 | 22 | 28 |
| Veterans through VA outreach | 8.3% of adult population are Veterans based on Outreach activities for Medicare initially a 20% mkt share going to 50% mkt. share of new Medicare patients -- 50% market share | 42 | 8 | 21 | 25 |
| Hospital patient referrals | General and Death with Dignity patients -- outreach to support with hospice | 33 | 3 | 6 | 8 |
| SNF Patient Referrals | Other SNF referrals in Snohomish County | | 8 | 15 | 20 |
| Native American Patients | Outeach to Tulalip Bay and North Coast about 1.9% of new Medicare patients, 20% share increasing to 50% | 10 | 2 | 3 | 5 |
| LGBTQ Self-Identified Adults | Outreach to LGBTQ community at 4% | 20 | 4 | 6 | 7 |
| African American Patients | FQMC and community agencies at 3.7% | 19 | 2 | 2 | 3 |
| Hispanic Patients | FQMC and community agencies at 10.4% | 53 | 10 | 14 | 20 |
| Subtotal: Other | | 0 | 37 | 67 | 88 |
| Commercial patients | Commercial patients represent 5% of Total | 14 | 4 | 9 | 13 |
| Subtotal: Commercial | | 14 | 4 | 9 | 13 |
| Total Patients: As of 2000 | | 543 | 77 | 171 | 251 |
| Population Increase Adj. | Approximate annual increase of 5.24% per yr. | | 4 | 9.0 | 25 |
| Grand Total Patients | | | 81 | 180.2 | 276 |
| ALOS | | | 60.2 | 61.2 | 61.2 |
| Patient Days | | | 4,886 | 11,020 | 16,888 |
| Average Daily Census | | | 13.39 | 30.19 | 46.27 |

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 22

**HEALTH DISPARITIES IN
SNOHOMISH COUNTY**

Health Disparities in Snohomish County



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| How Do We Address Health Disparities? | 3 |
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HEALTH DISPARITIES IN SNOHOMISH COUNTY

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CONCLUSION 23

AUTHOR

Elizabeth Parker, PhD, MHS
Healthy Communities & Assessment
Snohomish Health District

SUGGESTED CITATION

Parker, E.M.L. 2016. Health Disparities in Snohomish County. Snohomish Health District, October 2016.

ELECTRONIC SOURCE

This report is available at <http://www.snohd.org/Records-Reports/Data-Reports>

Background

What Are Health Disparities?

Not everyone in Snohomish County has access to the same health opportunities. Health disparities are differences in the burden of diseases, injury, violence, or limited opportunities to reach ideal health. Health disparities are experienced by socially disadvantaged populations and may be distinguished by race or ethnicity, income, education, gender, disability, geographic location, or sexual orientation. These disparities are directly related to the unequal distribution of social, political, economic, and environmental resources.

Although significant progress has been made in improving the health of residents in the county, health disparities remain a serious concern. We must focus on health equity, and give individuals the opportunity to attain their full health potential, regardless of socially determined circumstances.

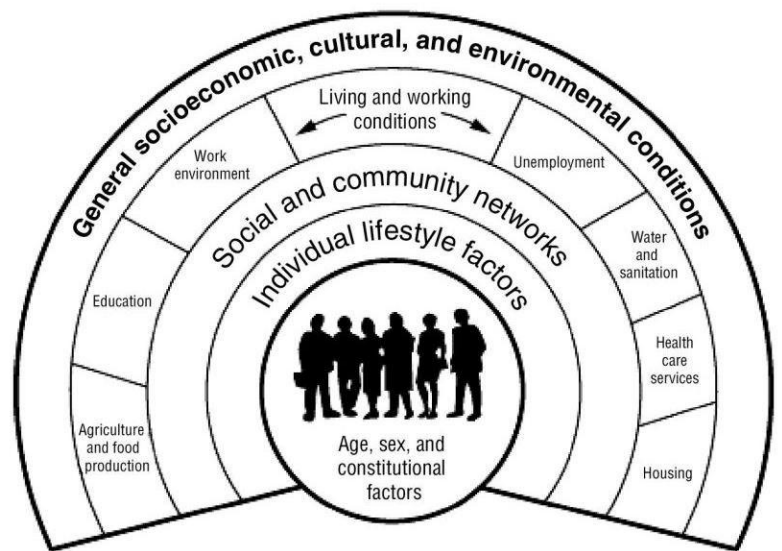
Source: CDC. Community Health and Program Services (CHAPS): Health Disparities Among Racial/Ethnic Populations. Atlanta: U.S. Department of Health and Human Services; 2008

How Do We Address Health Disparities?

In order to address health disparities in Snohomish County, an understanding of the conditions and factors that influence health is needed.

Conditions in which people are born, grow, live, work, and age influence a host of health risks and outcomes. These conditions and factors are called social determinants of health. Social determinants are mostly responsible for health inequities, or the unfair and avoidable differences in health status within and between communities. Conditions and factors can be divided into three types: those that threaten health, those that promote health, and those that protect health.

The graphic, developed by Dahlgren and Whitehead (1991), illustrates the range of conditions and factors that influence health.



Source: Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. Stockholm: Institute for Future Studies; 1991.

Sources: Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020. Healthy People 2020: An Opportunity to Address the Societal Determinants of Health in the United States. (2010). Retrieved on January 22, 2016 from: <http://www.healthypeople.gov/2010/hp2020/advisory/SocietalDeterminantsHealth.htm>

World Health Organization, Commission on Social Determinants of Health. Closing the Gap in a Generation: Health equity through action on the social determinants of health. Available from: http://www.who.int/social_determinants/en

Why Release a Health Disparities Report?

The aim of this report is to call attention to health disparities in Snohomish County. It is the first of what will be a series of reports that monitor health disparities throughout the county and over time. While it is intended to be comprehensive, it is by no means exhaustive.

Sociodemographics of Snohomish County

Snohomish County, Washington, has a population of 757,600, making it the third most populous county in the state. The majority of its population is concentrated in the western half of the county.

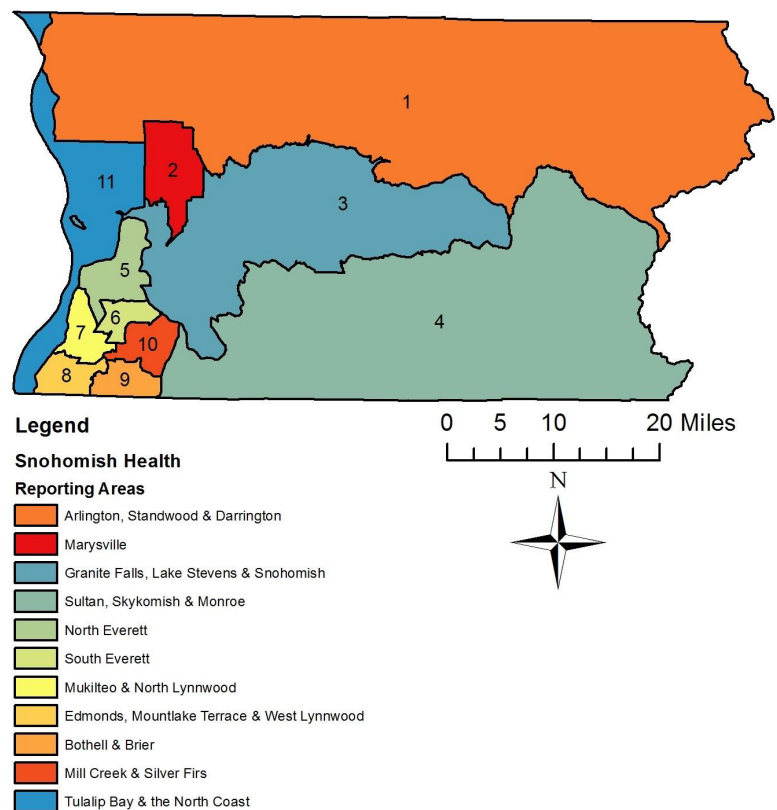
Health Reporting Areas

The Snohomish Health Reporting Areas (SHRAs) are developed to coincide with city boundaries, when possible. They are based on aggregations of U.S. Census Bureau census tracts and they include individual cities, groups of smaller cities, and unincorporated areas of Snohomish County. The names of the SHRAs are based on census county subdivisions, which are delineated by the Census Bureau for statistical purposes. The names of the sub-divisions are based on a place or well-known local area that identifies its location.

SHRAs were created to help communities, policymakers, and government officials as they think about local public health problems and health policy solutions. SHRAs will be used throughout the report when data are available at the census tract level and when there is sufficient a sample.

There are 11 SHRAs:

- Arlington, Stanwood & Darrington
- Marysville
- Granite Falls, Lake Stevens & Snohomish
- Sultan, Skykomish & Monroe
- North Everett
- South Everett
- Mukilteo & North Lynnwood
- Edmonds, Mountlake Terrace & West Lynnwood
- Bothell & Brier
- Mill Creek & Silver Firs
- Tulalip Bay & the North Coast



Prepared by the Snohomish Health District

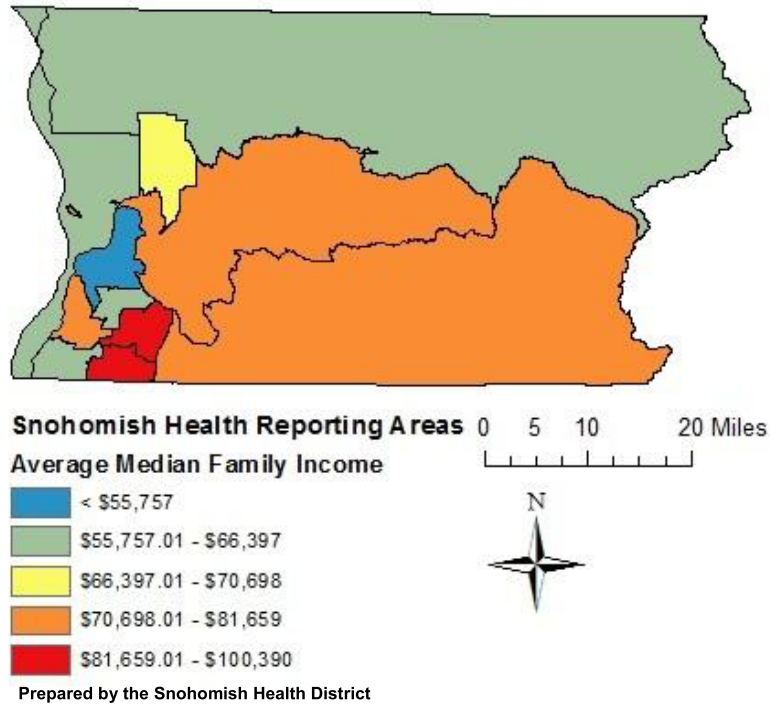
In This Report

To understand health disparities between educational, economic, and racial/ethnic groups in Snohomish County, it is helpful to examine the educational, economic, and racial/ethnic diversity of county residents. This report begins with a demographic and social description of Snohomish County. Health disparities across a range of topics are explored and include: life expectancy, leading causes of death, general health, mental illness, substance use, overweight/obesity, physical activity, chronic disease, health care access, cancer, maternal and child health, and adolescent health outcomes.

Income

The median household income in Snohomish County was \$63,381 in 2013. The average median household income in Snohomish County's poorest SHRA was \$55,757 while the wealthiest SHRA was \$100,390.

The poorest SHRAs are North Everett and South Everett where 10% and 13% of families respectively, live below the poverty line.



Source: American Community Survey 5 Year Estimates, 2013.

What is a healthy community?

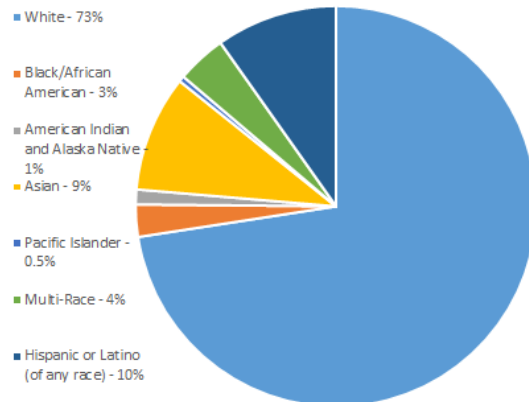
A healthy community continuously works to improve its physical and social environments and provides support to people on a day to day basis. They are designed and built to improve the quality of life for all people who grow, live, work, and age within their borders. In healthy communities, people are able to make choices between a range of healthy, available, accessible, and affordable options.

Source: National Center for Environmental Health, Centers for Disease Control and Prevention. (2014). About Healthy Places. Retrieved on July 26, 2016 from: <https://www.cdc.gov/healthyplaces/about.htm>

Race and Ethnicity

Snohomish County is racially and ethnically homogenous. In 2014, the population was 73% White, 9% Asian, 4% multiracial, 3% African American, 1% American Indian or Alaska native, and 0.5% Pacific Islander. About 10% of residents identified as Hispanic or Latino (of any race).

Race and Ethnicity, 2014



Source: Washington State Office of Financial Management, Forecasting Division, single year intercensal estimates 2001-2014, January, 2015.

Income and Poverty

On average, fewer Snohomish County residents are poor compared to state and national populations. According to the 2013 American Community Survey, 11.2% of county residents lived below the federal poverty line which is a slight increase from 10% in 2010 and 7.1% in 2000. In comparison, 14% of the Washington State population and 16% of the US population lived below the federal poverty line in 2013.

About 15% of Snohomish County households had an income less than \$25,000 in 2014.

What is the Federal Poverty Line (FPL)?

The FPL is a measure of income level released every year by the Department of Health and Human Services. FPLs are used to decide if you are eligible for certain programs and benefits. Here are current FPL amounts:

Single individual: \$11,770

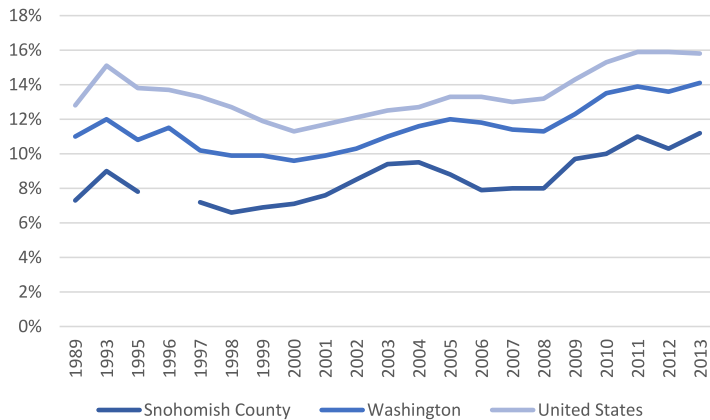
Family of 2: \$15,930

Family of 3: \$20,090

Family of 4: \$24,250

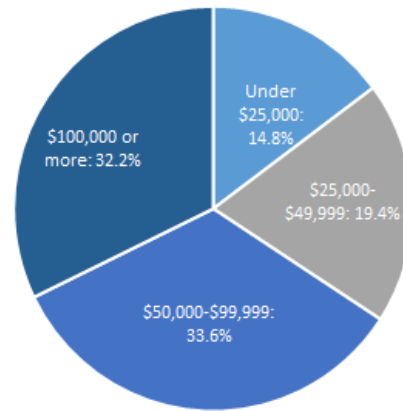
Source: Federal Poverty Level. (n.d.). Retrieved on 27 January 2016 from: <https://www.healthcare.gov/glossary/federal-poverty-level-fpl/>

People in Snohomish County Living in Poverty, 2013



Source: Washington State Office of Financial Management, Forecasting Division, single year intercensal estimates 2001-2014, January, 2015.

Household Income in Snohomish County, 2013



Source: American Community Survey 5 Year Estimates, 2013.

Poverty and Health

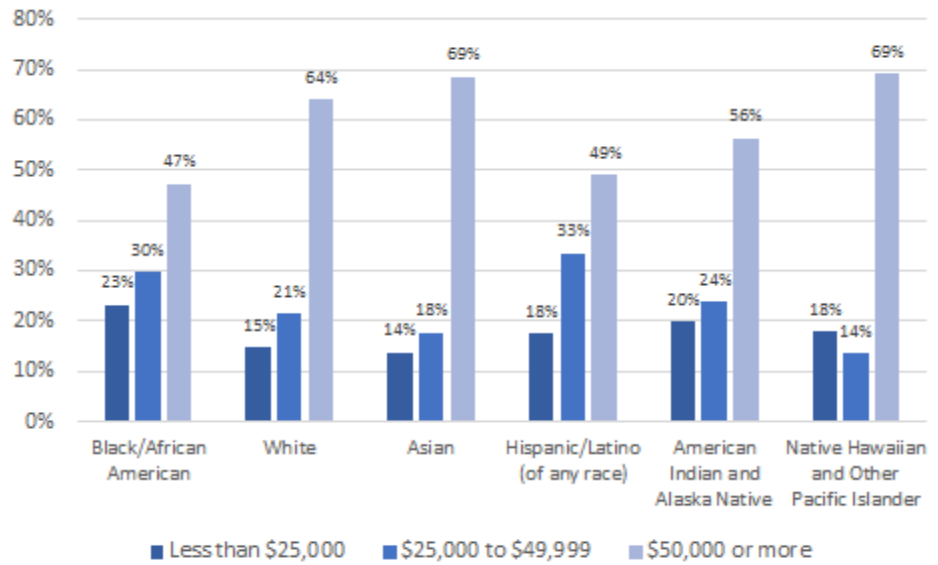
Living in poverty can have a devastating effect on health. But how and why poverty and health are linked is complicated. Health behaviors can be related to the risk of disease and death. One reason is a lack of health insurance. Many of the health behaviors individuals engage in—or don't engage in—are influenced by surrounding circumstances, such as where a person lives. For example, neighborhoods that have high crime rates, low performing schools, or reduced access to grocery stores or markets where healthy foods are available can also negatively affect a person's health. This can impact diet and prevent engaging in physical activity which influences the risk of disease and death.

Poverty is both a cause and a consequence of poor health. In order to break the cycle of poverty, the social and economic factors that jeopardize health and limit the ability to make healthful choices need to be addressed.

Source: Simon, D. (n.d.) Poverty fact sheet: Poor and in poor health. Retrieved on July 27, 2016 from: https://morgridge.wisc.edu/documents/Poor_and_In_Poor_Health.pdf
World Bank. (2014). Poverty and health. Retrieved on July 27, 2016 from: <http://www.worldbank.org/en/topic/health/brief/poverty-health>

Household income differs among racial and ethnic groups. In Snohomish County, Black and American Indian and Alaska Native residents are, on average, more poor than White and Asian residents.

Household Income by Race



Source: U.S. Census Bureau, 2006-2010 American Community Survey

How is race related to health?

Racial disparities in health are widespread and often associated with poor physical and mental health. For most of the leading causes of death, Black/African Americans, as well as American Indians have higher death rates than Whites. Racial discrimination may influence health because (1) exposure to stress may result in negative emotional states which generate psychological distress; (2) coping mechanisms may include unhealthy behaviors (such as alcohol use); (3) psychological and behavioral responses to stress can result in significant changes in several physiological systems.

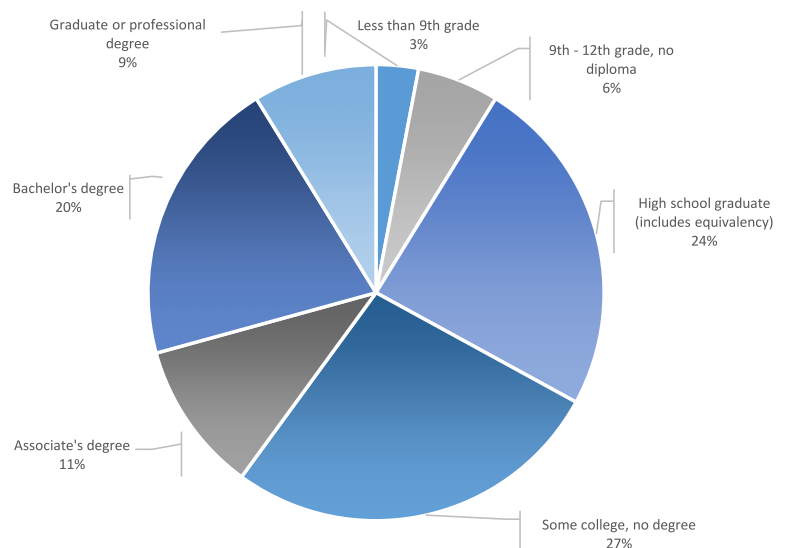
Sources: Williams, D.R. & Mohammed, S.A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, 32(1).
Williams, D. R. & Neighbors, H.W. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health*, 93(2), 200-208.

Education

In Snohomish County, 24% of the population graduated high school or passed the General Education Development tests, and 21% received a bachelor's degree.

Education generally results in better jobs and higher incomes. Research also suggests that individuals with better education live longer and healthier lives.

Educational attainment of adults ages 25 years and older



Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

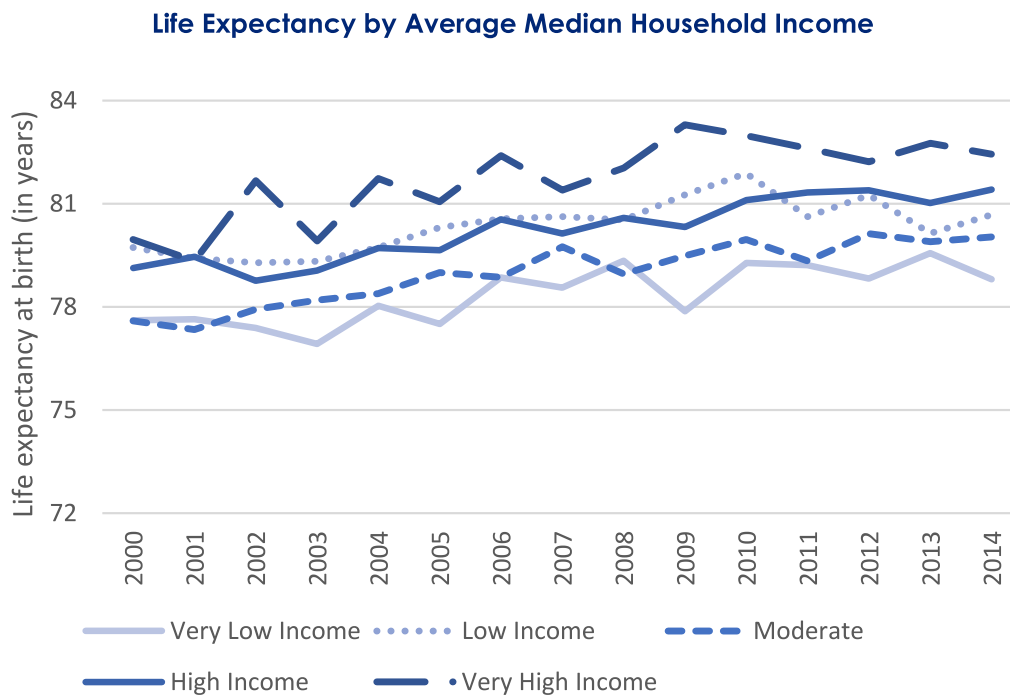
Disparities in Health in Snohomish County

General Health

Life Expectancy

Life expectancy is the average age to which a newborn baby can expect to live. This is a measure often used to describe the overall health status of a population. In Snohomish County, the life expectancy generally increased in every SHRA income group during the years 2000 to 2014. The gaps in life expectancy among income groups have remained stable over time. In 2014, life expectancy in the poorest SHRA was 3 years shorter than the wealthiest SHRA.

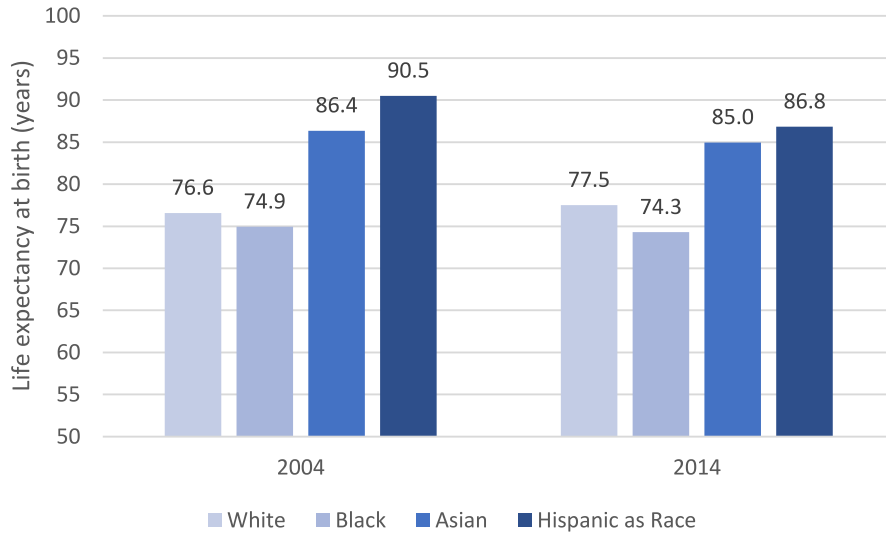
Source: Healthy People 2020. (2016). General Health Status. Retrieved on 27 January 2016 from: <http://www.healthypeople.gov/2020/about/foundation-health-measures/General-Health-Status#life>



Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

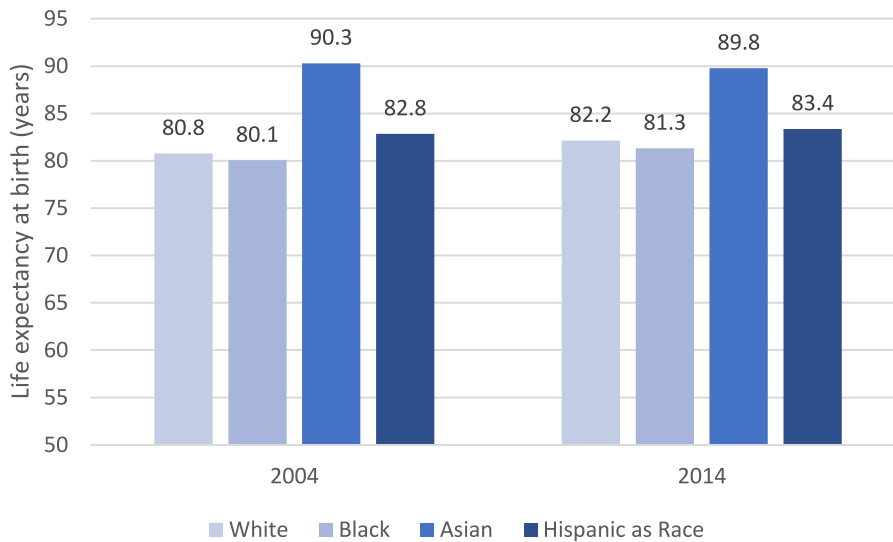
Racial and ethnic disparities in life expectancy exist in Snohomish County as well as throughout Washington State. Among Snohomish County residents, Black males, on average, live 2 years less than White males compared to a 4 year-disparity in Washington. For female Snohomish County residents, the difference is smaller, 1 year, compared to a 2-year disparity in Washington. The disparity in life expectancy has been relatively stable over the past 10 years.

Life Expectancy among Males



Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Life Expectancy among Females



Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Leading Causes of Death

Residents of Snohomish County’s poorest SHRAs have consistently higher mortality rates from almost all diseases compared to residents of its wealthiest SHRAs. For example, deaths due to liver disease and accidents are almost three times and two times higher respectively, in the poorest SHRAs. Alzheimer’s disease, influenza and pneumonia are more common causes of death in wealthier communities.

| Cause Of Death | Low-income SHRAs (deaths per 100,000 in 2014) | High-income SHRAs (deaths per 100,000 in 2014) | Lowest-income SHRA higher by... | Highest-income SHRA higher by... |
|---------------------------------------|---|--|---------------------------------|----------------------------------|
| All causes | 751 | 599 | 1.3 times | |
| Heart disease | 205 | 160 | 1.3 times | |
| Cancer | 163 | 169 | About the same | |
| Accidents | 46 | 22 | 2.0 times | |
| Alzheimer's disease | 39 | 60 | | 1.5 times |
| Chronic lower respiratory diseases | 51 | 30 | 1.7 times | |
| Diabetes mellitus | 35 | 20 | 1.7 times | |
| Suicide | 17 | 11 | 1.6 times | |
| Liver disease and cirrhosis | 12 | 4 | 2.8 times | |
| Pneumonitis due to solids and liquids | 15 | 8 | 1.7 times | |
| Influenza and pneumonia | 5 | 8 | | 1.5 times |

All rates are age-adjusted per 100,000 population

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Years of Potential Life Lost

Premature death can be defined as death before age 65. Years of potential life lost (YPLL) is a measure of early death and is used to represent the total number of years not lived by people who die before reaching a given age. Deaths among younger people contribute more to the YPLL measure than deaths among older people.

The rate of premature death is almost twice as high in the poorest SHRA than in the wealthiest SHRA.

| Cause Of Death | Lowest-income SHRA | Highest-income SHRA |
|---|--------------------|---------------------|
| Percent of deaths that are premature (< 65 years) | 31% | 27% |
| Total years of potential life lost | 7,133 | 2,406 |
| Total years of potential life lost per 100,000 population | 4,289 | 2,197 |
| Total years of potential life lost per premature death | 17 | 16 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Source: Healthy People 2020. (2016). General Health Status. Retrieved on 27 January 2016 from: <http://www.healthypeople.gov/2020/about/foundation-health-measures/General-Health-Status#life>

Some conditions tend to take peoples' lives earlier than others, and disparities exist between racial groups. For example, among Asian Snohomish County residents, accidents make up 53% of the years of potential life lost before age 65.

| Cause Of Death | Black/ African American | White | Asian | American Indian and Alaska Native |
|------------------------------------|----------------------------|-------|-------|---|
| Heart disease | 10% | 13% | 12% | 2% |
| Cancer | 20% | 19% | 30% | 7% |
| Accidents | 20% | 25% | 53% | 29% |
| Chronic lower respiratory diseases | 5% | 3% | 3% | 1% |
| Diabetes mellitus | 2% | 3% | 1% | 0% |
| Suicide | 0% | 14% | 17% | 10% |
| Liver disease and cirrhosis | 0% | 3% | 1% | 8% |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

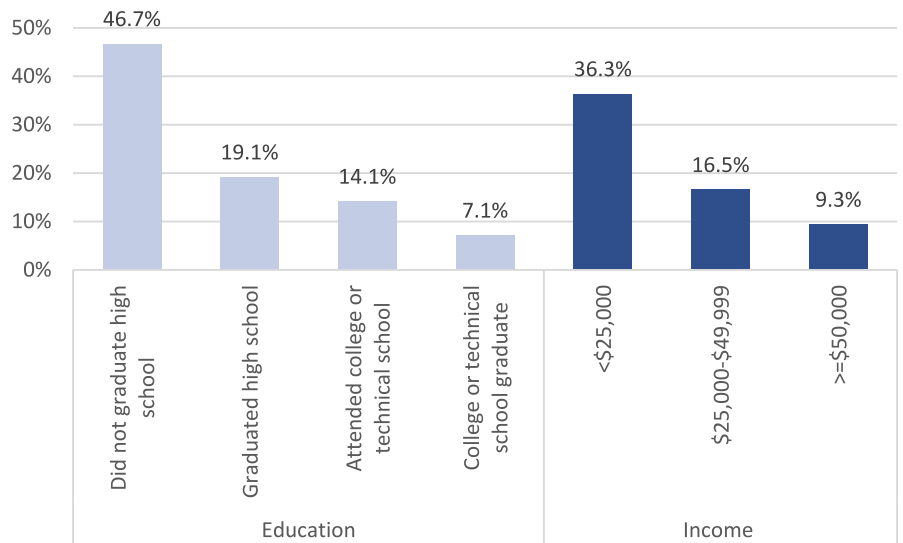
Self-Reported Health

Self-reported health status is a general measure of health-related quality of life in a population. This measure is based on responses to the question: “Would you say that in general your health is excellent, very good, good, fair, poor?” Self-reported health status is a reliable measure of current health.

On average, Snohomish County residents with lower incomes and less years of education tend to report worse health compared to those with higher incomes and more years of education.

Source: Healthy People 2020. (2016). General Health Status. Retrieved on 27 January 2016 from: <http://www.healthypeople.gov/2020/about/foundation-health-measures/General-Health-Status#life>

Fair or Poor Self-Reported Health by Education-Level and Income



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

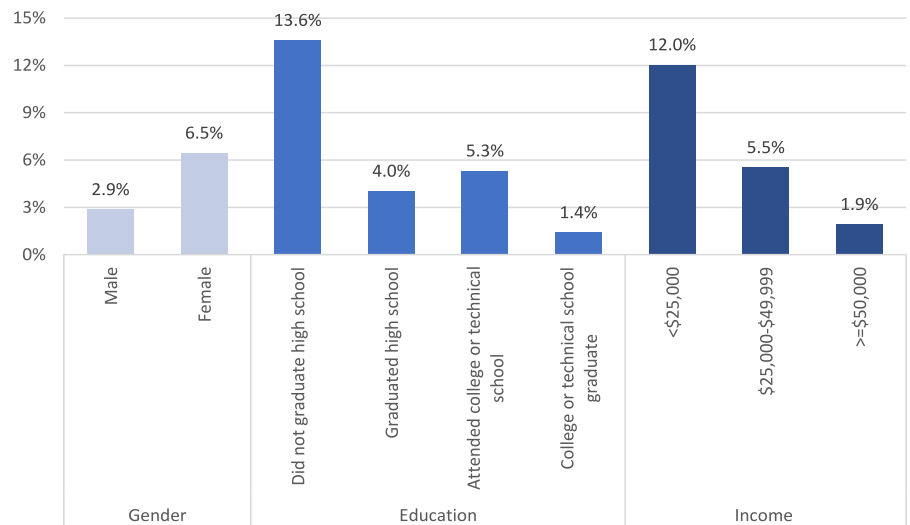
Mental Health

Serious mental illness is a mental, behavioral, or emotional disorder resulting in serious functional impairment, which significantly interferes with or limits an individual's major life activities. In 2014, it was estimated that 4.2% of adults in the United States have serious mental illness.

Mental health problems are more common among female residents of Snohomish County compared to males. They are also more common among residents with lower incomes and less years of education compared to wealthier residents and those with more years of education.

Source: Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from <http://www.samhsa.gov/data/>

Serious Mental Illness by Gender, Education-Level, and Income



Note: Serious mental illness is a composite measure of 6 questions regarding symptoms of nervousness, hopelessness, and depression as well as mental illness and mental illness related stigma. The measure corresponds to the Kessler-6 psychological distress scale.

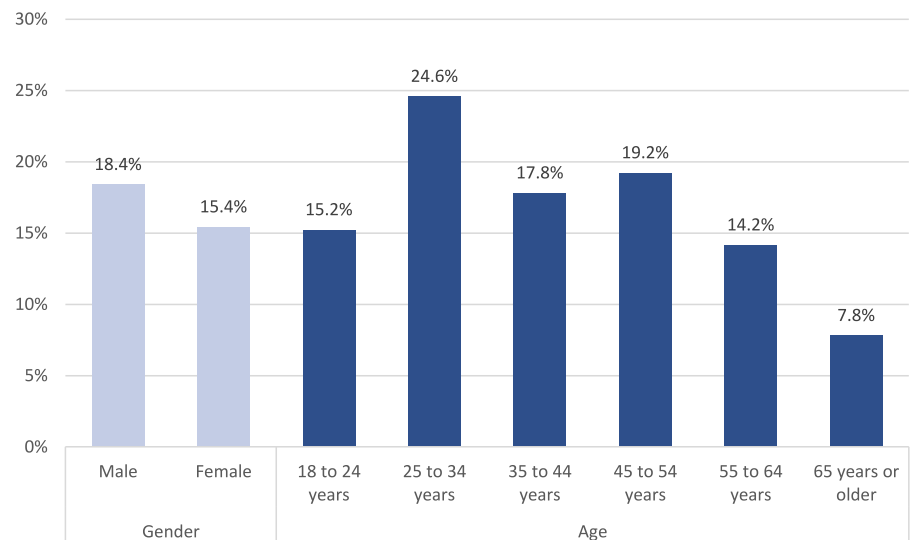
Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Smoking

More male residents of Snohomish County currently smoke cigarettes compared to females.

One in four Snohomish County residents ages 25 to 34 are smokers, and the percentage of adults who are current smokers decreases after age 35.

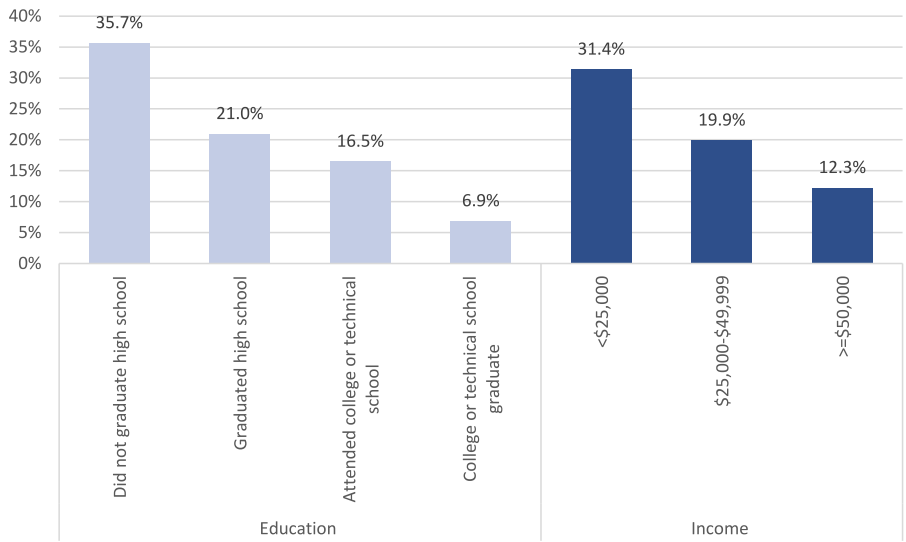
Current Smoking by Gender and Age



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

In general, smoking is more common among Snohomish County residents with less years of education. Smoking rates decrease as education-levels increase. Similarly, smoking is more common among Snohomish County residents with lower incomes compared to those with higher incomes.

Current Smoking by Education-Level and Income



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

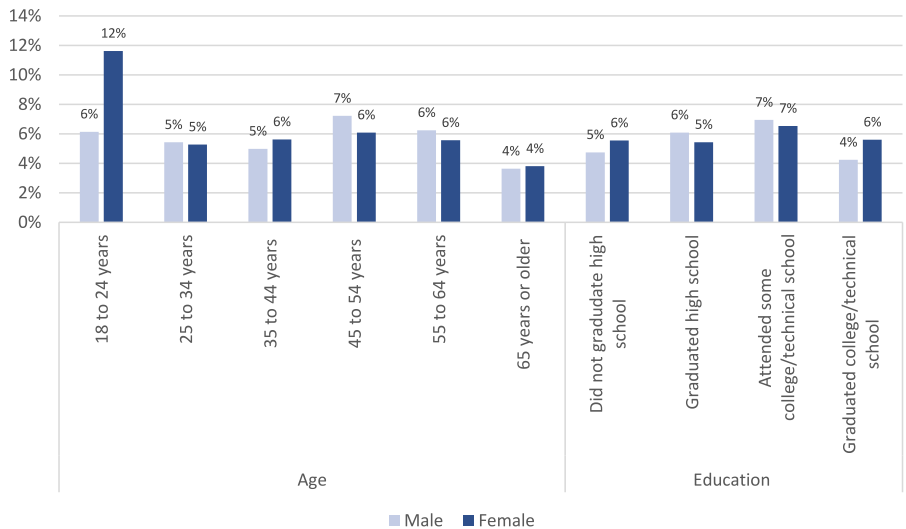
Alcohol Use

In Snohomish County, 58% of residents said they consumed alcohol in the past month.

While alcohol use is often viewed as socially acceptable, excessive use of alcohol is a major cause of death and disability in the United States. Men are generally more likely than women to drink excessively.

Overall, more males in Snohomish County were heavy drinkers than females, though rates vary by age. Heavy drinking rates were greatest for females between the ages of 18 and 24.

Heavy Drinking by Gender and Age



Note: Heavy drinking is defined as consuming 8 or more drinks per week for women and 15 or more drinks per week for men.

Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

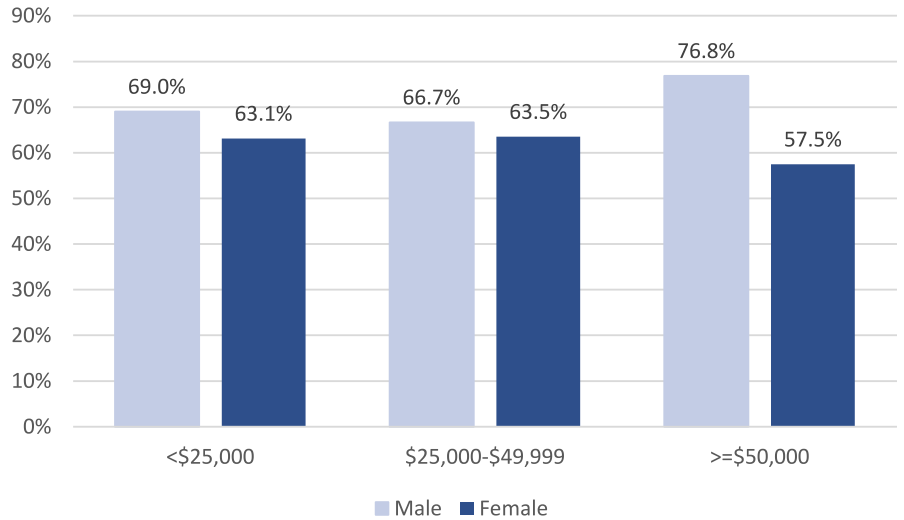
Source: Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. (2016). Fact Sheets - Alcohol Use and Your Health. Retrieved on February 5, 2016 from: <http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>.

Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. (2014). Fact Sheets - Excessive Alcohol Use and Risks to Men's Health. Retrieved on February 9, 2016 from: <http://www.cdc.gov/alcohol/fact-sheets/mens-health.htm>.

Overweight and Obesity

In Snohomish County, 66% of residents are overweight or obese. More males are overweight or obese compared to females, regardless of annual household income. When looking at overweight and obesity rates by sex and income, the greatest percentage of overweight and obese residents are males with annual incomes of \$50,000 or more.

Overweight and Obesity by Gender and Income



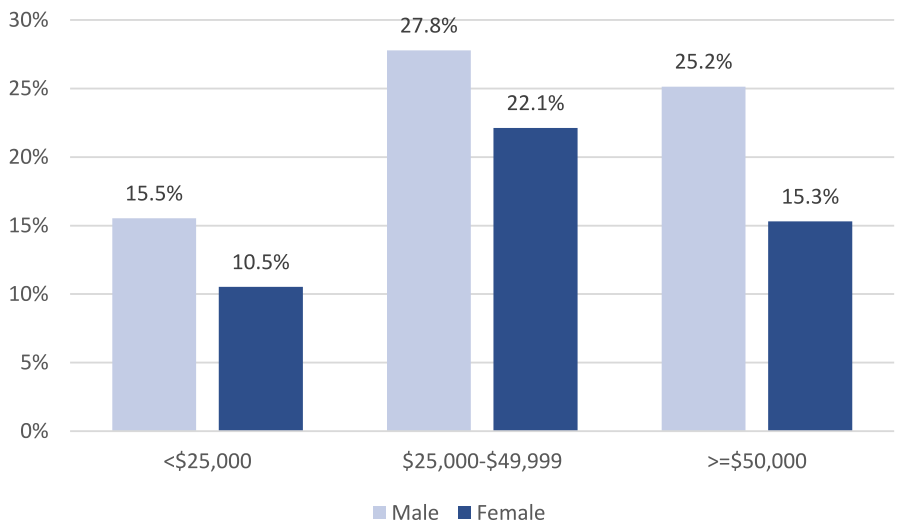
Note: Adults with a body mass index (BMI) between 25.0 and 29.9 are considered overweight, and those with a BMI of 30.0 or higher are considered obese.
 Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Physical Activity

The *Physical Activity Guidelines for Americans* (2008) recommends adults do two types of physical activity each week to improve health: aerobic and muscle-strengthening. In Snohomish County, 20% of residents met both aerobic and muscle-strengthening guidelines, 33% met the aerobic guidelines only, and 9% met the strengthening guidelines only.

More males than females, of any annual income, met the aerobic and muscle-strengthening guidelines. The greatest percentage of residents meeting both guidelines were males and females with an annual income between \$25,000 and \$49,999.

Physical Activity by Gender and Income



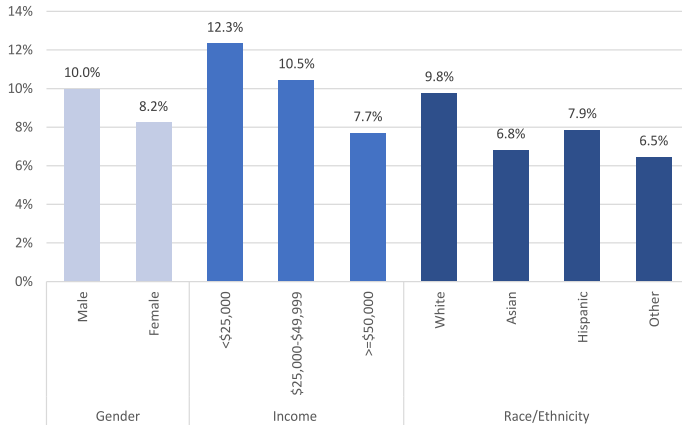
Note: Physical activity is defined as meeting both aerobic and muscle strengthening guidelines.
 Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011 and 2013 supported in part by Centers for Disease Control and Prevention

Diabetes

Diabetes cases are higher among male residents in Snohomish County, and cases vary by annual income and race/ethnicity. Diabetes cases decrease as annual income increases, and diabetes is most common among White non-Hispanic residents.

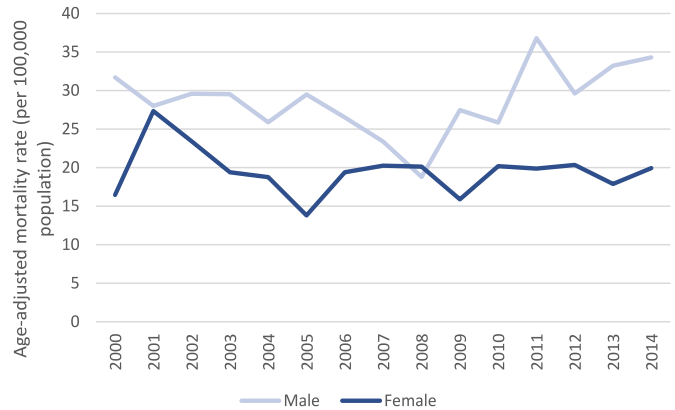
Death rates from diabetes began to increase for males beginning in 2008 (annual percent change (APC) = 7.8, $p < 0.05$). In comparison, the death rates from diabetes have not changed since 2000 for females.

Diabetes by Gender, Income, and Race/Ethnicity



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Age-Adjusted Diabetes Mortality Rate by Gender



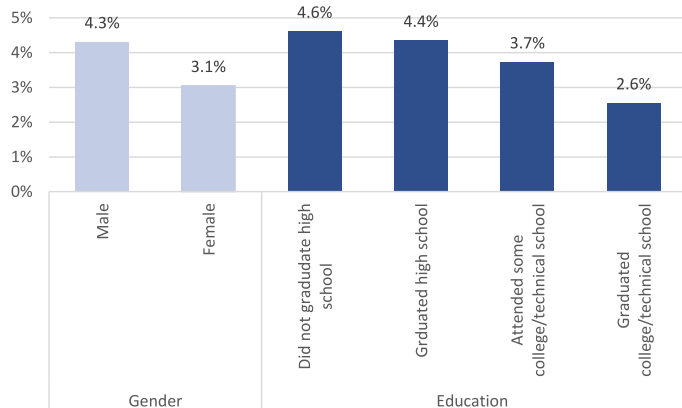
Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990-2014, August 2015.

Cardiovascular Disease (CVD)

Cardiovascular disease is an overall leading cause of death in Snohomish County, yet the rates vary by sex and education level. More males have CVD than females and the percentage of residents with CVD decreases as education levels increase.

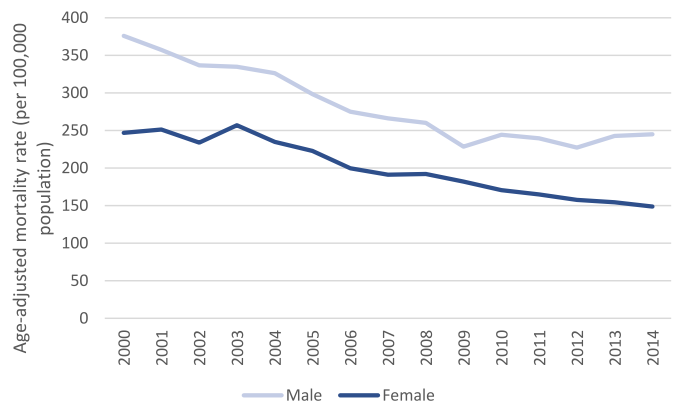
Deaths due to CVD have been decreasing since 2003 for females (APC range: -6.85 to -3.89, $p < 0.05$), while for males

CVD by Gender and Education



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Age-Adjusted CVD Mortality Rate by Gender

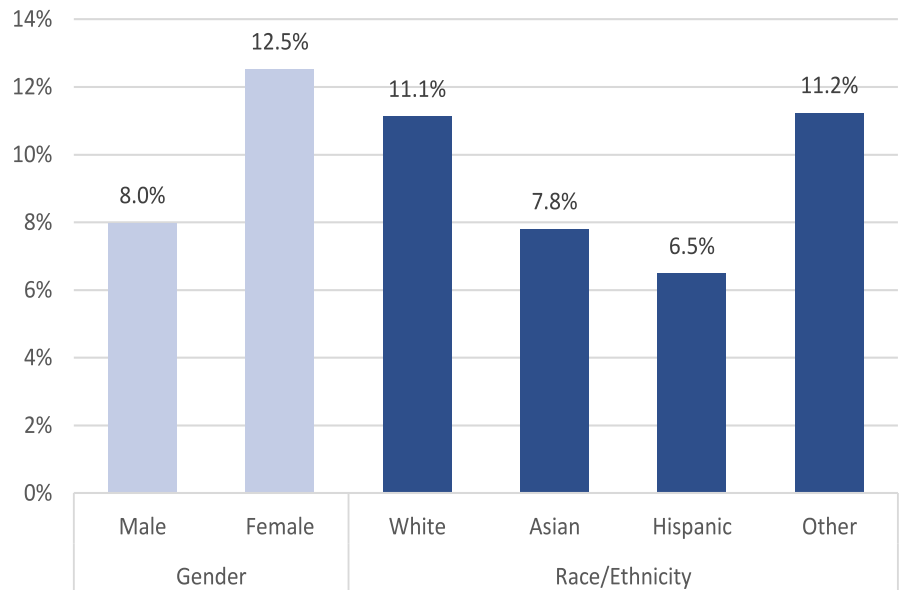


Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990-2014, August 2015.

Asthma

Disparities exist in asthma prevalence and control. When compared, a greater percentage of females than males currently have asthma. More White residents and residents who are Other race/ethnicity have asthma compared to Asian and Hispanic residents.

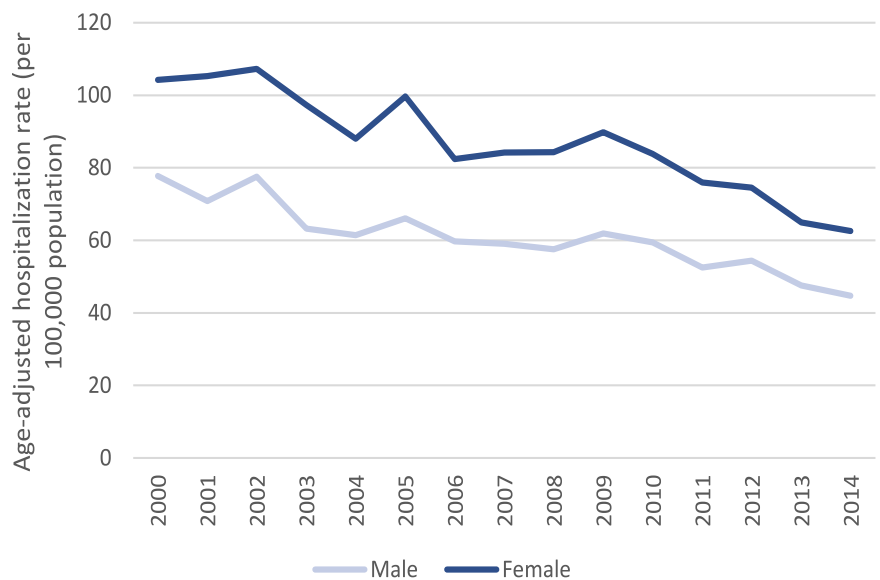
Current Asthma by Gender and Race/Ethnicity



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Among adults with asthma, females are more likely to be hospitalized for care (which may indicate a struggle to control the condition) than males. However, asthma hospitalization rates have been declining for both genders since 2000 (male: APC = -3.2, $p < 0.05$); female: APC = -3.4, $p < 0.05$).

Age-Adjusted Asthma Hospitalization Rate by Gender



Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Health Care Coverage

Almost three-quarters of residents have private health care coverage offered through an employer or union or purchased on their own; 18% have coverage through the government, either Medicare or Apple Health; 4% have coverage through TRICARE, VA, or the military.

Only 1% of residents reported have no health care coverage. The large percentage of residents with some form of health care coverage is likely a result of the Patient Protection and Affordable Care Act passed by President Obama in 2010.

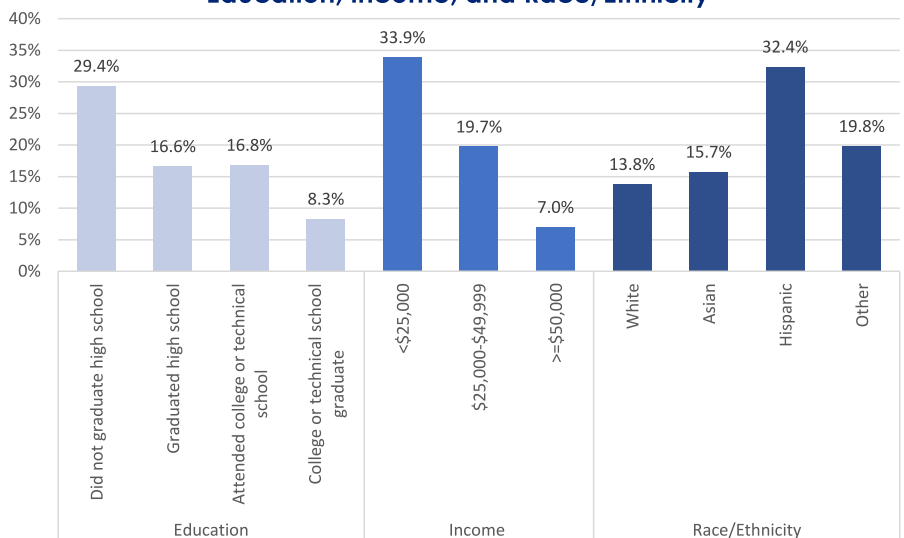
| Primary Source of Health Care Coverage | Percent |
|---|---------|
| Through your employer or union (or another person's employer) | 58% |
| Bought on your own, or family member bought it on his/her own | 13.3% |
| Medicare | 12.5% |
| Medicaid/Apple Health | 6.4% |
| TRICARE, VA, or the military | 3.6% |
| Indian Health Service or Alaska Native Health Service | 0.2% |
| Other | 2.8% |
| No health care coverage | 0.8% |

Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2014, supported in part by Centers for Disease Control and Prevention

In the past year, 16% of adults needed to see a doctor but could not because of the cost. This varies by education level, income, and race/ethnicity.

Adults with fewer years of education or with lower income levels are more likely to not see a doctor because of cost. A larger percentage of Hispanic adults, compared to White and Asian adults, are more likely to not see a doctor because of cost.

Could Not See Doctor because of Cost by Education, Income, and Race/Ethnicity

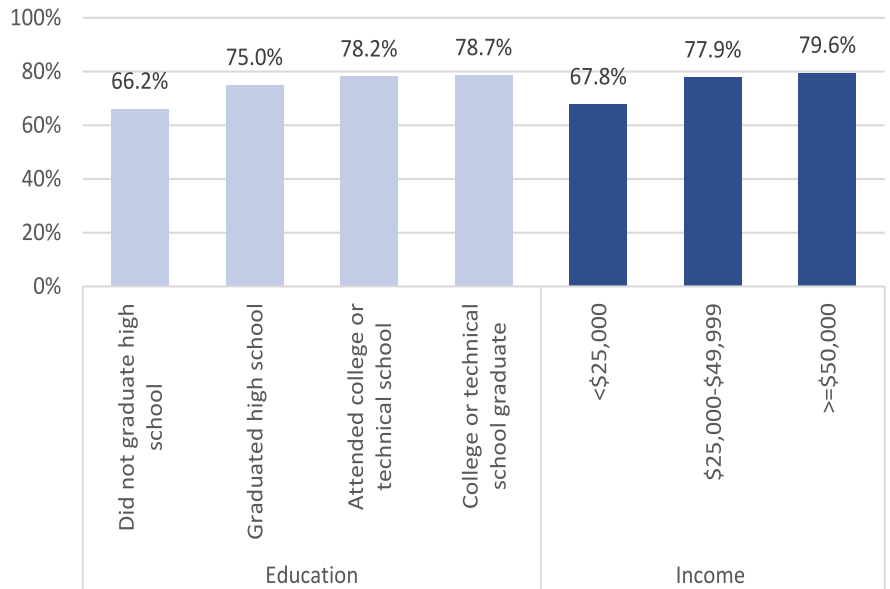


Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Mammography

In Snohomish County, women with more years of education or higher incomes are more likely to have had a mammogram in the past 2 years compared to women with fewer years of education or lower incomes.

Mammography Screening (Past 2 Years) among Women 50 Years and Older by Education and Income

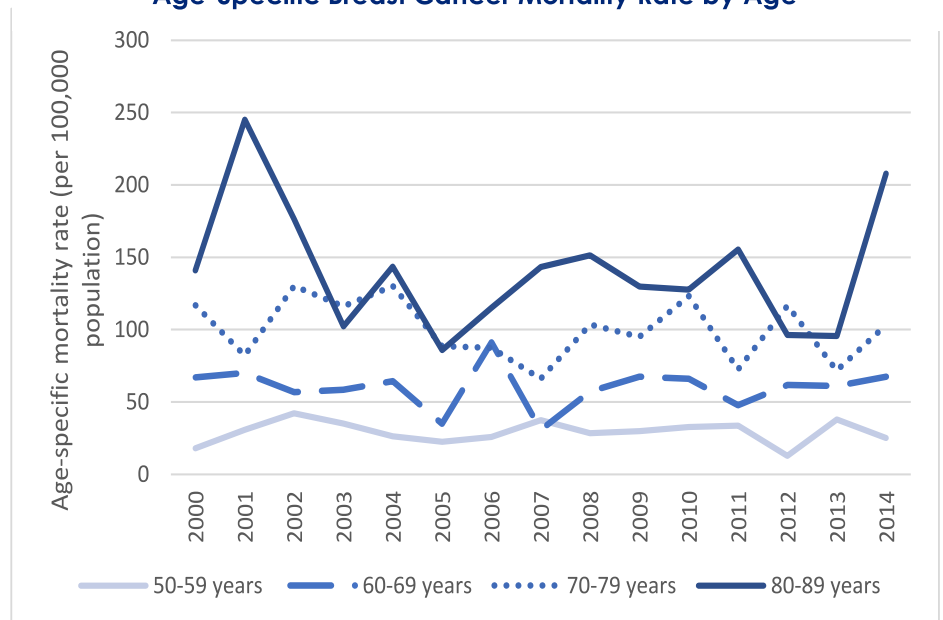


Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Breast Cancer Mortality

Among women in Snohomish County, breast cancer mortality rates increase with age. Generally, women between the ages of 50 and 69 years have a lower breast cancer mortality rate than women between the ages of 70 and 89 years. Looking at each age group separately, breast cancer mortality rates on average, have remained stable between 2000 and 2014.

Age-Specific Breast Cancer Mortality Rate by Age

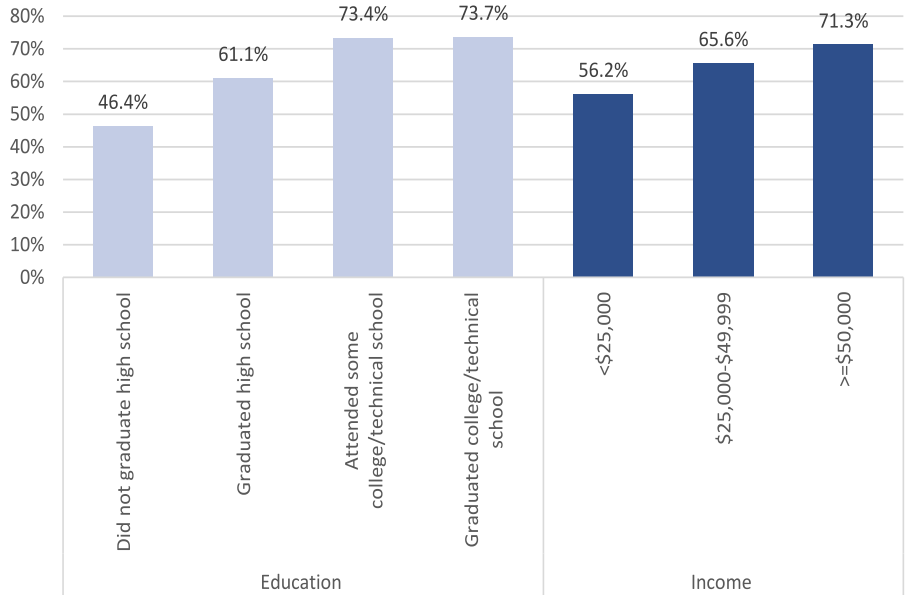


Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990-2014, August 2015.

Colorectal Cancer Screening

The U.S. Preventative Services Task Force recommends screening for colorectal cancer beginning at age 50 years and continuing until age 75 years. In Snohomish County, colorectal cancer screening varies by education- and income-levels. Residents with more years of education and higher income levels are more likely to have had a colonoscopy or sigmoidoscopy.

Colorectal Cancer Screening (Ever) among Adults Ages 50-70 years by Education and Income

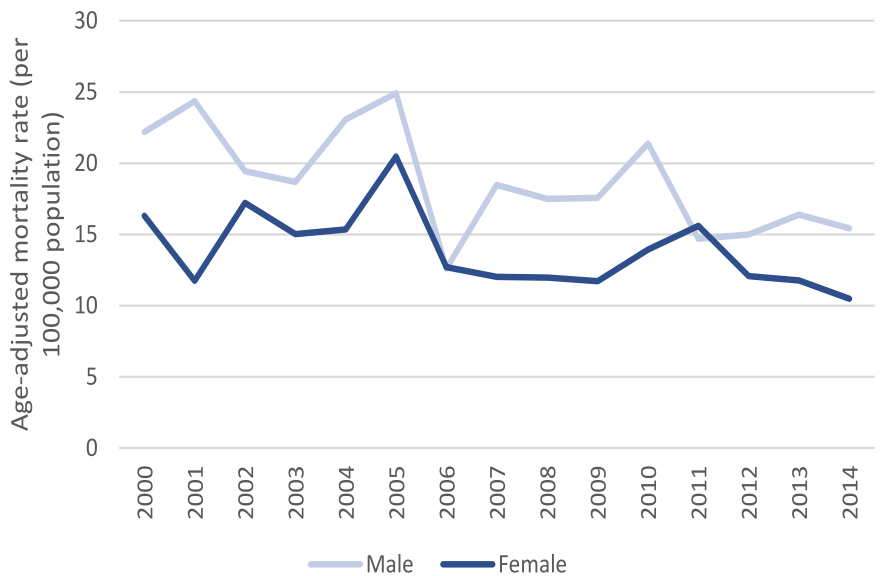


Note: Colorectal cancer screening includes ever having a colonoscopy or sigmoidoscopy. Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System 2011-2014, supported in part by Centers for Disease Control and Prevention

Colorectal Cancer Mortality

Age-adjusted colorectal cancer mortality rates have, on average, declined between the years 2000 and 2014 for both males (APC = - 2.74, $p < 0.05$) and females (APC = - 2.18, $p < 0.05$). However, mortality rates continue to be higher for males compared to females.

Age-Adjusted Colorectal Cancer Mortality Rate by Gender

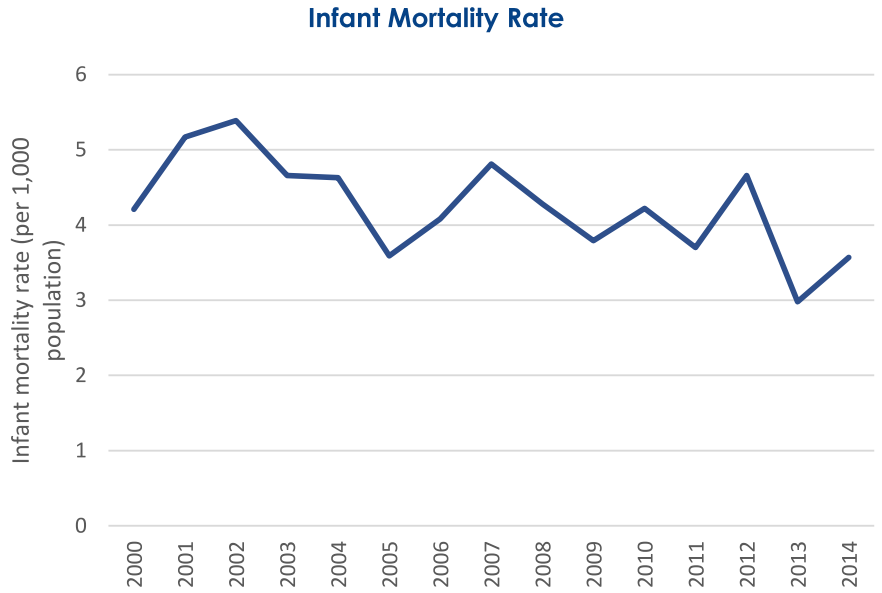


Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Birth Outcomes

Infant Mortality

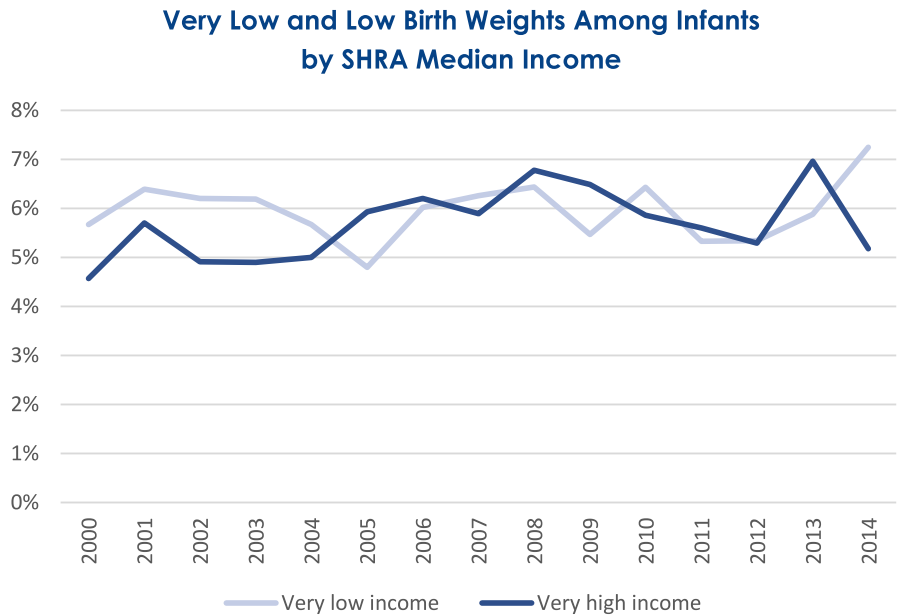
The infant mortality rate is the number of infant deaths for every 1,000 live births. This rate can be used as an indicator of a community's health and well-being. Factors influencing the health of an entire population can also affect mortality rates of infants. In Snohomish County, the infant mortality rate decreased between 2000 and 2014 (APC = -2.2, $p < 0.05$)



Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Low Birth Weight

A birth weight of less than 5.5 pounds is considered low birth weight. In Snohomish County, the percentages of babies born with low birth weights to mothers living in very low income and very high income SHRAs have remained relatively stable since 2000. Babies born at low birth weights may be more at risk for many health problems early in life as well as long-term problems, such as delayed motor and social development.



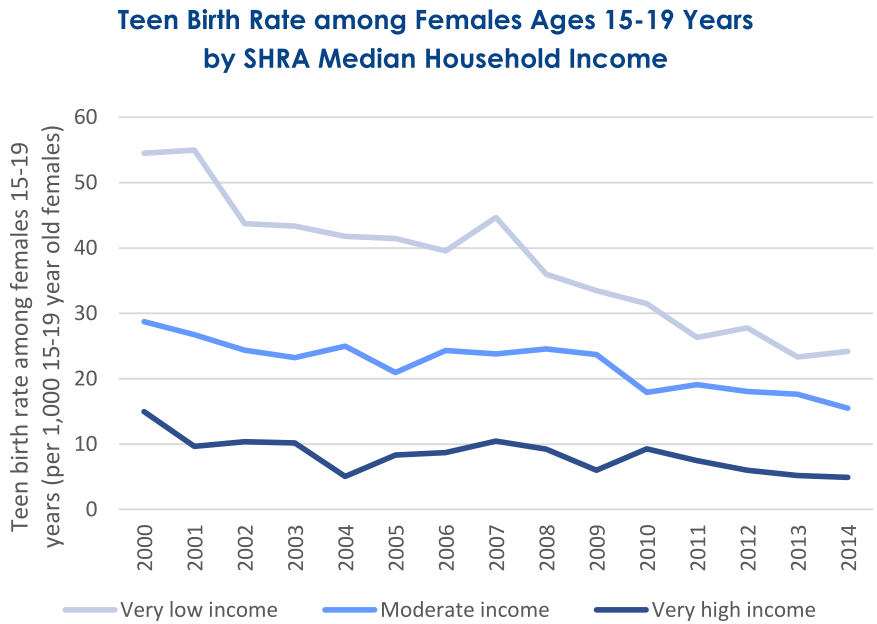
Source: Washington State Department of Health, Center for Health Statistics (CHS), Birth Certificate Data, 1990-2014, August 2015.

Adolescent Health Outcomes

Teen Birth Rate

In Snohomish County, the birth rate among 15 to 19 year olds has significantly decreased between 2000 and 2003 (APC = -9.52, $p < 0.05$) and 2007 and 2014 (APC = -7.35, $p < 0.05$).

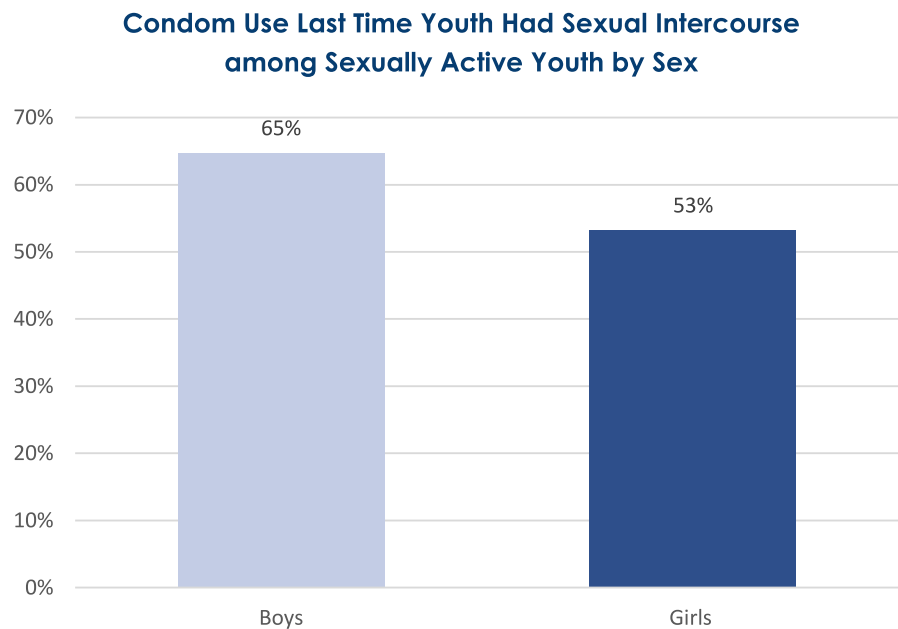
However, teen birth rates vary considerably based on the average median income of the SHRAs. The relationship between the teen birth rate and average median income is on a gradient; SHRAs with lower annual incomes tend to have more births to teens.



Source: Washington State Department of Health, Center for Health Statistics Birth Certificate Data, 1990–2014, August 2015.

Condom Use

In Snohomish County, among sexually active teens, more males reported using a condom the last time they had sex compared to females.

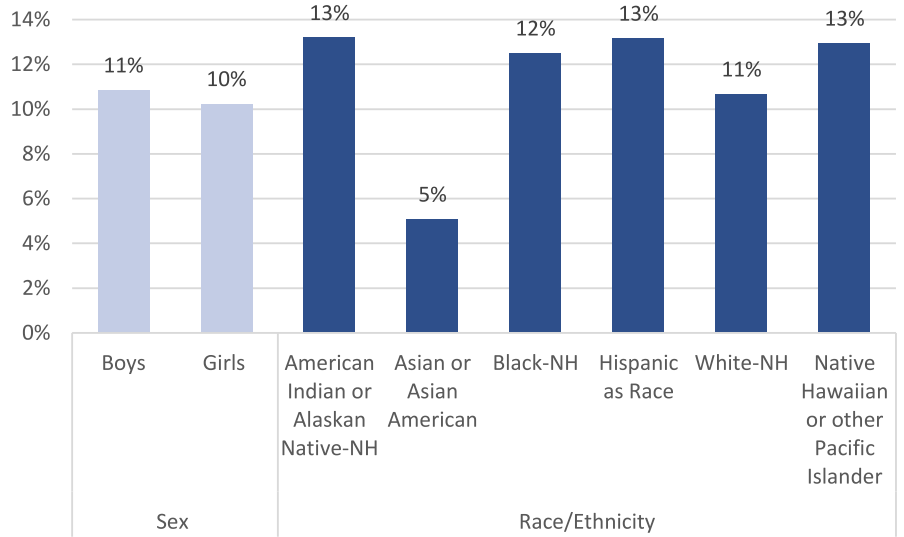


Source: Healthy Youth Survey, Olympia, WA: Washington State Department of Health; 2014.

Binge Drinking

In the past two weeks, 11% of high school students reported binge drinking. For boys, this means they consumed 5 or more drinks in the span of two hours, while girls consumed 4 or more drinks in the same amount of time. While binge drinking does not vary by sex in Snohomish County, it does vary by race/ethnicity. More students who identified as Hispanic, American Indian or Alaska Native, Black, or Native Hawaiian or other Pacific Islander said they engaged in binge drinking than students who identified as Asian or Asian American.

Binge Drinking by Sex and Race/Ethnicity

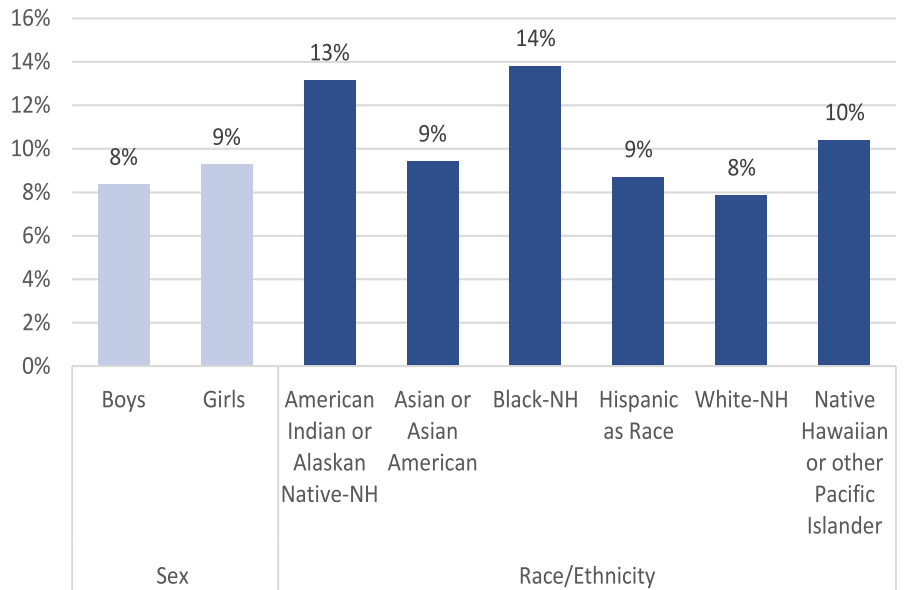


Source: Healthy Youth Survey, Olympia, WA: Washington State Department of Health; 2014.

Teen Dating Violence

In the past year, 9% of high school students reported being hit, slammed into something, or injured with an object or weapon by someone they were dating. These students are victims of teen dating violence. A similar percentage of boys and girls reported being victimized by a dating partner. More students who identified as American Indian or Alaska Native and Black were victimized compared to students who identified as Asian or Asian American, Hispanic, White, and Native Hawaiian or other Pacific Islander.

Teen Dating Violence Victimization by Sex and Race/Ethnicity



Source: Healthy Youth Survey, Olympia, WA: Washington State Department of Health; 2014.

Conclusions

The burden of illness and death among Snohomish County residents is linked to income, education, race/ethnicity, and gender. Regardless of the specific mechanisms through which these factors influence health, the disparities are clear. How can Snohomish County residents, community organizations, health care providers, government agencies, and advocates use this information to improve health and reduce disparities?

There are no quick fixes to this issue. Acknowledging that social conditions greatly influence health forces us to also acknowledge that the challenge of reducing disparities is intimidating. Regardless of the challenge, the information in this report may be used to move us closer to the goal of health equity:

1. Target resources, interventions, or programs to Snohomish Health Reporting Areas or smaller communities most at risk of poor health outcomes because of social and economic conditions.
2. Public health is the responsibility of more than just the health care and public health communities. Health is affected by education, housing, employment, access to green space and other factors. Given this, multi-disciplinary teams and approaches are needed to address health and health disparities.

PUBLIC HEALTH
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SNOHOMISH COUNTY

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 23

**SNOHOMISH COUNTY HEALTH NEEDS
ASSESSMENT 2017-2018**



Snohomish County, WA
COMMUNITY HEALTH
ASSESSMENT **2018**

Published December 2019



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Acknowledgements



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Executive Summary



The Snohomish Health District is pleased to share the 2018 Community Health Assessment for Snohomish County. District staff and community partners analyzed more than 150 health indicators to identify the top priorities for the county. The data task force included members of the Snohomish County Public Health Advisory Council and other subject matter experts. The goal of this report is to share the results of that analysis.

Since 1959, the District has been responsible for the health of the people of Snohomish County. The District has conducted a community health assessment (CHA) every five years since 2009. The CHA is a key document leading to more in-depth analysis of the top issues. The work culminates in a community health improvement plan (CHIP) for addressing the county’s biggest health concerns. The hope is that this assessment will assist civic leaders, community members, and non-profit organizations in their health improvement planning, as well.

SIGNIFICANT COMMUNITY NEEDS

District epidemiologists collected data on community health indicators through qualitative and quantitative means. Quantitative data relies on hard numbers, while qualitative data includes richer descriptive information that can’t be counted or expressed with a number. When possible, county data was compared to state and national figures, as well as previous years and Healthy People 2020 goals. These comparisons help ascertain the current status of public health in the county and whether the indicators are trending in a positive or negative direction.

For eight months, data on these indicators were presented to the data task force. The group worked to whittle the number of topics down to eight that members felt should be examined more closely. These eight were: suicide; youth mental health; opioid misuse; children’s oral health; housing; access to primary care; youth obesity; and disparities specific to the American Indian/Alaska Native population. Three community events, called data walks, took place in fall 2018. Participants examined and shared observations on these eight topics. Participants then ranked the eight topics in order of importance. The rankings are shown below.

| Everett walk | Lynnwood walk | Monroe walk | Total ranking |
|---|---|---|---|
| Youth mental health | Suicide | Youth mental health | Youth mental health |
| Suicide | Youth mental health | Suicide | Suicide |
| Housing | Opioid misuse | American Indian/Alaska Native disparities | Opioid misuse |
| Opioid misuse | American Indian/Alaska Native disparities | Opioid misuse | Housing |
| Youth obesity | Housing | Housing | American Indian/Alaska Native disparities |
| American Indian/Alaska Native disparities | Health care access | Health care access | Youth obesity |
| Health care access | Youth obesity | Youth obesity | Health care access |
| Children’s oral health | Children’s oral health | Children’s oral health | Children’s oral health |

Executive Summary (cont.)



Several other key findings from the CHA include:

| Doing well | Needs improvement |
|---|---|
| Children living under the Federal Poverty Level | Asthma-related hospitalizations |
| Homicide (Assault-related mortality) | Acute Hepatitis C |
| Cigarette smoking | Youth spending two or more hours a day on a computer or playing video games |
| Melanoma mortality | |
| Youth impaired driving | |
| Lung cancer mortality | |
| Motor vehicle crash mortality | |

About Snohomish County



Snohomish County is located in the northwest corner of Washington and the northern part of the Seattle metropolitan area. The county was created in 1861 and is named for the Snohomish Native American tribe. Snohomish County is 2,086.6 square miles.





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Introduction



HISTORY

The District completed its previous community health assessment (CHA) in 2013, with a mid-cycle update in 2016, to measure the health status and needs of Snohomish County residents. District staff gathered and analyzed data on 80 indicators, covering rates of disease or death, environmental measures, and behavioral risks. This data was presented, scored, and prioritized. Obesity, suicide, and youth physical abuse were identified as the top three health issues in the county at that time.

Working groups formed to create the 2014 Snohomish County Community Health Improvement Plan (CHIP), which included objectives to address those issues over five years. CHIP outcomes included:

- Providing suicide/crisis line information and instruction cards to the two primary emergency and discharge planning departments in Snohomish County (Providence Regional Medical Center Everett and Swedish Edmonds). A total of 1,000 cards were distributed, along with reordering instructions.
- Increasing the number of school districts that have adopted a suicide prevention curriculum from eight to 13 districts.
- Increasing safe pedestrian and bicycle access to schools through walking audits of all elementary schools in the county, then implementing recommendations from those audits.
- Improving options and access to physical activity through promotion of Complete Streets ordinances and resolutions, as well as partnering with cities on Safe Routes to School grants.

ABOUT THE 2018 COMMUNITY HEALTH ASSESSMENT PROCESS

This report is the result of a process for identifying Snohomish County's greatest health needs through a wide range of indicators. Those indicators include disease rates, leading causes of death, health risk behaviors, and social determinants of health.

By examining social determinants and other community risk factors such as housing issues and air quality, this report covers health in its broadest sense. It takes an in-depth look at upstream factors for early death or poor health. Specific efforts were made to identify health disparities to better target marginalized or vulnerable populations.

Three District epidemiologists analyzed the data and presented it to the data task force during monthly meetings from January through August 2018. The findings of the task force, combined with public input from three community data walks held in the fall of 2018, were used to determine the issues that are most detrimental to the health of Snohomish County residents.

The 2018 Snohomish County Community Health Assessment is part of the District's four-step CHA-CHIP process. This process was developed by adapting frameworks used from the Missouri Community Health Assessment Resource Team (<https://www.nap.edu/read/5298/chapter/6#82>) and Island County Public Health. The process requires:

- 1) Assessing the health of the community using indicators
- 2) Analyzing and prioritizing health issues
- 3) Developing and implementing a community health improvement plan (CHIP), and
- 4) Evaluating the process and outcomes.

This cycle repeats every five years. The first two steps are accomplished in the CHA.



ABOUT THE 2018 COMMUNITY HEALTH ASSESSMENT PROCESS (CONT.)

2018 Community Health Assessment Process



Methods



ABOUT THE DATA

A team of District staff and community partners collected and analyzed data for this community health assessment (CHA). The assessment incorporates both quantitative and qualitative data. Quantitative data is numerical information that can be counted or measured, such as a rate or percentage. Qualitative data provides richer descriptive information about a particular topic but cannot be counted or measured in numbers. Both types of data are needed to get the full picture of health priorities and concerns in Snohomish County.

QUANTITATIVE DATA

Every health indicator examined for this report includes the measure on a county level and, when applicable, a comparison with Washington and U.S. data. The information largely came from surveys or databases maintained by the District or Washington State Department of Health, such as vital statistics data.

The indicators were given a comparison score of plus or minus one point if Snohomish County was at least 20% different from the state or national comparison value. Additionally, staff analyzed the trend over time, looking at a minimum of three data points and a maximum of ten. How a measure changed over time factored into another plus-one or minus-one point – plus if the trend was toward a healthier outcome, minus if the trend was less healthy.

Finally, goals were looked at using the U.S. Department of Health & Human Services Healthy People 2020 objectives, as well as the Robert Wood Johnson Foundation County Health Rankings when available. A plus-one was awarded if goals are being met, and a minus-one if they are not.

These three factors resulted in an indicator's total score, ranging from a negative three (-3) to positive three (+3). For each health module, a summary table is included at the end of the section in this report. The tables are organized by total score, and color coded red, yellow and green. The red indicators are the lowest scoring, and therefore are of highest concern. The green indicators are faring well. Most indicators fell into the middle and are yellow for neutral.

When feasible, demographic data such as race, ethnicity, gender, or age were examined for sub-population analysis to identify disparities. For more information on the quantitative scoring methodology, please see Appendix A: Data Analysis Methods.

DATA SOURCES

Population-based health data is the best quantitative data to use in a CHA. This data is accessible at the county and state level. Most of the following sources are considered standard, and all are reliable and valid.

Population Counts

- Washington State Department of the Office of Financial Management

Birth and Death Data

- Washington State Department of Health Center for Health and Statistics

Socioeconomic Data

- United States Census Bureau
- Washington State Employment Security Department
- Workforce Development Council of Seattle-King County

Methods (cont.)



DATA SOURCES (CONT.)

Disease or Injury Surveillance Data

- Washington State Cancer Registry
- Washington State Department of Health Center for Health and Statistics

Health Survey Data

- American Community Survey (ACS)
- Behavioral Risk Factor Surveillance System (BRFSS)
- Pregnancy Risk Factor Monitoring System (PRAMS)
- Smile Survey
- Washington Healthy Youth Survey (HYS)

Note: This list does not contain every source used in this report. Numerical citations in-text can be linked to their corresponding source in the Sources section.

QUALITATIVE DATA

In the fall of 2018, the District gathered qualitative data through three public events called data walks. These data walks, guided by facilitators from the Northwest Opportunity Council from Bellingham, Washington, involved a four-step process. During each event, participants walked around a room and stopped at eight topic-based stations to examine preliminary health assessment data presented in charts and graphs on large posters. The eight topics covered were: youth mental health; suicide; American Indian/Alaska Native health disparities; opioids; housing, vacancy and homelessness; obesity; youth dental health; and access to primary care providers. These topics were selected by the data task force by an anonymous vote after reviewing the data they had received in the prior eight months.

Working in small, facilitated groups, participants shared observations on each data set, including strengths and concerns. Step two of the process involved selecting a top concern and brainstorming possible root causes of that concern. The third step was finding which root cause would be the strongest catalyst for improving the issue. To be considered a good candidate for step three, a root cause must be highly significant and highly within the control of interested parties, including the District and its partners throughout Snohomish County.

All total, 52 people participated in these walks and voted on which health indicators they felt were most important and impactful in Snohomish County. Participants represented many backgrounds, including hospitals, education, elected officials, and social workers.

At the first meeting, teams focused on each of the eight topics. The teams were assigned in advance by the project manager and data task force. At the end of the meeting, participants voted on what they felt the three most important issues were out of the eight covered. The groups selected youth mental health, suicide, and housing as their top three priority topics for health in Snohomish County.

The next two data walks covered the first step of the process in full, where participants walked around and recorded observations on all eight topics. Then, they could self-assign themselves to a topic-based group for one of three subjects: youth mental health, suicide, or opioid misuse. In those groups, they completed the final steps of the data walk process, including the root cause analysis. At the final event, no one chose to participate in the opioid discussion.

As new data has been released since the data walks were held, new issues potentially impacting Snohomish County residents' health have been identified. The data task force is paying close attention to the large increase seen in 2018 in youth vaping habits, and have deemed the matter an 'emerging issue' in addition to the eight topics discussed in the data walks.



CONSIDERATIONS & LIMITATIONS

While this assessment is quite comprehensive, there is no way to capture every unique perspective or population of interest in Snohomish County through quantitative data, which is limited by the selection and participation of stakeholders. Some groups are not captured in telephone survey data, such as homeless or incarcerated individuals, those living in a group home or facility, or those who speak languages other than English or Spanish. With Washington and Snohomish County having a higher Asian and Pacific Islander/Native Hawaiian population compared to the country as a whole, this means residents who speak only Mandarin, Tagalog, or other Asian or Pacific Islander dialects may not be fully represented in survey data. LGBTQ populations and smaller racial groups, including Native Hawaiian or Pacific Islander, often are too small of a group to have the data be considered accurate in survey analysis.

Additionally, in telephone surveys some respondents may not feel comfortable being entirely honest, particularly about substance use on the Behavioral Risk Factor Surveillance System or Pregnancy Risk Assessment Monitoring System. While the Healthy Youth Survey is in pencil-and-paper format and is anonymous, students may fear being identified through their answers, which can impact the validity of that survey.

Demographics

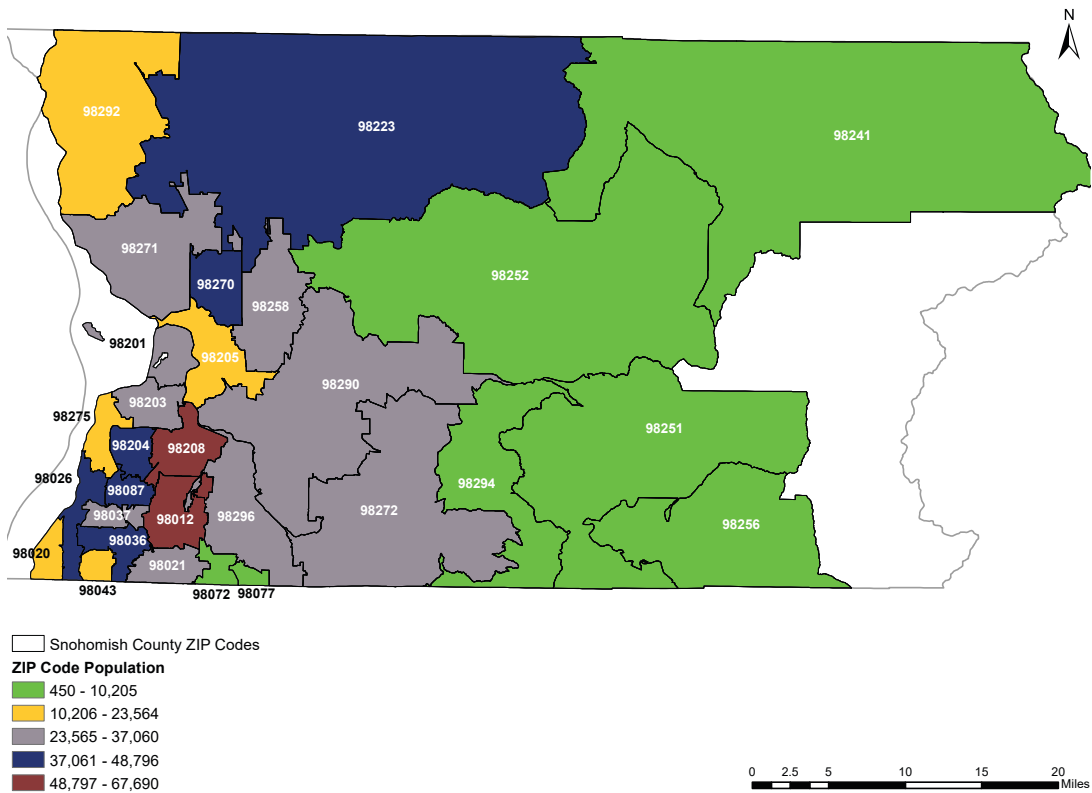


POPULATION

This assessment concerns people who live within the geographic boundaries of Snohomish County. There are 29 ZIP codes fully or partially in these boundaries. These ZIP codes are shown below by population size.

The population of Snohomish County was estimated to be 818,700 in 2019, which is approximately 9.2% of Washington's total population. Between 2010 and 2019, the county's population grew 14.8%, faster than the state's growth of 12.2% in that same period¹. ZIP codes 98012 (Mill Creek/Bothell), 98087 (Paine Field/Picnic Point/Martha Lake) and 98205 (Lake Stevens) have seen the highest population growth in that time, at over 30%².

Figure 1: 2019 Population by ZIP Code



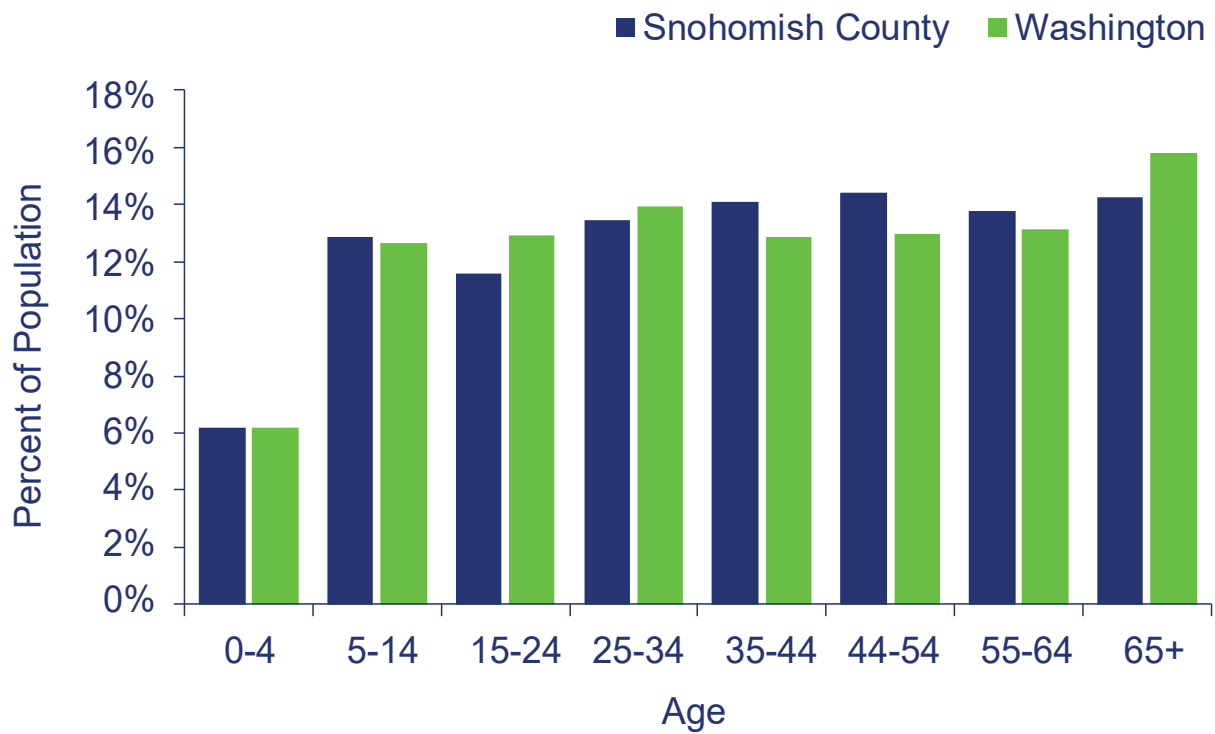
Demographics (cont.)



AGE

Snohomish County has a higher proportion of middle-aged residents than the state. People who are 35 to 54 years old make up 28.3% of the county's total population compared to 25.6% of the state's population¹.

Figure 2: 2018 Population by Age



Demographics (cont.)



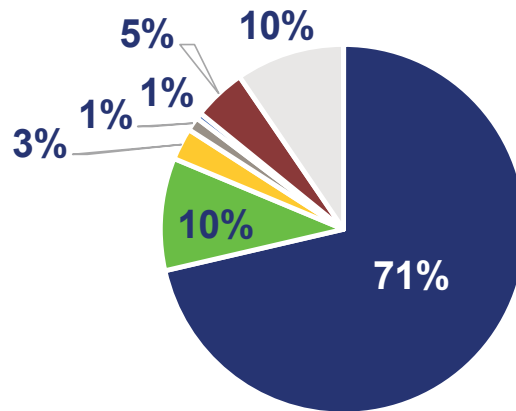
RACE, ETHNICITY, AND LANGUAGE

Snohomish County is less racially and ethnically diverse than the state. A smaller proportion of the population is Hispanic (9.6% compared to 11.5% statewide) or Black (2.8% compared to 3.6% statewide). However, the Asian population makes up a larger percentage of the county than the state (9.9% compared to 7.7%).

Snohomish County is becoming more diverse over time. In 2000, 83.4% of the population was white. That number is now 71.4%¹. Figure 3 below shows this data (with Hispanic people of all races combined).

Figure 3: 2018 Snohomish County Population by Race

- White
- Black
- Native Hawaiian/Pacific Islander
- Hispanic as Race
- Asian
- American Indian/Alaska Native
- Two or More Races



Demographics (cont.)



The table below shows languages spoken at home by adults and children older than five in Snohomish County, compared to state and national figures. Typically, those 65 and older who speak a language other than English at home are more likely than other age groups to say they do not speak English very well³.

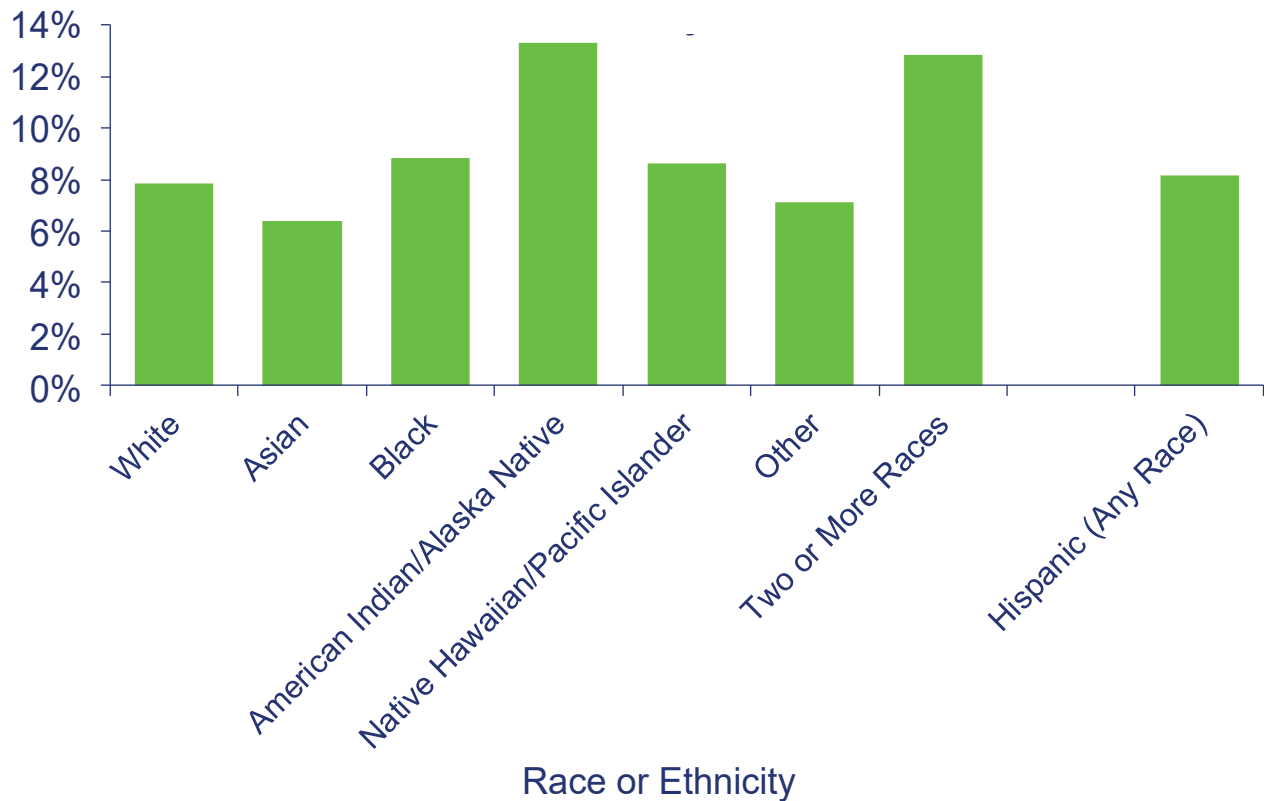
| | Snohomish County | Washington | United States |
|--|------------------|------------|---------------|
| Speak only English at home | 80.0% | 80.9% | 78.7% |
| Speak Asian/Pacific Islander languages at home | 7.2% | 5.7% | 3.5% |
| Speak Spanish at home | 6.4% | 8.4% | 13.2% |
| Speak Indo-European languages at home | 4.8% | 3.9% | 3.6% |
| Speak other languages at home | 1.6% | 1.1% | 1.0% |



Median Income: The median household income in Snohomish County in 2017 (\$78,020) was far higher than the state (\$66,174) and U.S. (\$57,652). Snohomish County saw a six percent increase in median household income from 2016 to 2017⁴.

Unemployment: Snohomish County had an overall unemployment rate of 3.8% in 2018, which is similar to the state (4.5%) and U.S. (4.4%) rates⁵. As seen in Figure 4 below, unemployment was lowest in the Asian population and highest in the American Indian/Alaska Native population.

Figure 4: 2017 Snohomish County Unemployment by Race or Ethnicity



Economy & Housing (cont.)

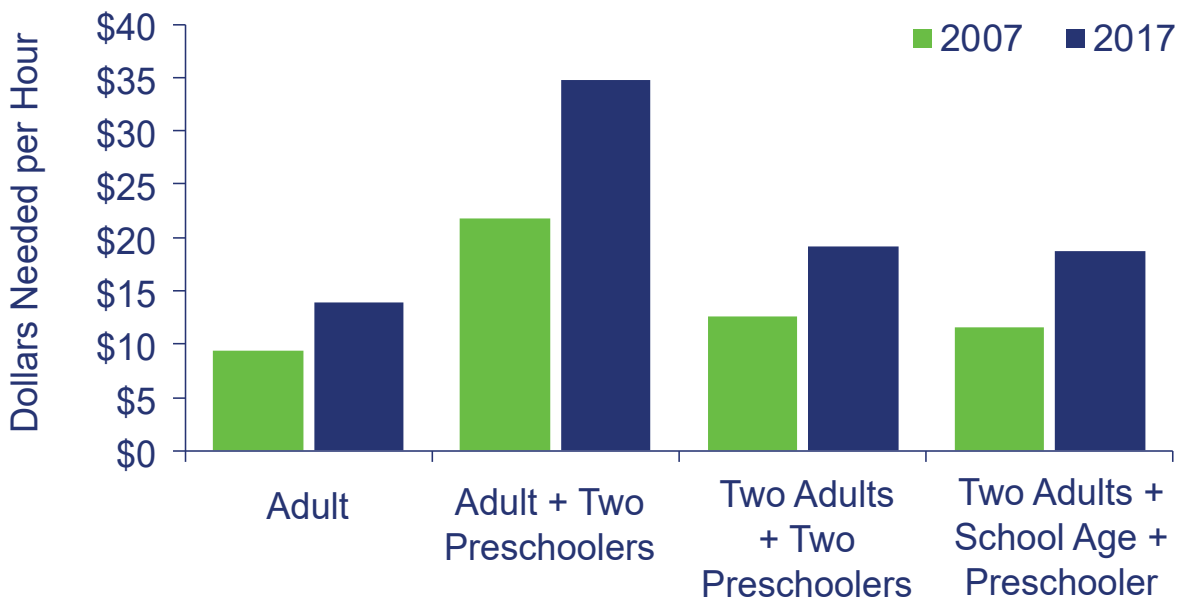


Poverty: An estimated 8.8% of people living in Snohomish County in 2017 were under the Federal Poverty Level (FPL). In 2017 the FPL was defined as a single person making \$12,060 a year or a four-person household making \$24,600 a year. While this is better than the state (12.2%) and U.S. (14.6%) rates, the data shows that poverty is more common among certain groups. Over 11% of children in the county are below the FPL, as are 28.6% of single women with children. Those who identified themselves as Hispanic ethnicity of any race or 'other' for race also were more likely to be below the FPL (15.6% and 17.6%, respectively)⁴.

Cost of Living: The Self-Sufficiency Standard defines the minimum income needed to meet basic needs without assistance from government, community or personal aid. As of 2017, a single parent in Snohomish County with one school-aged child and one preschooler would need to make \$18.69 an hour at a full-time job to meet these needs—the highest self-sufficiency standard in the state⁶.

Assistance: In 2017, 11.1% of households in the county had received SNAP benefits in the prior 12 months. This is a lower percentage of households compared to the state (13.3%) or U.S. (12.6%)⁴. In 2018, 33.3% of public school students in the county were in the Free and Reduced Price Meal program. That was lower than the state percentage (43.4%)⁷.

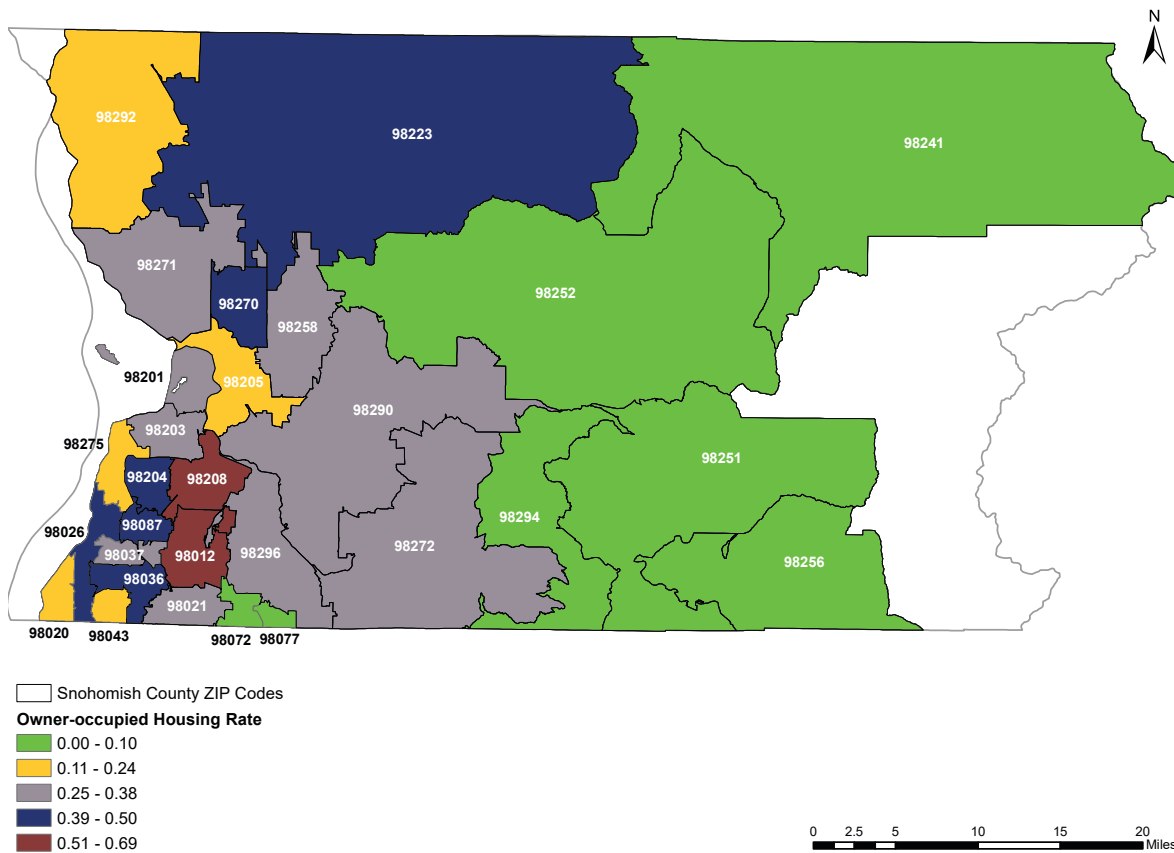
Figure 5: Snohomish County Self-Sufficiency Standard





Housing: Two-thirds (66.6%) of homes in the county are occupied by homeowners. However, there is great variation by ZIP code, with 98204 (south Everett) seeing 32.6% of homes occupied by the owner, and 98077 (Maltby) seeing 93.9% of homes occupied by the owner⁸.

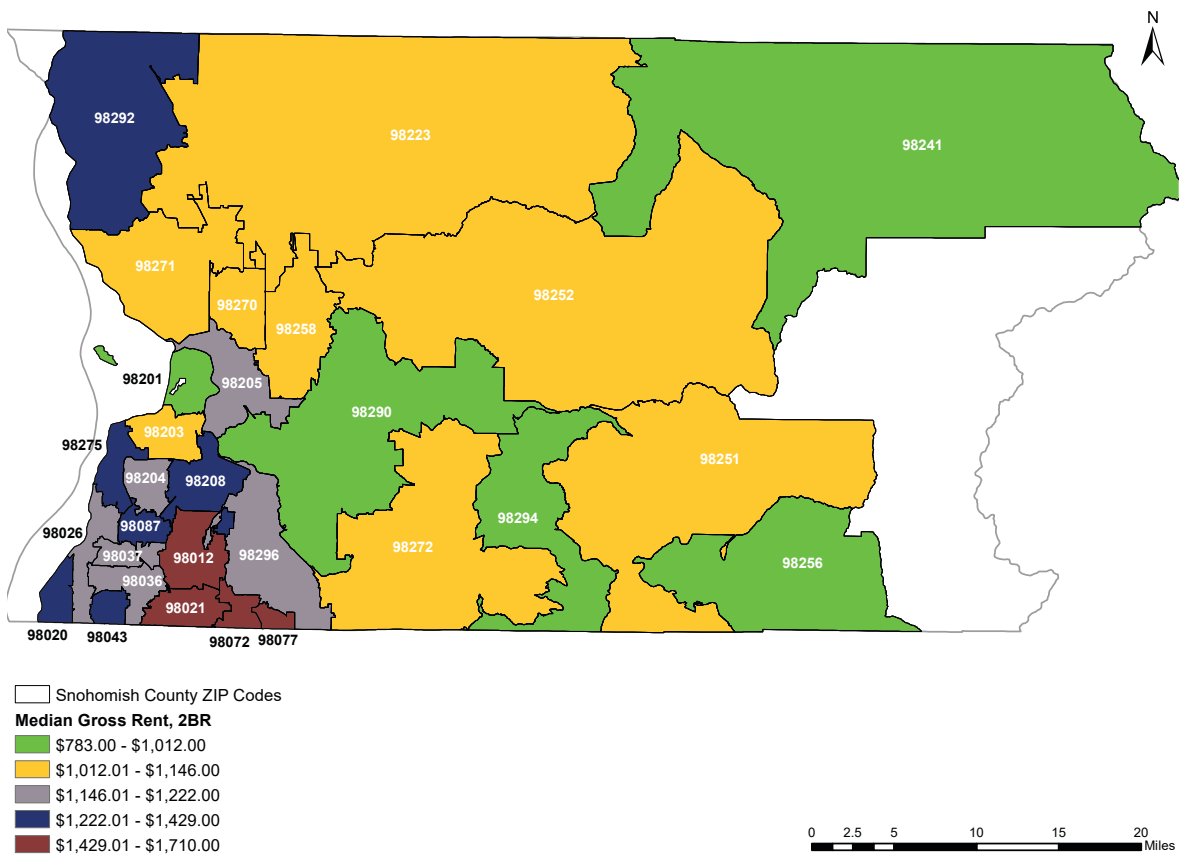
Figure 6: 2018 Housing Occupied by Homeowners by ZIP Code





Housing Affordability: The best information available on housing affordability is median gross rent. The median gross rent includes low-income housing and may be skewed lower than the median rent for those who do not qualify for low-income housing. Snohomish County’s median gross rent for a two-bedroom unit (house or apartment) in 2018 was \$1,205 per month. This was higher than the state (\$1,079) and U.S. (\$964) medians. ZIP code 98077 (Maltby, \$1,710) had the highest median gross rent, and 98241 (Darrington, \$783) had the lowest⁹.

Figure 7: 2018 Median Two-Bedroom Rent by ZIP Code

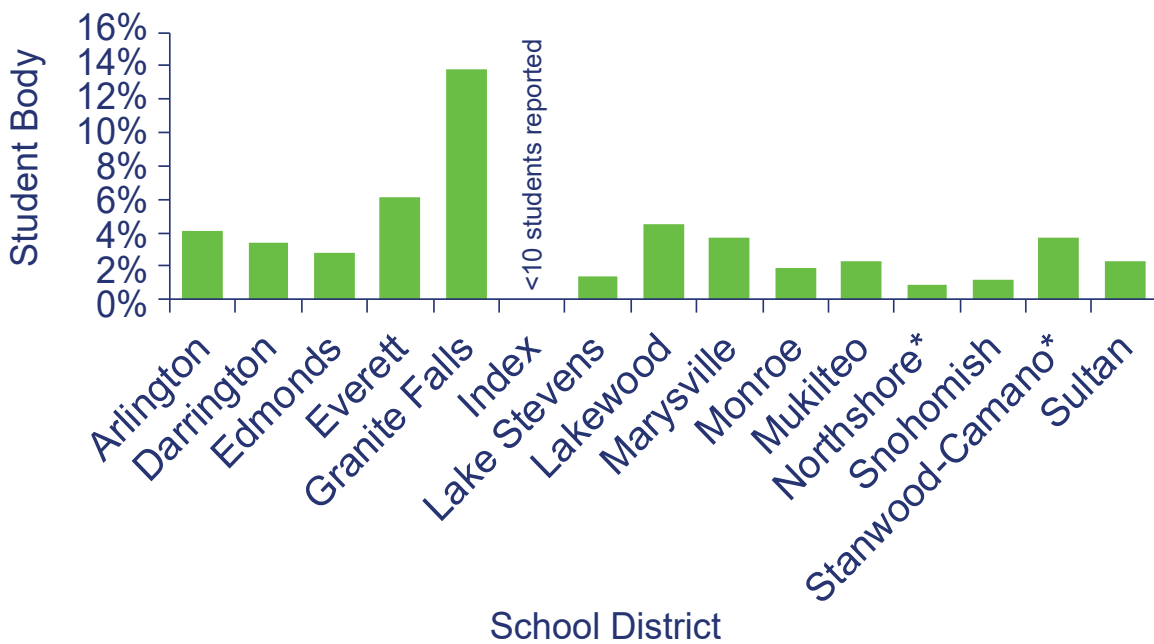


Economy & Housing (cont.)



Homelessness: According to the Snohomish County Point-in-Time Count estimates, 1,116 people in the county were homeless in 2019¹⁰. The Point-in-Time Count is used for funding and planning methods but due to constantly-changing methodologies, trends cannot be accurately analyzed. Another method of measurement comes from the Office of Superintendent for Public Instruction (OSPI), which tracks students who are homeless. Granite Falls School District had 13.8% of students considered homeless in the 2017-18 school year, while the Northshore School District (located partially in Snohomish County) had 0.9% of students considered homeless¹¹.

Figure 8: 2017-2018 Snohomish County Homeless Students by School District



* School District is only partially located in Snohomish County

Economy & Housing (cont.)



COMMUNITY INPUT

Housing was one of the eight topics discussed at three community data walks. Participants' most common concern was Snohomish County's lower vacancy rate compared to the state and U.S. Vacancy rate is an important factor for housing because more vacancies can mean more options for people to find a suitable and affordable home.

Groups at the first data walk voted housing as the third highest concern of the eight topics covered. There was in-depth discussion about housing at the first event, but not at the next two data walks. The focus during the discussion was on how zoning codes restrict development of housing that is affordable to low- and middle-income families. The group decided that if zoning codes in the county were amended to allow greater density and provisions for affordable housing unit requirements, the number of available and affordable housing options would increase.

Economy & Housing Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|---|------------------|-------------|------------|-------------|
| Vacancy rate | -1 | 0 | n/a | -1 |
| Owner-occupied housing | 0 | -1 | n/a | -1 |
| Supplemental Nutrition Assistance Program (SNAP) recipients | 0 | -1 | n/a | -1 |
| 65 and older below Federal Poverty Level (FPL) | 0.5 | -1 | n/a | -0.5 |
| Median gross two-bedroom rent | -0.5 | n/a | n/a | -0.5 |
| Single mothers under FPL | 1 | -1 | 0 | 0 |
| Renters spending >30% on housing | 0 | 0 | n/a | 0 |
| Unemployment rate | 0 | 1 | -1 | 0 |
| Population below FPL | 1 | 0 | n/a | 1 |
| Families below FPL | 1 | 0 | n/a | 1 |
| Free/reduced cost lunch recipients | 0.5 | 1 | 0 | 1.5 |
| 18 and under below FPL | 1 | 1 | 0 | 2 |

Education

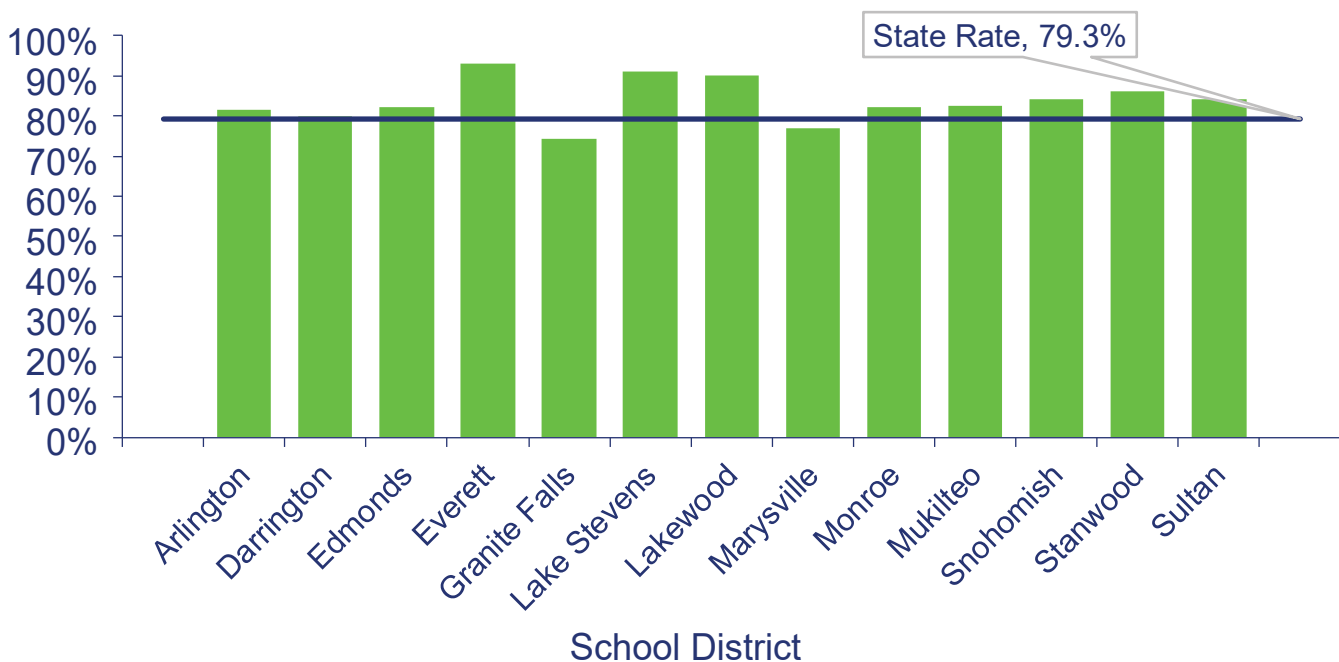


Educational Attainment in Adults: In 2017, 31.3% of Snohomish County adults age 25 or older had obtained a Bachelor’s degree or higher. While slightly lower than the state rate (34.4%), this was on par with the national rate (30.9%)¹².

Four-Year Graduation: The 2017 on-time graduation rate for public high schools in the county was 79.5%, which is on par with the state rate of 79.3%. Asian students have the highest rates of on-time graduation in the county (87.6%), while American Indian/Alaska Native students have the lowest rates (55.7%)¹³. The 2017 national rate for on-time graduation was 84.6%¹⁴. Snohomish County is not currently meeting the Healthy People 2020 goal, which is an on-time graduation rate of 87%¹⁵.

Figure 9 below shows performance by school district in the county.

Figure 9: 2016-2017 Snohomish County On-Time Graduation Rate by School District



Education Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| On-time graduation rate | 0 | 1 | -1 | 0 |
| Population 25 and older with Bachelor’s degree | 0 | 1 | n/a | 1 |

Transportation



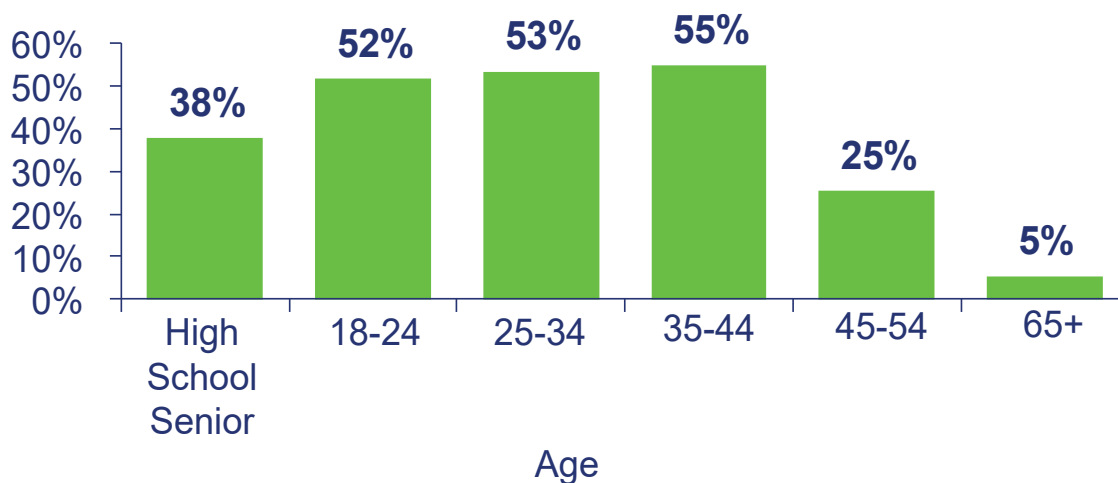
Average Travel Time to Work: In 2017, Snohomish County's average (or mean) travel time to work increased for the fifth year in a row. At 31.8 minutes, Snohomish County commuters are spending more time on the road than commuters state and nationwide⁴.

Delayed Healthcare due to Lack of Transportation: A little less than four percent (3.5%) of people in the county reported in 2018 that they had to delay seeking healthcare because they didn't have transportation¹⁶.

Seatbelt Usage: According to the 2018 Behavioral Risk Factor Surveillance System, 95.4% of adults in Snohomish County say they 'always' wear a seatbelt¹⁶. This meets the Healthy People 2020 goal of 92% of adults always wearing a seatbelt when in a vehicle¹⁵.

Texting and Driving: In the 2018 Healthy Youth Survey, 37.8% of high school seniors admitted to texting while driving at least once in the past month¹⁷, compared to 36.9% of adults in 2017¹⁸. For adults, those between 35 and 44 years old had the highest rate of texting and driving (54.7%) and those who are 65 or older had the lowest (5.4%)¹⁸.

Figure 10: 2018/2017 Snohomish County Texting and Driving by Age





Impaired Driving: In 2018, 13.1% of high school seniors admitted to driving a motor vehicle within three hours of consuming marijuana at least once in the past month¹⁷. For adults, 25.4% said they've driven within three hours of consuming marijuana at least once in the past year¹⁶. The adult percentage decreased to 23.4% in 2017, after a peak of 35.6% in 2016, while the state figure has remained fairly stable since 2015. This could be in part due to efforts by the state to educate people on the consequences of driving while impaired by any substance.

The percentage of high school seniors who reported driving after consuming alcohol has decreased immensely, from 15.4% in 2006 to 5.5% in 2018¹⁷.

Figure 11: Snohomish County High School Seniors Drinking and Driving



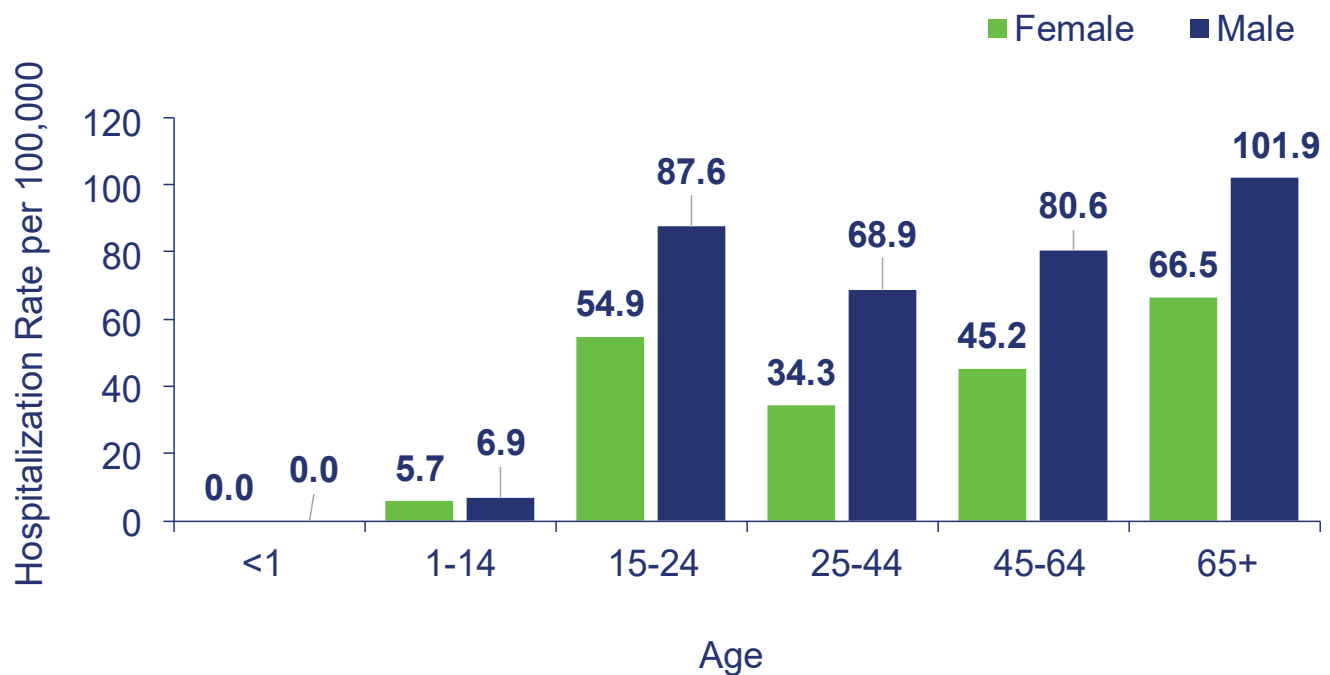
Transportation (cont.)



Motor Vehicle Collisions: In 2018, 424 Snohomish County residents were hospitalized for injuries sustained in a motor vehicle collision, a rate of 50.7 hospitalizations per 100,000 people. Across all age groups, men in the county were more likely than women to be hospitalized for injuries sustained in a motor vehicle collision, as shown below in Figure 12¹⁹. 57 county residents died from a motor vehicle collision in 2017, a rate of 6.5 deaths per 100,000 people²⁰. Deaths may have occurred after the person was hospitalized for their injuries.

The county's rate of death due to motor vehicle collision is slightly lower than the state rate of 8.6 deaths per 100,000 people.⁶

Figure 12: 2018 Snohomish County Motor Vehicle Collision Hospitalization by Age and Gender



Transportation (cont.)



Transportation Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| Drive alone to work | 0 | 0 | -1 | -1 |
| Mean travel time to work | 0 | -1 | n/a | -1 |
| Adult drove after marijuana | 0 | 0 | n/a | 0 |
| Adult texting & driving | 0 | 0 | n/a | 0 |
| Delayed healthcare due to transportation | 0.5 | 0 | n/a | 0.5 |
| Motor vehicle crash injury | 0 | 1 | n/a | 1 |
| Adult seatbelt use | 0 | 0 | 1 | 1 |
| Public transportation to work | 0 | 0 | 1 | 1 |
| Youth texting & driving | 0.5 | 1 | n/a | 1.5 |
| Motor vehicle crash mortality | 1 | 0 | 1 | 2 |
| Youth drove after marijuana | 1 | 1 | n/a | 2 |
| Youth drove after drinking | 1 | 1 | n/a | 2 |

General Health



Leading Causes of Death: The top ten causes of death in Snohomish County in 2018 were as follows²⁰:

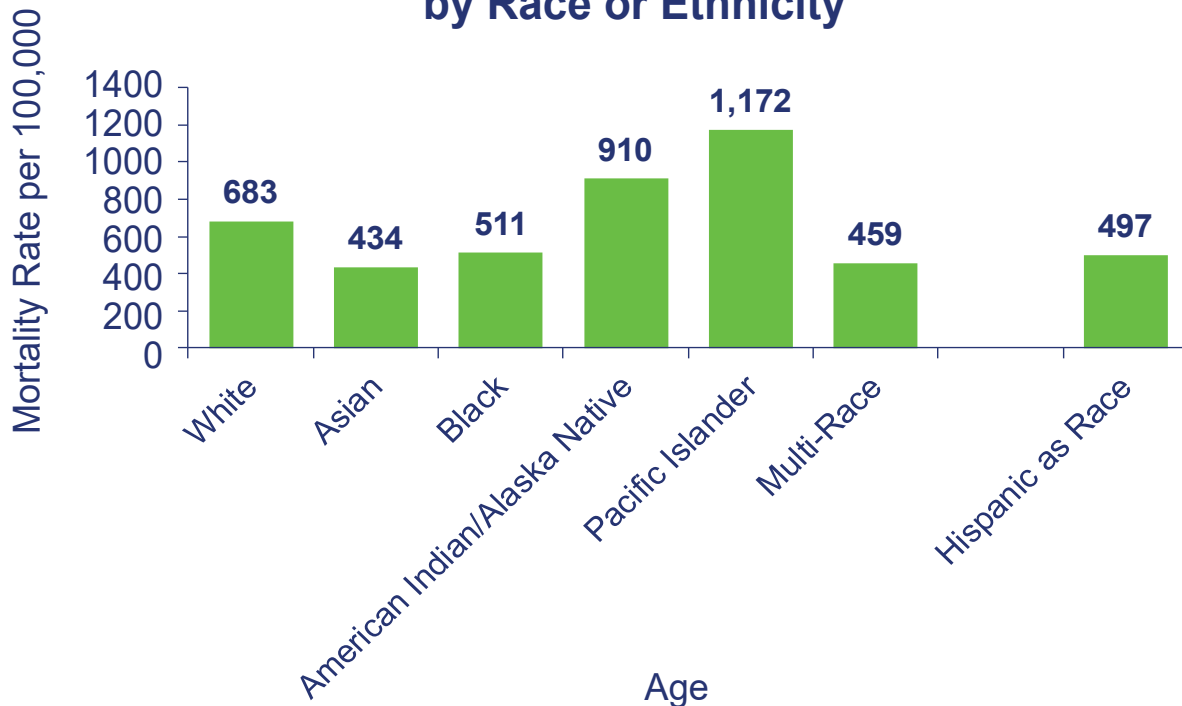
For children between 1 and 14 years old, five years of data were combined to more accurately determine the leading causes of death. From 2014-2018, accidents were the leading cause of child mortality, followed by cancer, suicide, birth defects, and assault (homicide)²⁰.

Life Expectancy: In 2018, average life expectancy at birth in Snohomish County was 80.4 years. That matches the state²⁰ and is higher than the U.S. expectancy of 78.6 years²¹. Women in the county are projected to live longer than men (82.9 years compared to 77.6 years)²⁰.

Overall Mortality: The overall mortality rate from all causes in Snohomish County in 2018 was 654.4 deaths per 100,000 people. This was close to the state rate of 664.5 per 100,000²⁰. The 2017 U.S. rate was higher at 731.9 per 100,000²². In Snohomish County, the mortality rate was highest among American Indian/Alaska Native and Pacific Islander residents.

| Rank | Cause of death |
|------|-----------------------------------|
| 1 | Cancer |
| 2 | Heart disease |
| 3 | Unintentional Injury |
| 4 | Alzheimer's Disease |
| 5 | Chronic lower respiratory disease |
| 6 | Stroke |
| 7 | Diabetes |
| 8 | Suicide |
| 9 | Chronic liver disease & cirrhosis |
| 10 | Influenza & pneumonia |

Figure 13: 2018 Snohomish County Mortality Rate by Race or Ethnicity

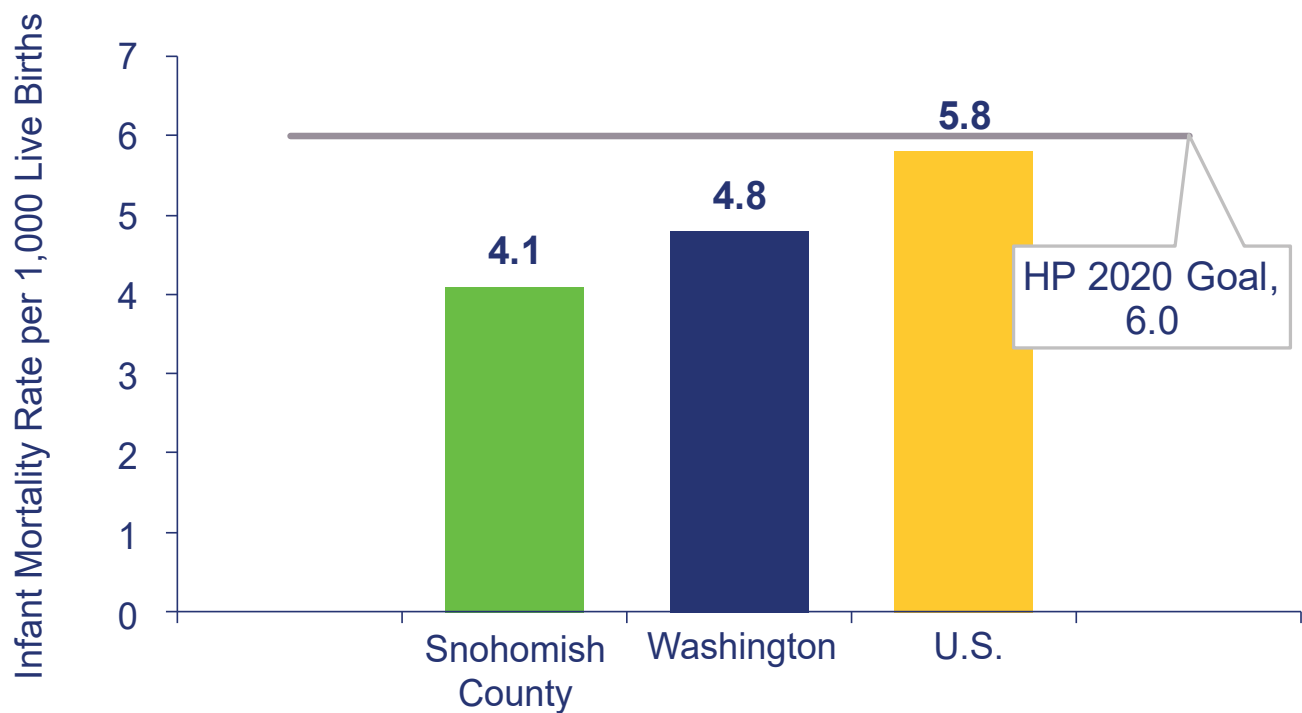


General Health (cont.)



Infant Mortality: The infant mortality rate in Snohomish County was 4.1 per 1,000 live births in 2015. This is better than the state (4.8)⁴ and U.S. (5.8)²² rates. Snohomish County meets the Healthy People 2020 goal of 6 or fewer deaths per 1,000 infants.⁵

Figure 14: 2017 Infant Mortality Rate



General Health (cont.)



Leading Causes of Hospitalization: After childbirth and pregnancy complications, the leading causes of hospitalization in 2018 were: heart disease, injury and poisoning, mental illness, and diseases of the digestive system¹⁹.

Hospitalization: In 2018, the overall hospitalization rate for Snohomish County was 8,410.9 hospitalizations per 100,000 people. Of the leading causes of hospitalization, 30% were due to complications related to pregnancy and childbirth, which is the likely explanation for the hospitalization rate being far higher in females (9,604 per 100,000) compared to males (7,388.9 per 100,000). Rates were lowest in children ages 1 to 14, and highest in the county’s youngest (less than one year old) and oldest (65 and older) residents¹⁹.

Physical Health: In 2018, 11.2% of adults in Snohomish County said that their physical health was ‘not good’ for 14 or more of the last 30 days. This rate was slightly higher for females (12.8%) than males (9.5%)¹⁶.

Disability: 21.7% of adults in Snohomish County said they were limited in activities due to physical, mental, or emotional problems in 2017. While nearly identical to the state rate of 22%¹⁸, both are slightly higher than the U.S. figure of 19.3%²³.

General Health Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| Life expectancy at birth | 0 | 0 | n/a | 0 |
| Days poor health interfered with Activities of Daily Living (ADLs) | 0 | 0 | n/a | 0 |
| Fair/poor overall health in adults | 0.5 | 0 | n/a | 0.5 |
| Overall mortality | 0 | 1 | n/a | 1 |
| Overall hospitalization | 0 | 1 | n/a | 1 |
| Adult poor physical health days | 0 | 0 | 1 | 1 |
| Infant mortality | 0.5 | 0 | 1 | 1.5 |
| Childhood mortality | 1 | 0 | 1 | 2 |



Overall: Snohomish County's rate of new cancer diagnoses in 2016 was 527.5 diagnoses per 100,000 people. This was much higher than the state (497.6 per 100,000). The rate was highest in those age 65 or older²⁴.

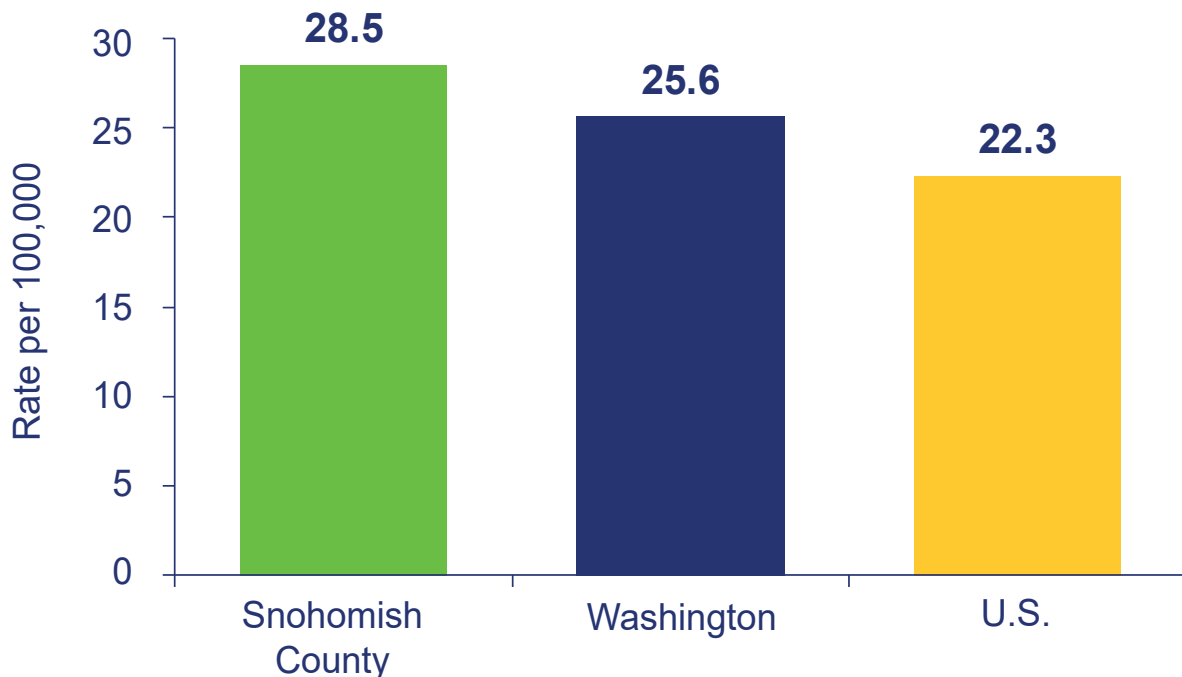
The mortality rates for the county and state were similar in 2018, with 140.9 cancer-related deaths per 100,000 people in Snohomish County and 144.5 per 100,000 statewide.

The mortality rate from cancer has been decreasing over the past decade²⁰.

Melanoma (Skin Cancer): In 2016, Snohomish County had an incidence rate of 28.5 per 100,000 for cases of melanoma (skin cancer)²⁴. This was higher than the U.S. (22.3) rate²⁵, despite Snohomish County seeing fewer days of sun annually.

The county rate was far higher for males (79.6) compared to females (58.7)²⁴.

Figure 15: 2016 Melanoma Incidence



For melanoma mortality, Snohomish County's 2018 rate (1.5 deaths per 100,000 people)²⁰ is meeting the Healthy People 2020 goal of 2.4 deaths or fewer per 100,000 people¹⁵. The county's rate was slightly better than the state (2.3)²⁰ and U.S. (2.1)²² rates.

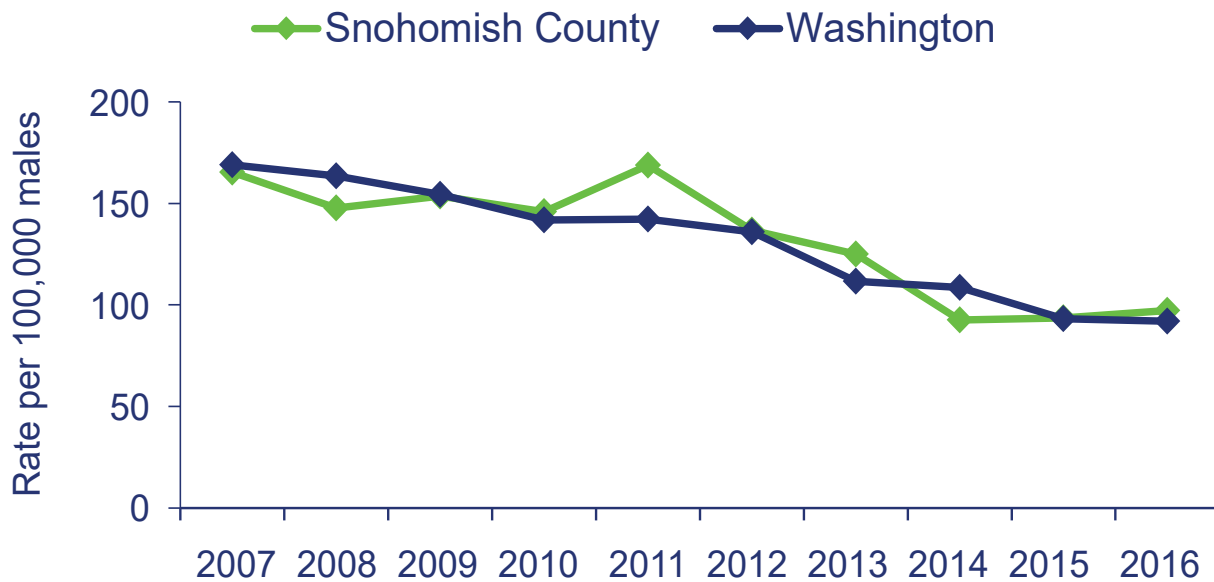
Cancer (cont.)



Prostate Cancer: There were 450 men in Snohomish County diagnosed with prostate cancer in 2016, a rate of 105.3 per 100,000 males²⁴. Snohomish County fares worse than the state rate of 96.7 per 100,000,²⁴ and the U.S. rate of 101.4 per 100,000 males²⁵.

The trend for new cases of prostate cancer in Snohomish County does show promise. The incidence rate ten years ago was 147.7 per 100,000 males, compared to 105.3 per 100,000 now²⁴.

Figure 16: Prostate Cancer Incidence



Looking at deaths from prostate cancer, Snohomish County's 2017 rate (19.5 per 100,000 males) as well as the state (19.9)²⁰ and 2017 U.S. (18.7)²² rates are meeting the Healthy People 2020 goal of 21.8 deaths or fewer per 100,000 males¹⁵.

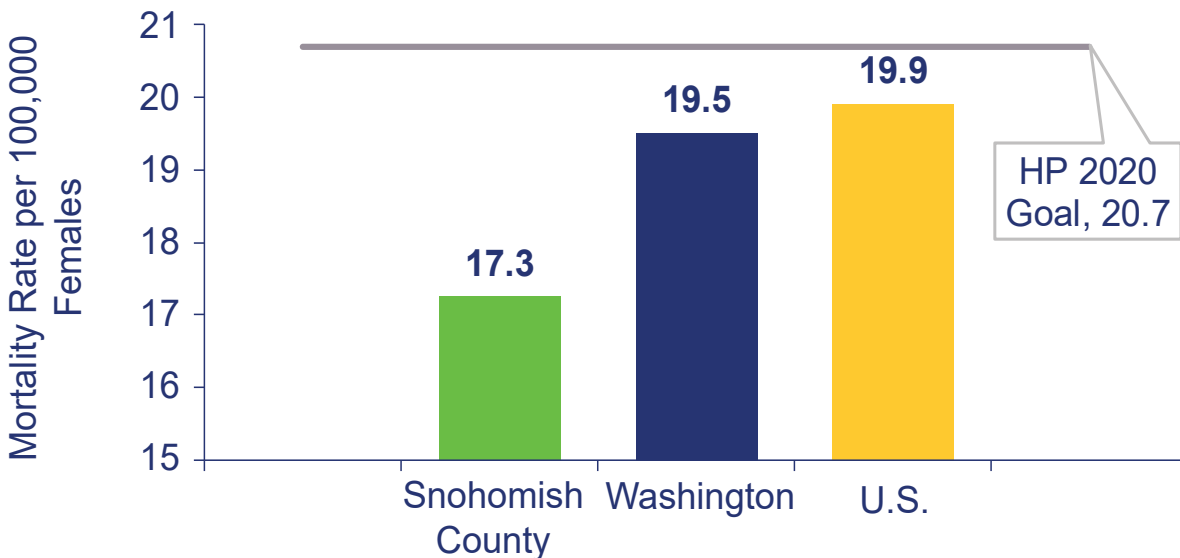
Cancer (cont.)



Female Breast Cancer: Snohomish County saw 131.1 cases of breast cancer per 100,000 females in 2016. This is similar to the state rate (133.2)²⁴ but both are slightly higher than the U.S. (124.2) incidence rate²⁵.

While incidence is higher in the county, mortality is lower. The county's 2018 rate of 17.3 breast cancer deaths per 100,000 females was better than the state rate (19.5²⁰) and the 2017 U.S. rate (19.9 per 100,000²²). All are currently meeting the Healthy People 2020 goal of a mortality rate no higher than 20.7 deaths per 100,000 females¹⁵.

Figure 17: 2018 Female Breast Cancer Mortality



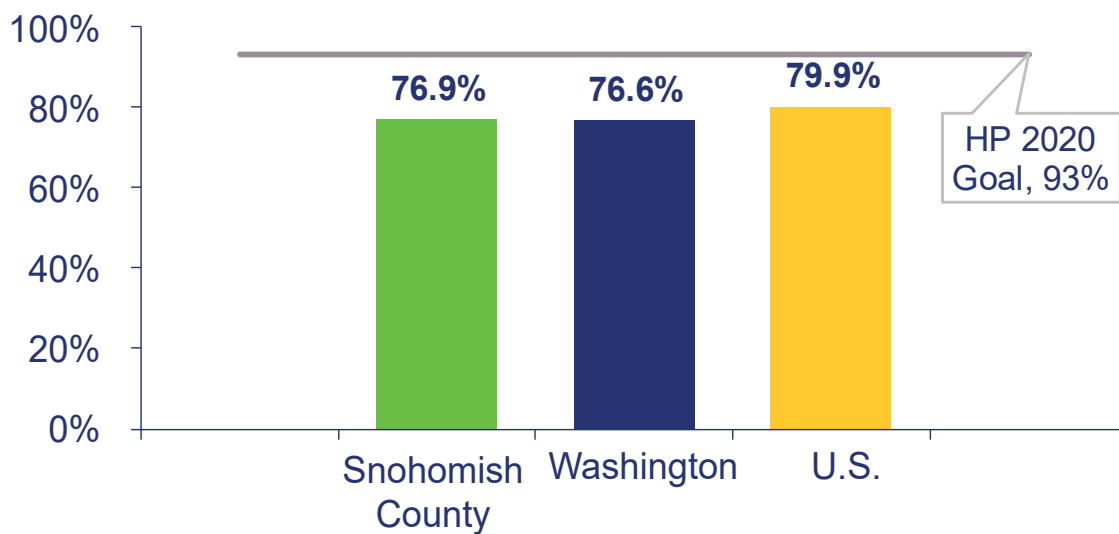
Cancer (cont.)



Female Cancer Screening: Mammograms are recommended to detect breast cancer in females, with early detection of cancer greatly increasing the odds of survival. In 2018, 75.4% of women in the county between the ages of 50 and 74 had received a mammogram within the last two years¹⁶. This is currently meeting the Healthy People 2020 goal of 73.7% or more women ages 50 to 74 receiving a timely mammogram¹⁵. Washington (75.1%)¹⁶ and the U.S. (78.9%)²³ are also meeting the goal.

Women ages 21-65 are recommended to get a Pap test every three years to screen for HPV and cervical cancer. In 2018, 76.9% of women in Snohomish County were meeting those guidelines, similar to the state rate of 76.6%¹⁶. Neither the county, state, nor the U.S. (79.9%)²³ are currently meeting the Healthy People 2020 goal of 93% of women ages 21 to 65 meeting the screening guidelines¹⁵.

Figure 18: 2018 Females Ages 21-65 Meeting Pap Test Guidelines



Cancer (cont.)



Cancer Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--------------------------------|------------------|-------------|------------|-------------|
| Pap test last 3 years | 0 | 0 | -1 | -1 |
| Colorectal cancer screening | 0 | 0 | -1 | -1 |
| Melanoma incidence | -0.5 | 0 | n/a | -0.5 |
| Cancer incidence | -0.5 | 0 | n/a | -0.5 |
| Female breast cancer incidence | 0 | 0 | n/a | 0 |
| Colorectal cancer incidence | 0 | 0 | n/a | 0 |
| Mammogram last 2 years | 0 | 0 | 1 | 1 |
| Prostate cancer mortality | 0 | 0 | 1 | 1 |
| Lung cancer incidence | 0 | 1 | n/a | 1 |
| Female breast cancer mortality | 0 | 0 | 1 | 1 |
| Prostate cancer incidence | 0 | 1 | n/a | 1 |
| Colorectal cancer mortality | 0 | 0 | 1 | 1 |
| Melanoma mortality | 1 | 0 | 1 | 2 |
| Cancer mortality | 0 | 1 | 1 | 2 |
| Lung cancer mortality | 0 | 1 | 1 | 2 |

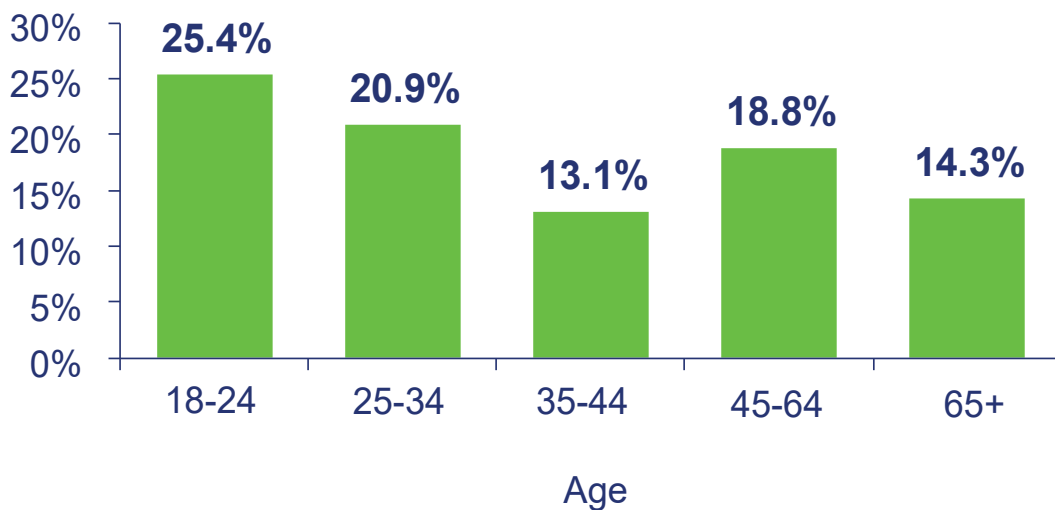
Chronic Disease



Diabetes: In 2018, 10.2% of Snohomish County residents said they had been told by a doctor, at some point in their lives, that they had diabetes¹⁶. In that year, there were 119.9 diabetes-related hospitalizations per 100,000 county residents. The rate was highest in adults 65 and older (250.5 per 100,000). The rate for males (141.1) was much higher than females (101.3)¹⁹.

Asthma: More than 17% of adults in Snohomish County reported in 2018 that they had, at some point in their lives, been told by a physician or nurse that they had asthma¹⁶. The 2018 rate for 10th graders ever being told by a doctor or nurse that they had asthma was 18.1%¹⁷.

Figure 19: 2018 Snohomish County Adults Diagnosed with Asthma by Age



Children between 1 and 14 years old were the most likely to be hospitalized for asthma-related issues. That age group's rate of hospitalization was 80 per 100,000, compared to the overall county rate of 39.3 hospitalizations per 100,000 people¹⁹.

Chronic Disease (cont.)



High Blood Pressure: High blood pressure, or hypertension, is a fairly common malady, with 29.9% of U.S. residents reporting in 2017 that a doctor had, at some point in their lives, told them that they had high blood pressure²³. Snohomish County posted a similar figure of 29.4%¹⁸. Neither are not meeting the Healthy People 2020 goal of no more than 26.9% of people diagnosed with hypertension¹⁵. The county rate was significantly higher for males compared to females (35.8% compared to 23.0%)¹⁸.

Chronic Disease Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| Asthma hospitalization | -0.5 | -1 | -1 | -2.5 |
| Adult high blood pressure | 0 | 0 | -1 | -1 |
| COPD hospitalization | -0.5 | -1 | 1 | -0.5 |
| Adults ever told they have asthma | 0 | 0 | n/a | 0 |
| Adults ever told they have diabetes | 0 | 0 | n/a | 0 |
| Adult Chronic Obstructive Pulmonary (COPD) diagnosis | 0.5 | 0 | n/a | 0.5 |
| Adult stroke diagnosis | 0.5 | 0 | n/a | 0.5 |
| Adults ever told they have Coronary Heart Disease (CHD) or ever had a Myocardial Infarction (MI) | 0.5 | 0 | n/a | 0.5 |
| Diabetes hospitalization | 0 | 1 | n/a | 1 |
| Stroke hospitalization | 0 | 1 | n/a | 1 |
| Adult high cholesterol diagnosis | 0 | 1 | n/a | 1 |
| Youth ever told they have asthma | 0.5 | 1 | n/a | 1.5 |

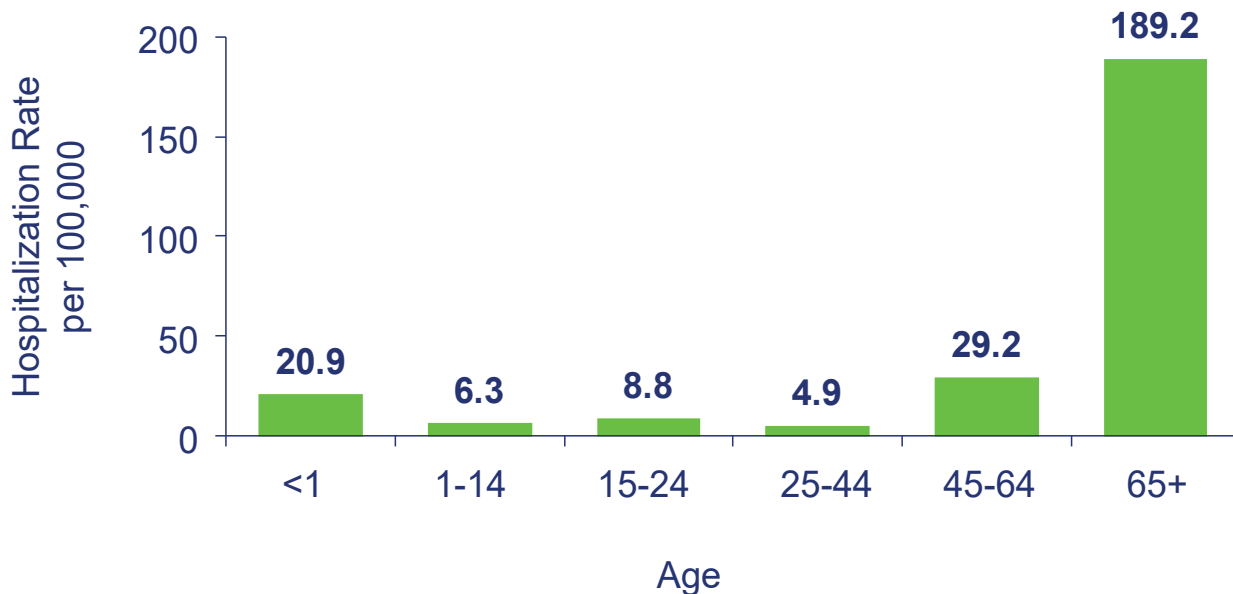
Communicable & Infectious Disease



Hepatitis C: In 2017, Snohomish County’s rate of acute hepatitis C was 1 case per 100,000 people. Acute hepatitis C can become a chronic infection with life-threatening complications if left untreated. The rate of acute hepatitis C is increasing in Snohomish County²⁶. Additionally, the county rate is higher than the Healthy People 2020 goal of no more than 0.3 cases per 100,000 people¹⁵.

Influenza: 311 Snohomish County residents were hospitalized for influenza in 2018. Nearly 70% of them were 65 or older. The state and county have experienced increasing rates of influenza hospitalizations in recent years¹⁹.

Figure 20: 2018 Snohomish County Influenza Hospitalizations by Age

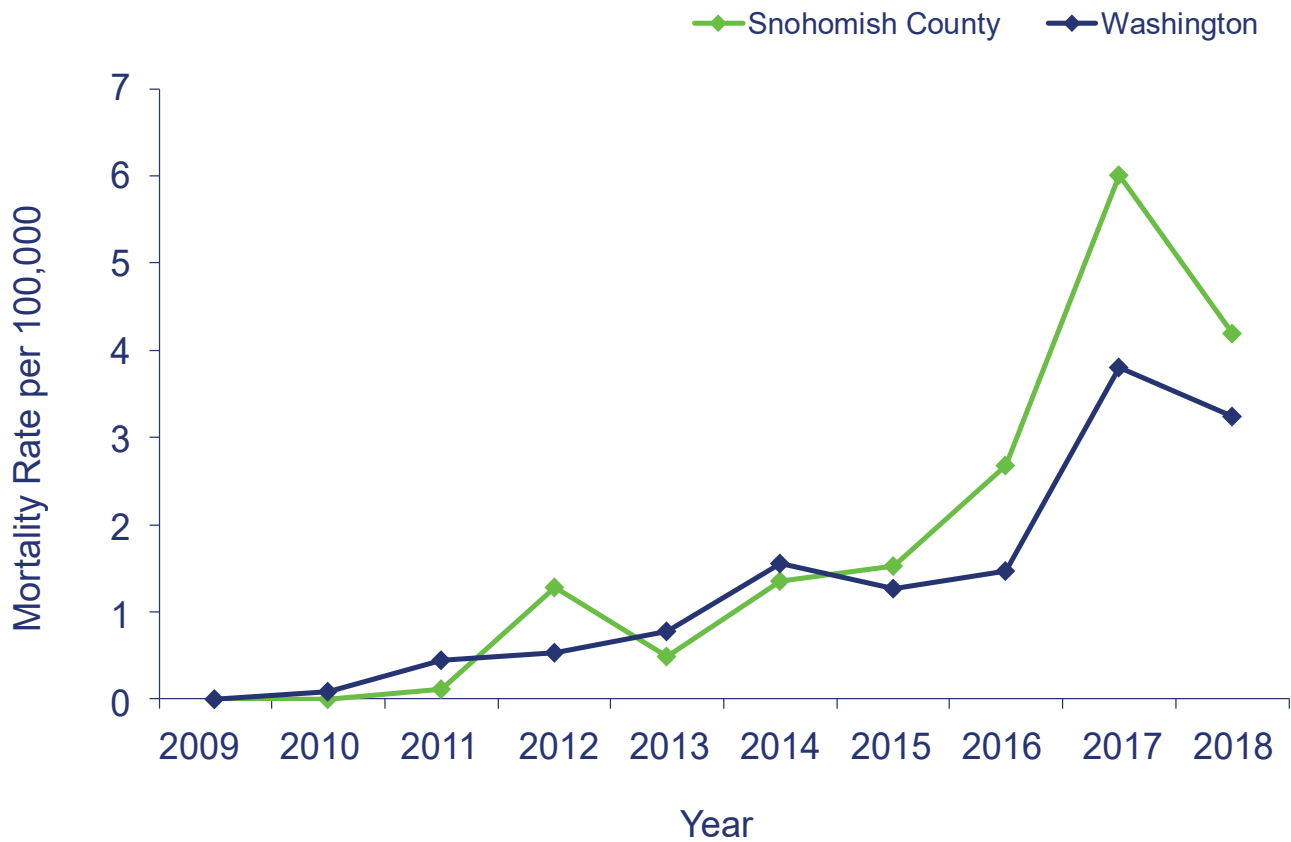


Communicable & Infectious Disease (cont.)



Influenza Mortality: In 2018, 36 Snohomish County residents died from influenza, a rate of 4.2 deaths per 100,000 people. The county's influenza mortality rate has been mostly increasing since 2013, when there was a rate of 0.5 deaths per 100,000 people²⁰.

Figure 21: Influenza Mortality



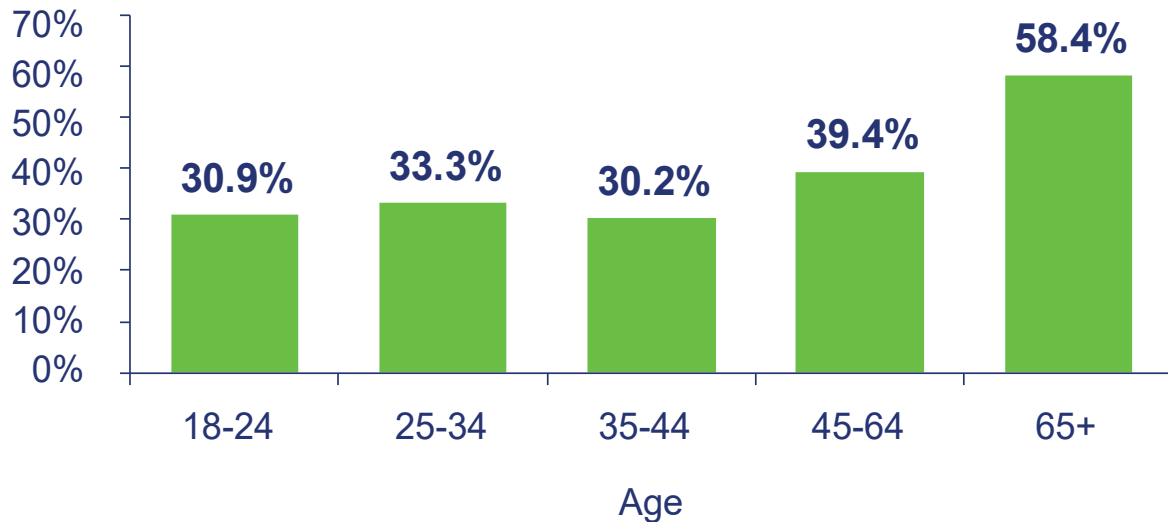
Communicable & Infectious Disease (cont.)



Immunization: In 2018, 39.6% of adults in Snohomish County reported receiving a flu shot in the last 12 months. This percentage was slightly higher for females compared to males (41.6% compared to 37.6%), and highest overall among adults age 65 or older (58.4%)¹⁶.

During the 2016-17 school year, 86.4% of public school students in the county had completed all of their recommended vaccinations.⁶

Figure 22: 2018 Snohomish County Adults Influenza Vaccination by Age

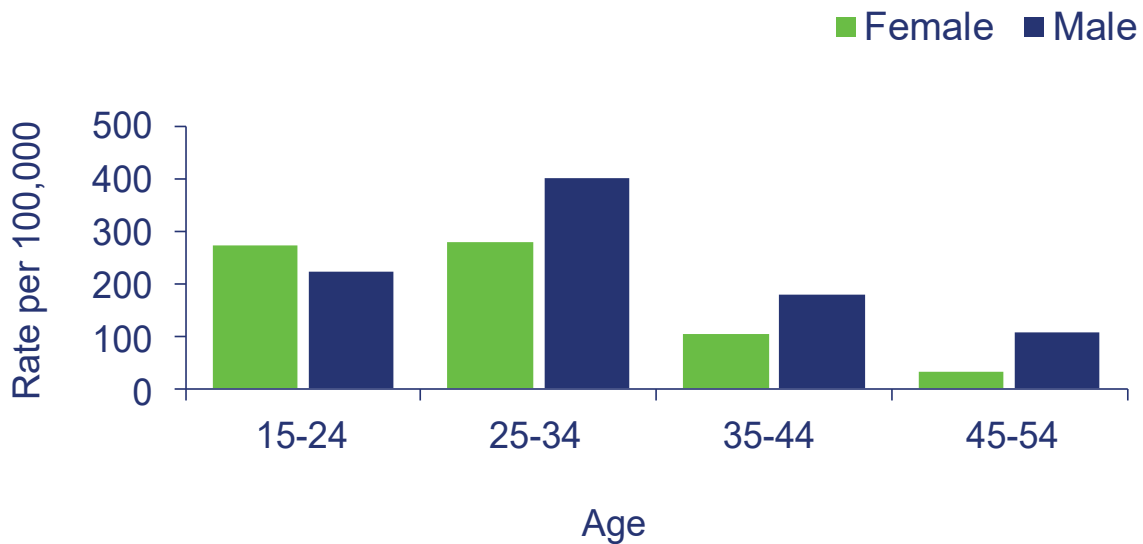




Gonorrhea: Snohomish County had a gonorrhea rate of 116.0 infections per 100,000 residents in 2018. This is nearly six times the rate from ten years ago (20.8). State and national rates have been increasing at a similar pace.

As shown below in Figure 23, the group in the county that has the highest infection rate is males ages 25 to 34²⁷.

Figure 23: 2018 Snohomish County Gonorrhea Infections by Age and Gender



Syphilis: In recent years, syphilis rates have been increasing in the county and state, from 0.6 cases per 100,000 people in 2009 in Snohomish County to 5.2 per 100,000 in 2018. An overwhelming majority of people infected with syphilis are men. This is presumed to be a significant issue for men who have sex with men (MSM). There have only been a few cases of syphilis among women in Snohomish County in the past decade²⁷.

Communicable & Infectious Disease (cont.)



Communicable Disease Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| Acute Hepatitis C | 0 | -1 | -1 | -2 |
| Campylobacteriosis | -0.5 | -1 | n/a | -1.5 |
| Influenza mortality | -0.5 | -1 | n/a | -1.5 |
| Influenza hospitalization | 0 | -1 | n/a | -1 |
| Active Tuberculosis | 0 | 0 | -1 | -1 |
| Adults with influenza vaccination past 12 months | 0 | 0 | -1 | -1 |
| Children K-12 complete for immunizations | 0 | -1 | n/a | -1 |
| Adults who have had an HIV test | 0 | 0 | -1 | -1 |
| Giardia | -0.5 | 0 | n/a | -0.5 |
| STEC e.Coli | 0 | 0 | 0 | 0 |
| Pertussis | 0 | 0 | n/a | 0 |
| Mumps | 0 | 0 | n/a | 0 |
| Gonorrhea | 1 | -1 | n/a | 0 |
| Primary and secondary Syphilis | 1 | -1 | n/a | 0 |
| Salmonella | 0.5 | 0 | 0 | 0.5 |
| Chlamydia (females ages 15-24) | 1 | 0 | n/a | 1 |
| New HIV diagnosis | 1 | 0 | n/a | 1 |
| Acute Hepatitis B | 0.5 | 0 | 1 | 1.5 |
| Hepatitis A | 1 | 0 | 1 | 2 |

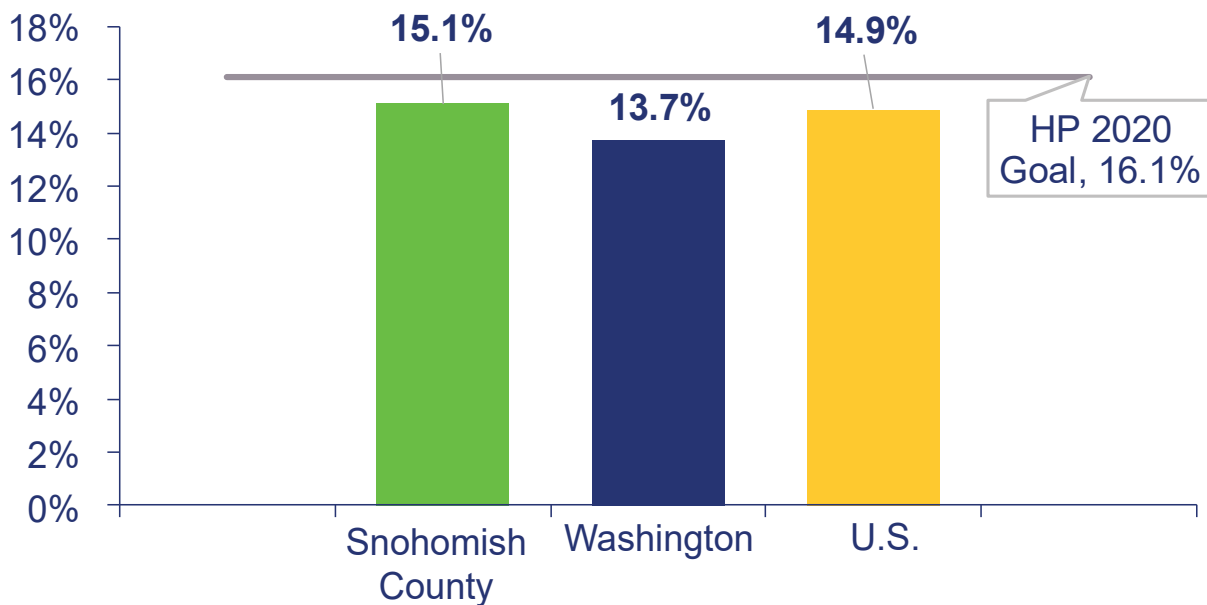


Body Weight: In 2018, 14.9% of 10th grade students in Snohomish County were considered overweight. Overweight is defined as being in the highest 5 to 15% of body mass index (BMI) growth charts from the Centers for Disease Control and Prevention. This rate was comparable to the state (14.6%)¹⁷ and 2017 U.S. (16.2%)²⁸ rates. An additional 15.1% of 10th graders in the county were in the highest 5% of the charts, which is considered obese.

Males were more likely to be considered obese than females at this age (19.5% compared to 10.6%). This could, in part, be due to muscle mass, which is not accounted for when calculating BMI.

The statewide rate for 10th grade obesity was 13.7%¹⁷, slightly better than the county. The 2017 U.S. rate was worse at 14.9%²⁸. The county, state and nation are meeting the Healthy People 2020 goal of no more than 16.1% of adolescents ages 12 to 19 being considered obese¹⁵.

Figure 24: 2018/2017 10th Grade Obesity



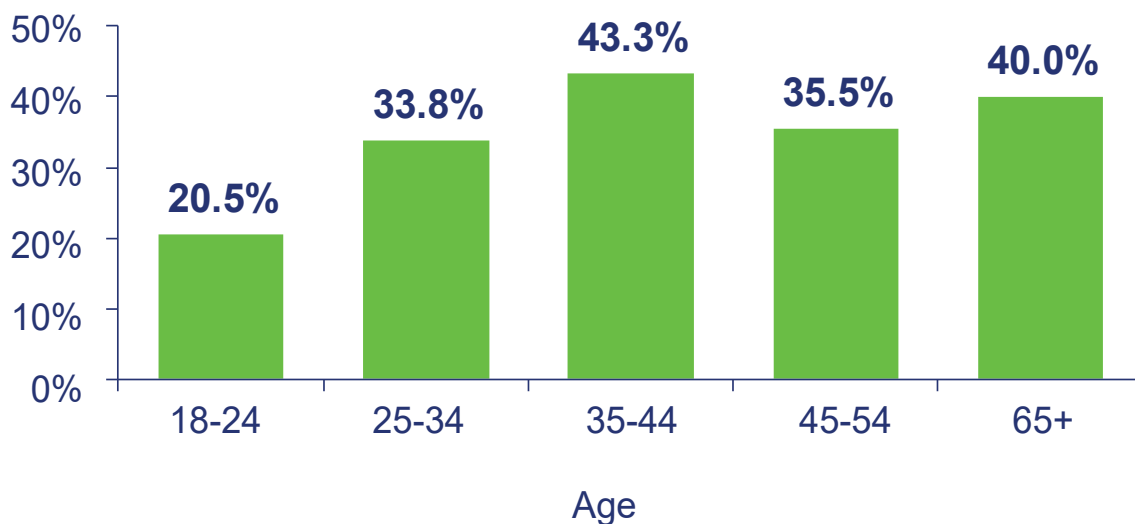
Diet & Activity (cont.)



Roughly one-third of adults (35.6%) in Snohomish County were considered overweight in 2018. The percentage of people who are overweight was highest for those ages 35 to 44¹⁶.

The obesity rate peaks at 38.1% for the 45 to 64 age group. Overall, 30.9% of adults in the county were considered obese in 2018. For both overweight and obese adults in the county, there were no strong differences in rates in males compared to females¹⁶.

Figure 25: 2018 Snohomish County Adults who are Overweight by Age



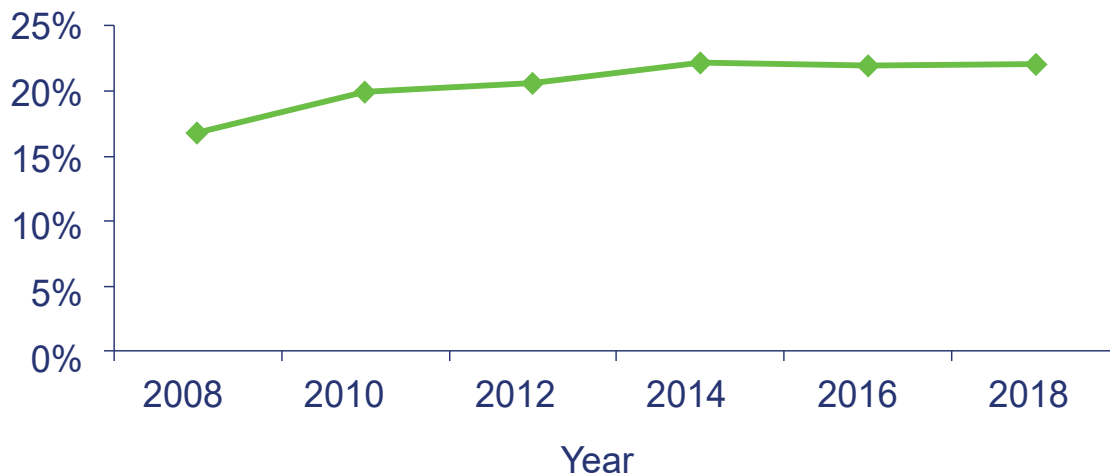
Diet & Activity (cont.)



Physical Activity: There has been steady improvement in the proportion of 10th grade students who are meeting recommended physical activity guidelines. The recommendation is for them to be active for at least 60 minutes each day. There has been an upward trend since 2008.

Though the 2018 rate of 22.1% of 10th graders meeting the guidelines is slightly better than the state (21.6%)¹⁷, they both fall below the national rate (25.6%)²⁸ and all are far below the Healthy People 2020 goal of 31.6% meeting physical activity guidelines¹⁵. There has been improvement in the past decade, however, as demonstrated in Figure 26 below.

Figure 26: Snohomish County 10th Grade Students Physically Active 60+ Minutes/Day 7 Days a Week



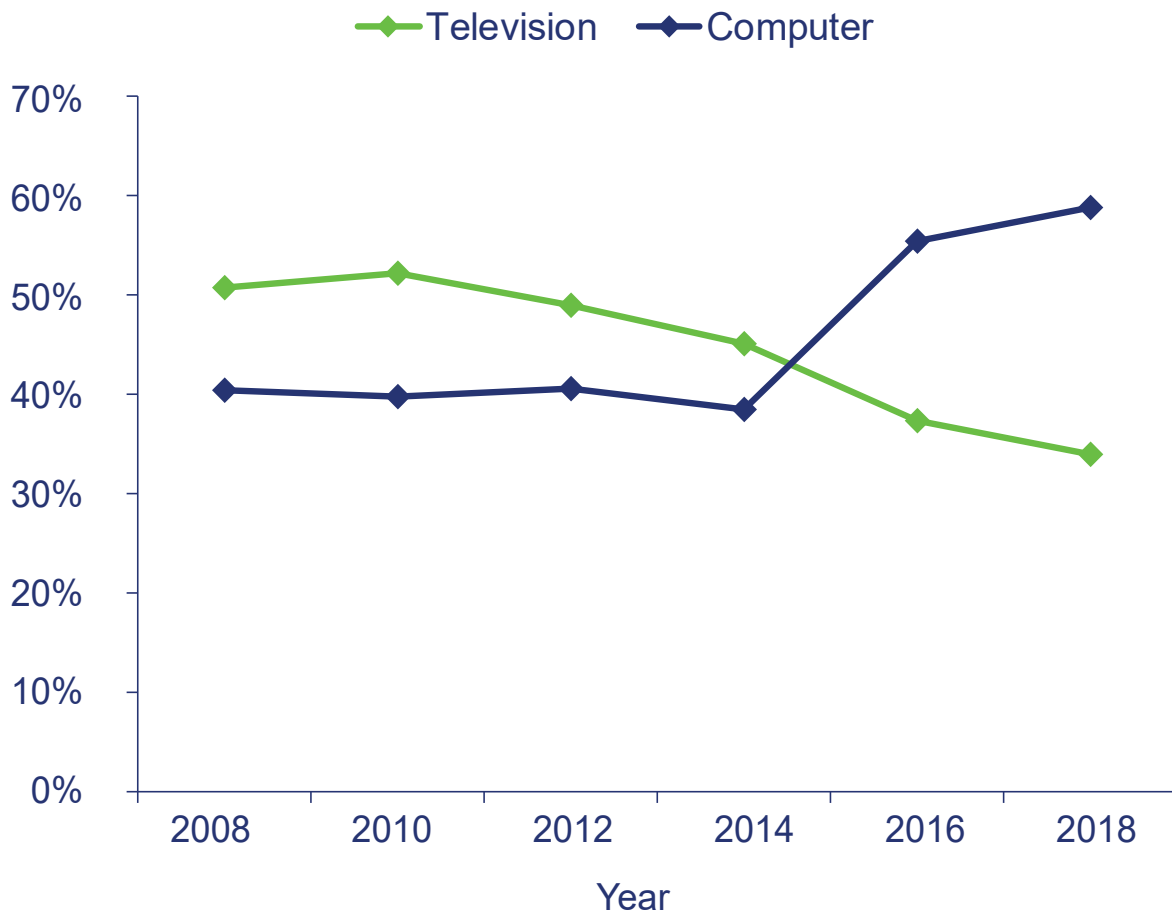
In Snohomish County, 22% of adults were meeting guidelines for aerobic and muscle-strengthening activities in 2017¹⁸. The guidelines call for at least 150 minutes per week of light to moderate aerobic activity, 75 minutes of vigorous activity, or some combination of the two.

Diet & Activity (cont.)



Screen Time: The amount of time spent in front of a computer, cell phone, or television is known as screen time. Currently, screen time for youth, but not adults, is measured at the county level. In recent years, the Healthy Youth Survey has been trying to re-word these questions to best capture screen time trends, by adding social media to the question about time spent on the computer in 2014 and also adding streaming television to the question about time spent watching television in 2018. This might explain some of the large shifts in viewing modes as seen in Figure 27¹⁷.

Figure 27: Snohomish County 10th Grade Students with 2+ Hours of Screen Time

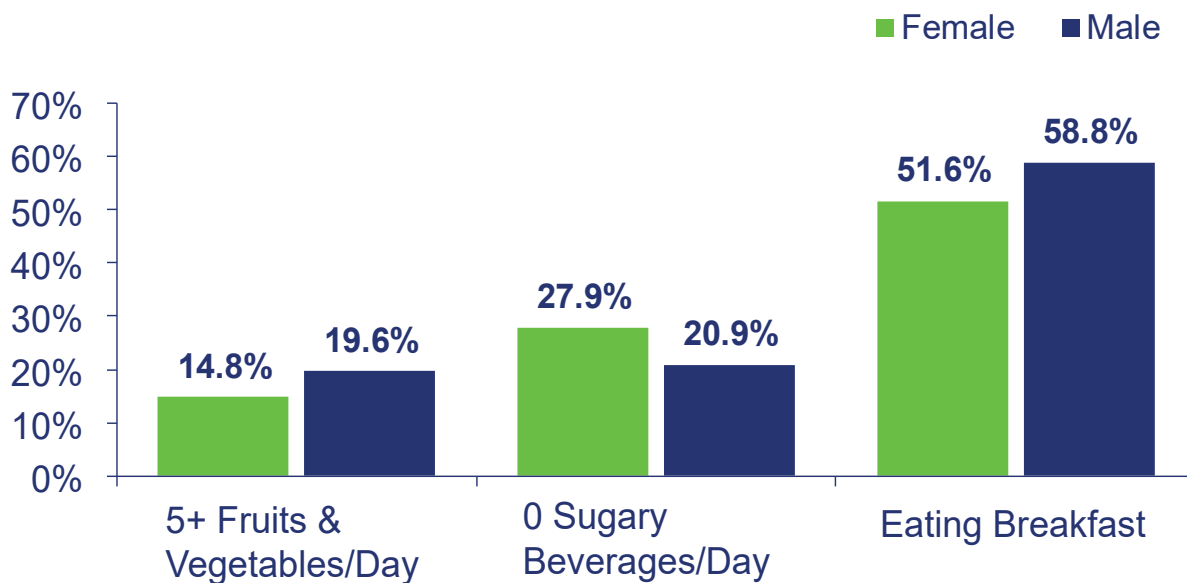


Diet & Activity (cont.)



Diet: As of 2018, 10th grade students in Snohomish County are doing better at eating breakfast (55.1%) than they are at avoiding sugar-sweetened beverages (24.1%) or eating enough fruits and vegetables (17.2%). Differences by gender were notable in some instances shown below, with females more likely to avoid sugar-sweetened beverages but males more likely to eat five or more servings of fruits and vegetables, as well as eat breakfast¹⁷.

Figure 28: 2018 Snohomish County 10th Grade Student Nutrition Habits by Gender



Vegetable and fruit intake is measured differently for adults compared to youth. Results are reported out on adults who average less than one serving a day of fruits or vegetables. Countywide, 14.7% of adults reported eating less than one vegetable serving a day, and 32.3% reported eating less than one fruit serving a day in 2017. Males were more likely to be consuming less than one fruit a day than females (25.6% compared to 28.9%)¹⁸.

Diet & Activity (cont.)



COMMUNITY INPUT

Youth obesity was one of the eight topics covered during three community data walks. The most common concern, noted by groups at 10 of the 13 total data walk tables, was that 2016 data showed male youth had a higher rate of obesity compared to female youth. After the data walks were held, 2018 Healthy Youth Survey data showed the gender disparity for youth obesity is still strong.

Youth obesity was discussed in-depth at the first data walk. Discussion focused on the substantially higher rates of obesity in male students compared to females. The group at that table agreed that if society demanded a healthy weight for males and females with equal importance, then the gap between genders would decrease.

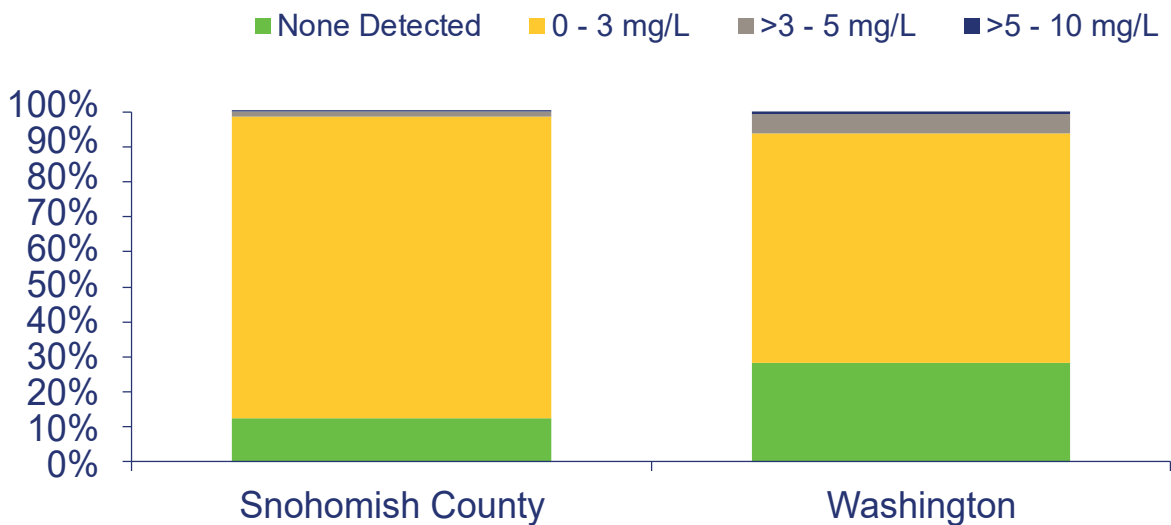
Diet & Activity Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| Youth with 2+ hours of computer time/day | 0 | -1 | -1 | -2 |
| Youth Eating 5+ fruits and vegetables/day | 0 | -1 | n/a | -1 |
| Adults meeting physical activity recommendations | 0 | n/a | -1 | -1 |
| Youth with 2+ hours of television/day | 0 | 0 | -1 | -1 |
| Obese adults | 0 | 0 | -1 | -1 |
| Obese youth | 0 | -1 | 1 | 0 |
| Overweight youth | 0 | 0 | n/a | 0 |
| Adults with very low fruit intake | 0 | 0 | 0 | 0 |
| Overweight adults | 0 | 0 | n/a | 0 |
| Youth eating breakfast | 0 | 0 | n/a | 0 |
| 6 th grade students physically active 60+ minutes/day | 0 | 0 | 0 | 0 |
| Youth consuming 0 sugar-sweetened beverages/day | 0 | 0 | n/a | 0 |
| Youth physically active for 60+ minutes/day | 0 | 1 | -1 | 0 |
| Adults with very low vegetable intake | 0.5 | 1 | n/a | 1.5 |



Drinking Water: Contaminants of all kinds can enter public and private water systems. The Safe Drinking Water Act requires public water systems to be tested regularly for contaminants such as nitrates and arsenic. In 2017, 12.4% of the county population’s public drinking water had no detectable level of nitrates. All water was deemed to be at a safe level, which is a nitrate concentration no greater than 10 milligrams per liter. Statewide, less than one percent (0.6%) of the population’s drinking water exceeded the safe guidelines for nitrates²⁹.

Figure 29: 2017 Nitrate Levels in Public Water Sources



Arsenic is a naturally occurring element that is present throughout our environment in water, soil, dust, air, and food. Levels of arsenic can vary from place to place due to farming and industrial activity as well as natural geological processes. In 2017, 35.3% of the county population’s public drinking water had no detectable levels of arsenic, compared to 25.1% of the state population’s drinking water. While 28 of the county’s 329,408 water systems had arsenic levels above the maximum contaminant level of 10 micrograms per liter, this was less than a one-hundredth of a percent of all water in the county³⁰.

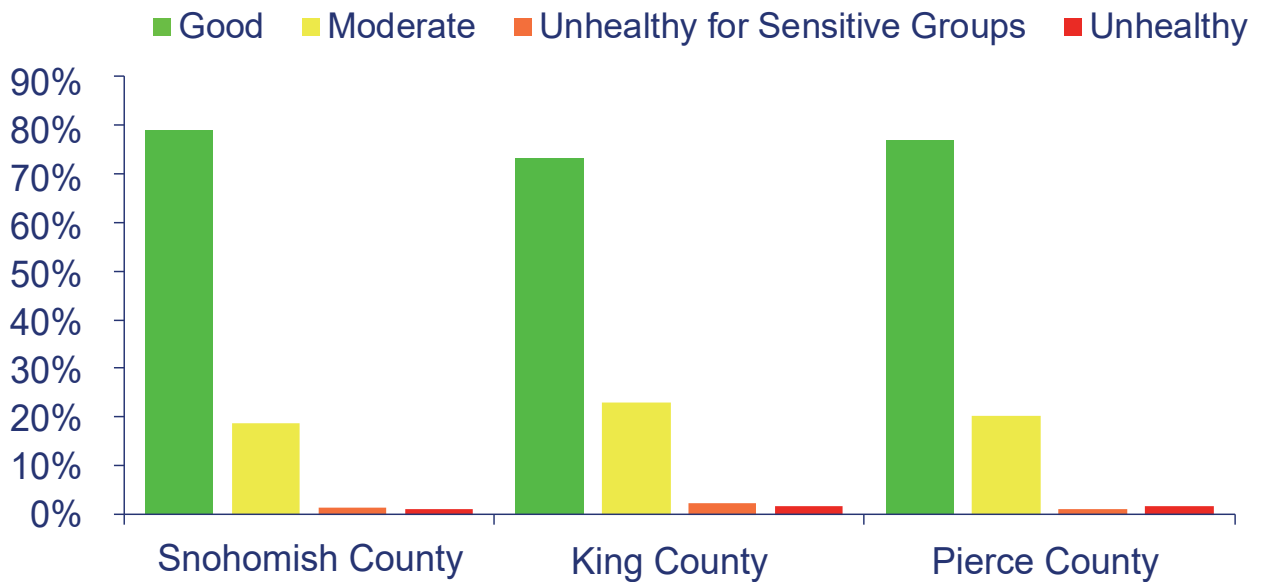
Environmental Health (cont.)



Air Quality: For over three-quarters of 2018 (78.9% of the year), Snohomish County’s air quality was deemed ‘good’ by the Puget Sound Clean Air Agency. Air quality is determined by three monitoring stations in Darrington, Marysville, and Lynnwood. An air quality index (AQI) score is assigned daily to indicate how clean the air is based on factors such as ozone levels and particulate matter (PM2.5). A score from 0 to 50 is “good” and 51 to 100 is considered “moderate.” Scores between 101 and 150 are considered “unsafe for sensitive groups” such as pregnant women, those with asthma, and the elderly. Scores above 151 are “unhealthy” for all.

In Snohomish County and all over Washington, wildfires are the most likely cause when the air quality is less than “good.” The highest AQI score in Snohomish County in 2018 was 177, which is in the “unhealthy for all” range. About four days in 2018 had air deemed “unhealthy for all” in Snohomish County. Snohomish County did not drastically differ from other counties served by the Puget Sound Clean Air Agency, with wildfire smoke having an impact on the entire state³¹.

Figure 30: 2018 Air Quality Index Scores



Environmental Health (cont.)



Environmental Health Scoring Table

| Indicator | Comparison score | Trend Score | Goal Score | Total Score |
|--|------------------|-------------|------------|-------------|
| Children <72 months of age screened for lead | -0.5 | 1 | n/a | -0.5 |
| Population with water exceeding Nitrate guidelines | 0 | n/a | n/a | 0 |
| Population with water exceeding Arsenic guidelines | 0 | n/a | n/a | 0 |

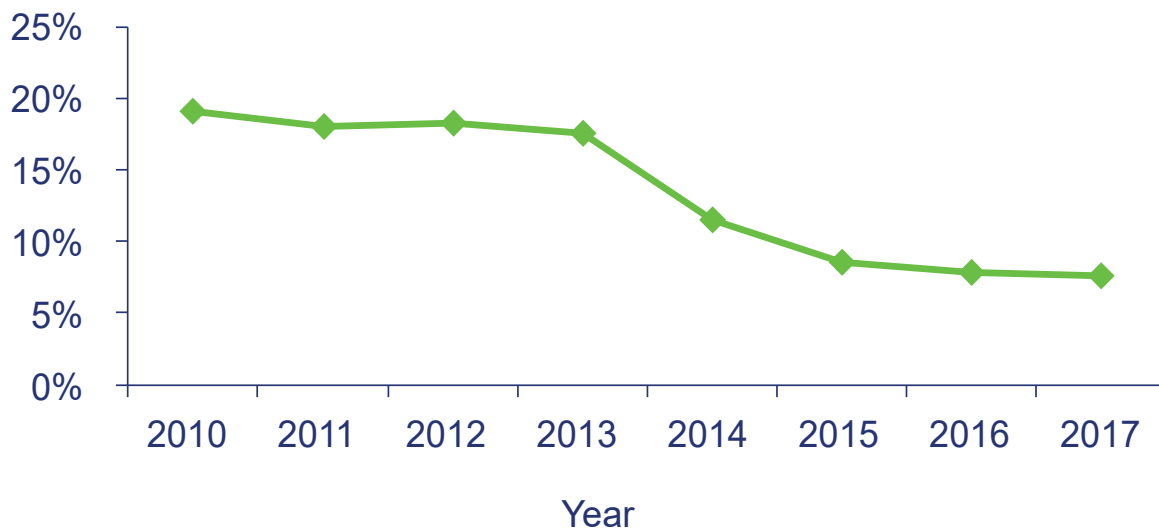
Health Care Access



Insurance: In 2017, an estimated 7.6% of adults ages 18 to 64 in Snohomish County did not have health insurance. This is a large decrease from 2010, when 19.1% of adults were uninsured³². Most of this is due to expanded health insurance availability under the Affordable Care Act (ACA).

Of the 18 and younger population, 2.5% did not have health insurance. For both adults and children, the figures were similar to the state but better than the national rate (12.1% of adults and 5.3% of youth uninsured)³².

Figure 31: Snohomish County Adults without Health Insurance



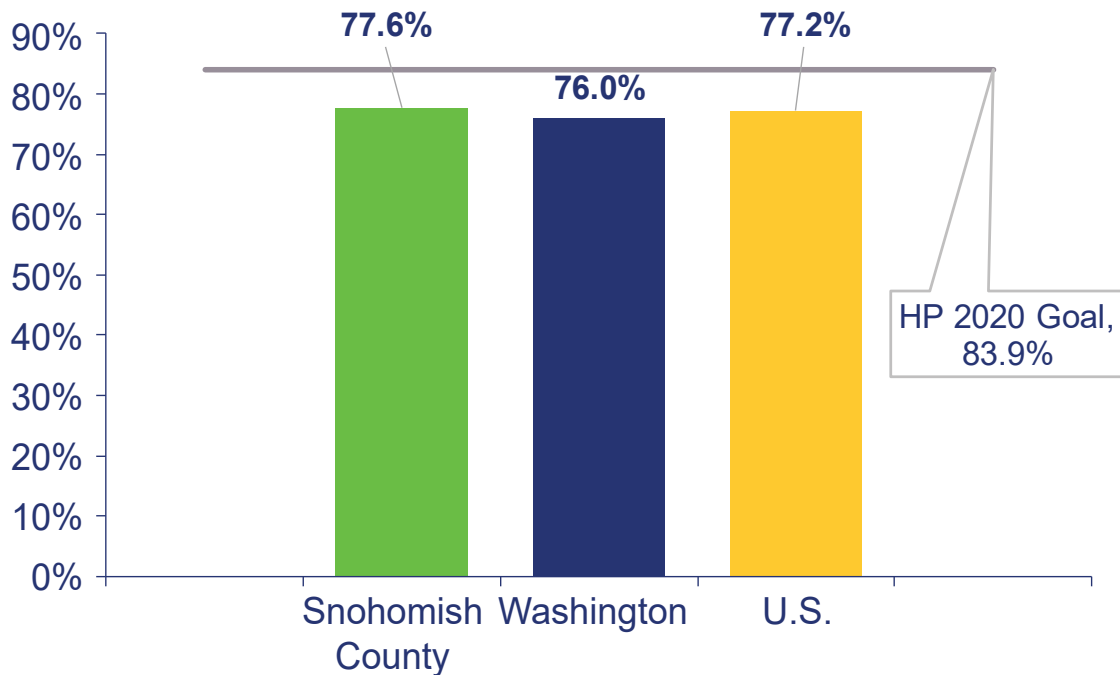
Cost: Nearly ten percent (9.9%) of Snohomish County adults reported in 2018 that there was at least one time in the last year when they did not go to the doctor due to cost¹⁶. This is an improvement from earlier years and can also be at least partially attributed to ACA expansion of health insurance.

Health Care Access (cont.)



Having a Primary Care Provider: According to the 2018 Behavioral Risk Factor Surveillance System, 77.6% of adults in Snohomish County have one person they consider to be their personal doctor or health care provider. This is similar to state (76.0%)¹⁶ and U.S. (77.2%)²³ figures. The county, state, and nation are not meeting the Healthy People 2020 goal of 83.9% of adults having a primary care provider¹⁵.

Figure 32: 2018 Adults with a Primary Care Provider



Snohomish County has a ratio of one primary care physician for every 1,969 residents. This ratio has been increasing. The increase may be due to the influx of new residents in the county outpacing the number of new primary care providers. Snohomish County has nearly twice the ratio of residents to PCP as the top performers in the country (1:1,050)³³.

Health Care Access (cont.)



Routine Checkup: Routine checkups are vital for catching any health concerns before they grow into something more serious. More than 15% of Snohomish County adults have not seen a doctor for a checkup within the last two years. Males (20.3%) are nearly twice as likely as females (10.3%) to report that they did not have a checkup in the previous two years¹⁶. The county percentage of adults who have not had checkups is similar to the state (14.5%)¹⁶ and higher than the U.S. (12.2%)²³.

COMMUNITY INPUT

Health care access, specifically access to primary care, was one of eight issues selected for discussion at the community data walks. The most common observation was the same for all three events: Snohomish County's high ratio of patients per primary care provider.

At the first data walk, the group that discussed health care access focused on the low amount of primary care providers, especially when compared to the state figure. The group concluded that the catalyst for change should be the development of career paths with local schools and colleges to interest more medical students in primary care.

Health Care Access Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|---|------------------|-------------|------------|-------------|
| Primary care physician ratio | -1 | -1 | -1 | -3 |
| Adults with a personal doctor or health care provider | 0 | 0 | -1 | -1 |
| Adults without routine checkup in 2 years | -0.5 | 1 | n/a | 0.5 |
| Uninsured youth | 0.5 | 1 | -1 | 0.5 |
| Uninsured adults 18-64 | 0.5 | 1 | -1 | 0.5 |
| Adults who did not see a health care provider due to cost | 0.5 | 1 | n/a | 1.5 |



Birth Rate: The crude birth rate in Snohomish County was 12.1 births per 1,000 people in 2018. The birth rate was highest in those who identified themselves as Pacific Islander (19.2) or Black (19.7) and lowest in those who identified as White (10.3). The rate has held fairly steady over the last ten years³⁴.

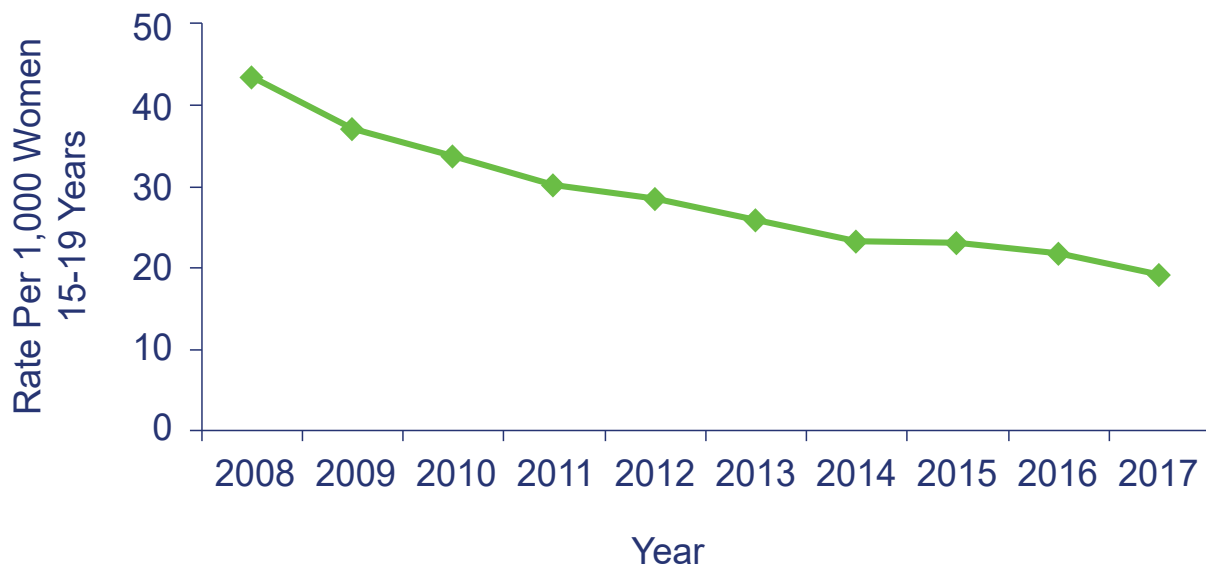
Figure 33: Snohomish County Live Birth Rate





Teen Pregnancy: The pregnancy rate for women between 15 and 19 years old has been steadily declining over the last decade, going from 43.5 births per 1,000 teens in 2008 to less than half that (19.1 per 1,000) in 2017³⁵.

Figure 34: Snohomish County 15-19 Year Old Pregnancy Rate



Maternal-Child Health (cont.)

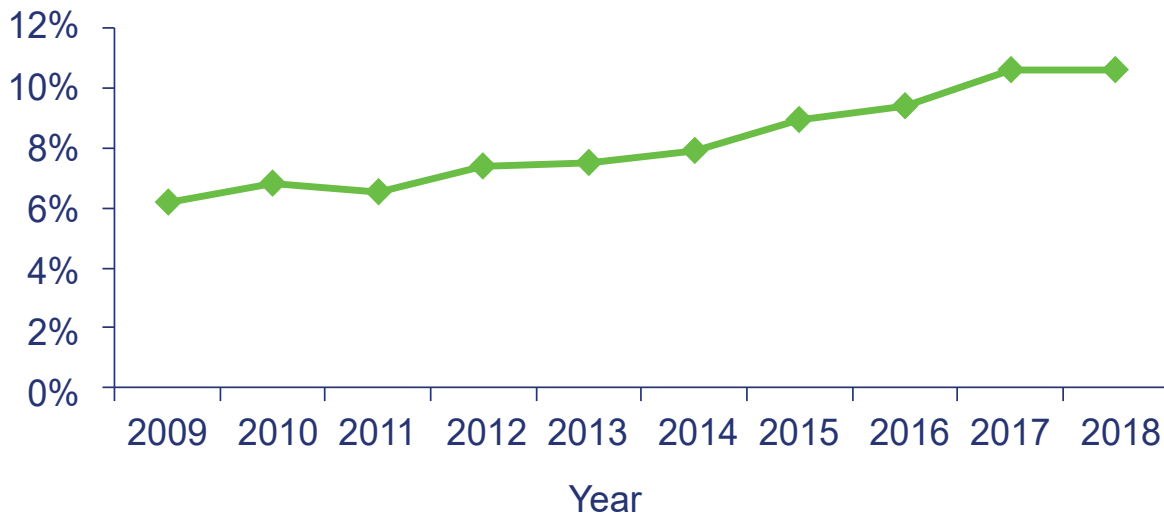


Birth Risk Factors: Nearly one-third (32.1%) of pregnant women ages 15 to 19 did not receive prenatal care in their first trimester. This may be because many didn't know they were pregnant until the second trimester. That percentage is much greater than the county rate (22.7%) for pregnant women of all ages who did not receive prenatal care in their first trimester³⁴.

Along with lack of prenatal care early in the pregnancy, pre-term birth is a risk factor for maternal-child health. Pre-term birth is defined as a birth occurring before the 37th week of pregnancy. The county rate is 8.7% of births occurring before week 37. Pre-term births were highest in mothers age 40 or older (16.6%)³⁴.

Gestational diabetes is another risk factor in pregnant women. The percentage has been steadily increasing from a low of 5.5% of pregnant women diagnosed with gestational diabetes in 2008 to 10.6% in 2018³⁴.

Figure 35: Snohomish County Gestational Diabetes



Maternal-Child Health (cont.)



Breastfeeding: The vast majority of mothers in Snohomish County (96.5%) in 2016 breastfed their infants at least once in the first two months of the infant's life³⁶.

Maternal Child Health Scoring Table

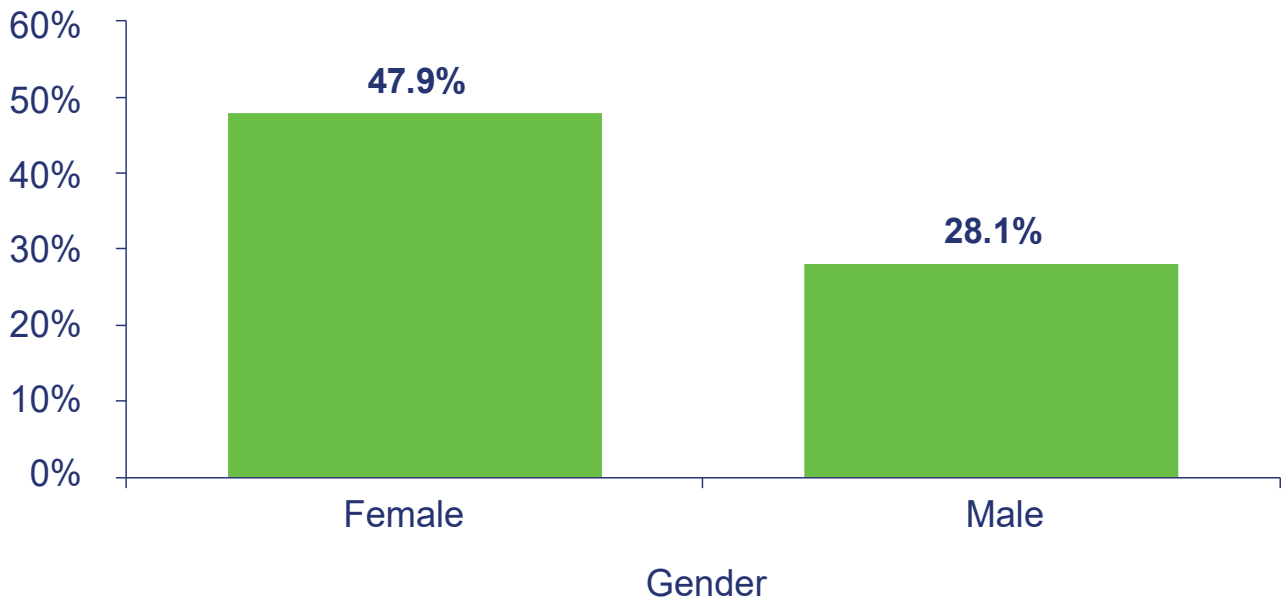
| Indicator | Comparison score | Trend score | Goal score | Total score |
|--|------------------|-------------|------------|-------------|
| Gestational diabetes | -0.5 | -1 | n/a | -1.5 |
| Smoking during pregnancy | 0 | 0 | -1 | -1 |
| Low birth weight | 0.5 | 0 | -1 | -0.5 |
| Postpartum depression | 0 | n/a | n/a | 0 |
| No 1 st trimester prenatal care | 0 | 1 | -1 | 0 |
| Teen pregnancy | 0 | 1 | n/a | 1 |
| Premature births (<37 weeks) | 0 | 0 | 1 | 1 |
| No breastfeeding | 0.5 | n/a | 1 | 1.5 |



Youth Depression: A young person who reports feeling sad or hopeless almost every day for two weeks or longer, to the point that they are not doing their usual activities, meets the definition of youth depression in surveys like the Youth Risk Behavior Survey or Healthy Youth Survey. The percentage of students reporting experiencing depression in Snohomish County has been rising since 2012, when it was 29.8% of 10th graders. The overall rate in 2018 was 38.2%, with a strong difference in rates between male and female students¹⁷.

The Healthy People 2020 goal is that no more than 7.5% of all high school students report these feelings¹⁵.

Figure 36: 2018 Snohomish County 10th Grade Students with Depression by Gender



Support: In 2018, 10.4% of Snohomish County adults said they “rarely” or “never” get the social and emotional support they need¹⁶.

About half (52.2%) of 10th grade students felt they had an adult in their life they could turn to for help when feeling sad or hopeless¹⁷.

Suicidal Ideation: According to the 2018 Healthy Youth Survey, 22.5% of 10th grade students in Snohomish County had seriously considered attempting suicide in the past 12 months. This number has been increasing steadily since 2012, when 18.6% of students reported this contemplation. Like depression, there was a significant disparity between male and female students¹⁷.

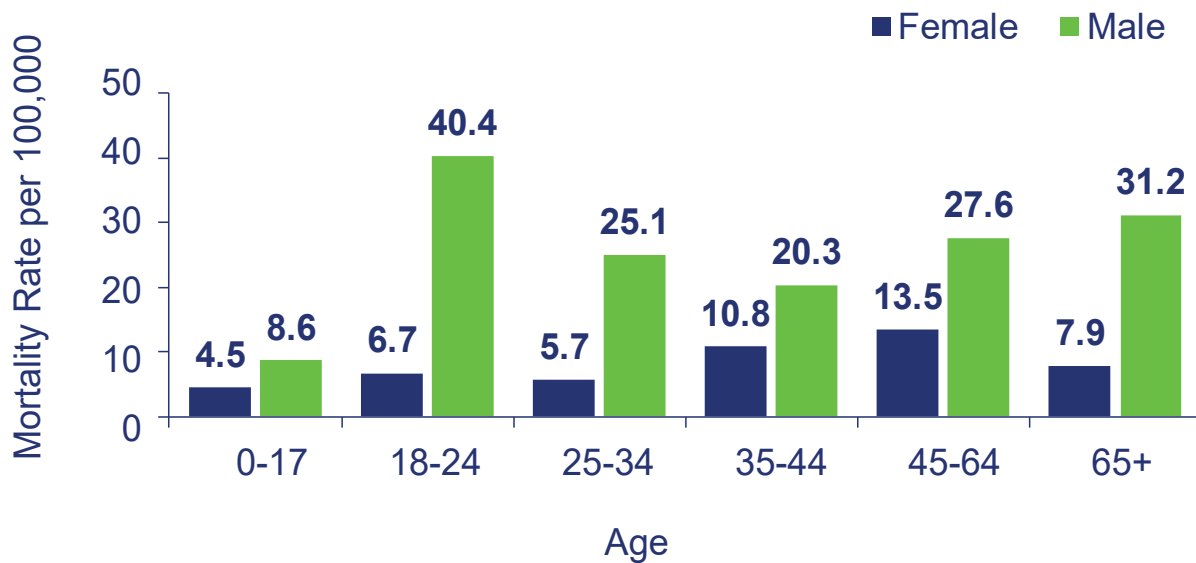
Suicide Attempts: There were 411 Snohomish County residents hospitalized for suicide attempts in 2018, a rate of 53 hospitalizations per 100,000 people. Hospitalizations were highest for young adults between 18 and 24 years old¹⁹.

Mental Health (cont.)



Suicide Mortality: On average, one person in Snohomish County died by suicide every three days in 2018. A total of 129 Snohomish County residents died by suicide, which is a rate of 15.5 deaths per 100,000 people. The rate was highest for males in two age groups: 65 and older and 18 to 24 years old²⁰.

Figure 37: 2018 Snohomish County Suicide Mortality by Age and Gender



Mental Health Provider Ratio: Snohomish County had a ratio of one mental health provider for every 328 residents in 2017. Providers include: psychologists, licensed clinical social workers, psychiatrists, counselors, marriage and family therapists, mental health providers who treat alcohol and drug abuse, and advanced practice nurses specializing in mental health care. The state ratio was one provider for every 310 residents³³.

COMMUNITY INPUT

Groups at all three data walks talked about suicide in-depth. Discussion topics included suicide mortality, hospitalization, and ideation among youth and adults. Nearly all participants (seven out of eight groups at the first data walk) were concerned that the mortality rate for suicide was far higher in males compared to females, across all age groups.

For indicators around mental health, the most noted observation (made by 75% of participants in the first data walk) was that only 50.5% of 10th graders in Snohomish County say they have an adult to turn to when they feel sad or hopeless in 2016. The Healthy People 2020 goal is 83.2% of adolescents with an adult to turn to.

Mental Health (cont.)



COMMUNITY INPUT (CONT.)

The groups at the youth mental health table during the first and third data walks determined that not having a trusted adult to turn to was their top concern for youth mental health. At the first walk, the group suggested that the root cause of this is that adults are not aware of the importance of their role in a teen's life. They decided that if more adults that interact with teens on a regular basis were taught or trained on how to respond to problems, more youth would feel comfortable turning to them when needed. The group at the third walk determined that the root cause is teens not having enough healthy outlets for stress that include adults to turn to, and if those outlets were increased, fewer youth would report feeling depressed.

At the second walk, the group at the youth mental health table determined that the biggest catalyst for change in improving youth mental health would be to focus on the gender gap in depression by getting more young women in counseling or on medication to manage depression.

At all three walks, the groups who talked about suicide focused on mortality. Key concerns include: mortality is higher than the rest of the country; mortality is higher in males; and suicide mortality is trending up in Snohomish County. The group at the first walk believed the root cause is a lack of social connectedness. The group at the second walk pointed to a need for increased access to mental health providers. At the third walk, the group felt that reducing the stigma around mental health would reduce mortality.

Mental Health Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|------------------------------------|------------------|-------------|------------|-------------|
| Youth depression | 0 | -1 | -1 | -2 |
| Youth considering suicide | -0.5 | -1 | n/a | -1.5 |
| Suicide mortality | 0 | 0 | -1 | -1 |
| Youth social support | 0 | 1 | -1 | 0 |
| Adult inadequate emotional support | 0 | n/a | n/a | 0 |
| Adult poor mental health days | 0 | 0 | n/a | 0 |
| Suicide hospitalization | 0 | n/a | n/a | 0 |
| Mental health ratio | 0.5 | 1 | -1 | 0.5 |

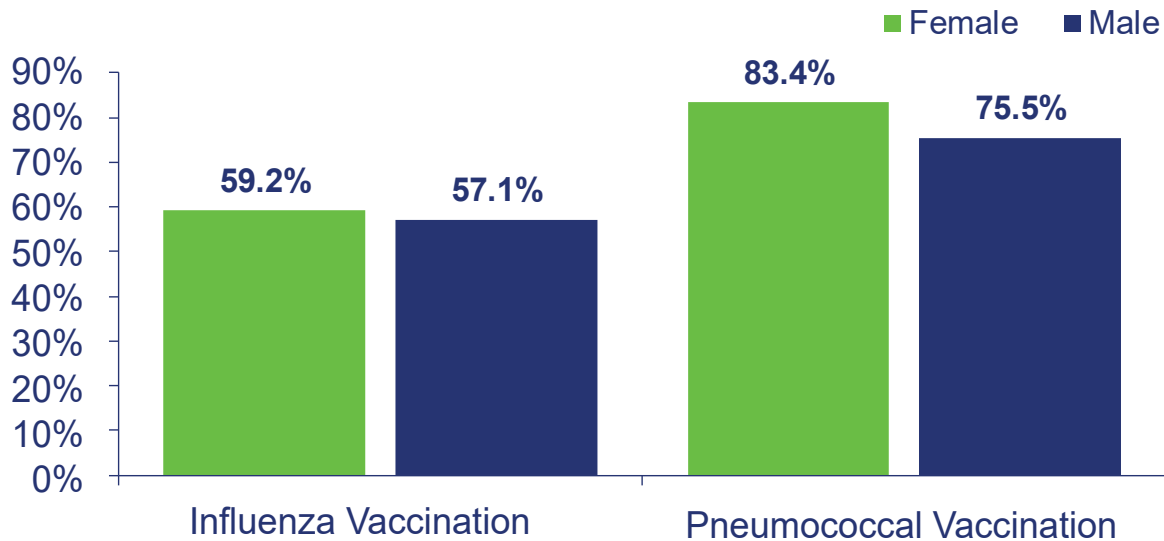
Older Adults & Aging



Living Alone: In 2018, 114,746 Snohomish County residents were age 65 or older¹. Recent census estimates suggest that 43.4% of this age group lives alone⁸.

Vaccinations: 58.4% of older adults (65 or older) in Snohomish County reported in 2018 that they had received a flu shot in the last year. Additionally, 80.3% of that population reported that they've received a pneumonia vaccination at some point in their lives. Females were more likely to have gotten the pneumonia vaccination than males (83.4% and 75.5%, respectively)¹⁶. The Healthy People 2020 goal is for 90% of people 65 and older to have received the pneumonia vaccine¹⁵.

Figure 38: 2018 Snohomish County Adults 65 and Older Vaccination by Gender

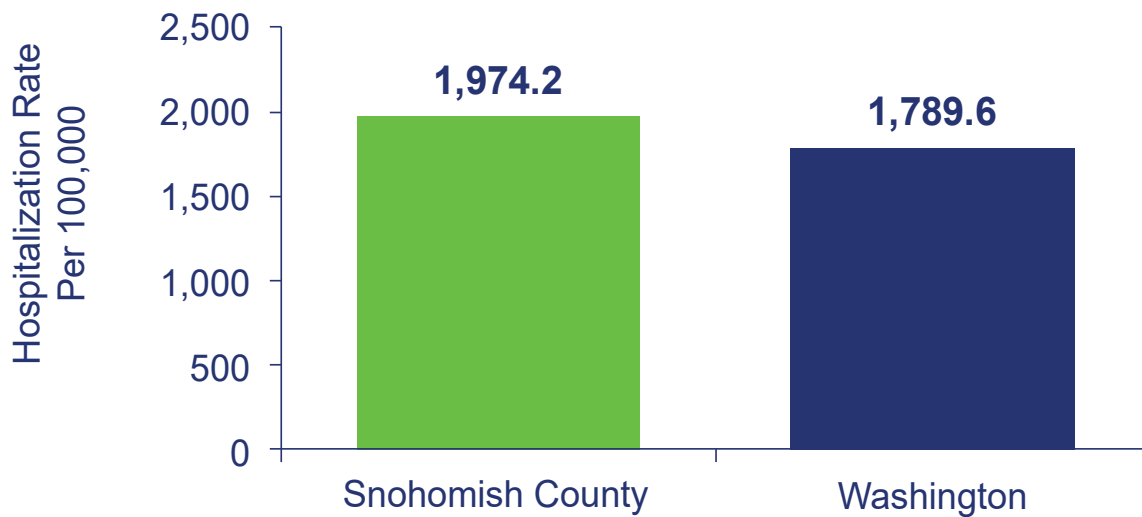


Older Adults & Aging (cont.)



Falls: Fall-related injuries sent 2,254 older adults to the hospital in 2018, a rate of 1974.2 fall-related hospitalizations per 100,000 residents age 65 or older. The rate was higher for females compared to males (2,156.6 compared to 1,748.4). The county rate is also higher compared to the state rate of 1,789.6 hospitalizations per 100,000 older adults¹⁹.

Figure 39: 2018 Adults 65 and Older Fall Hospitalizations



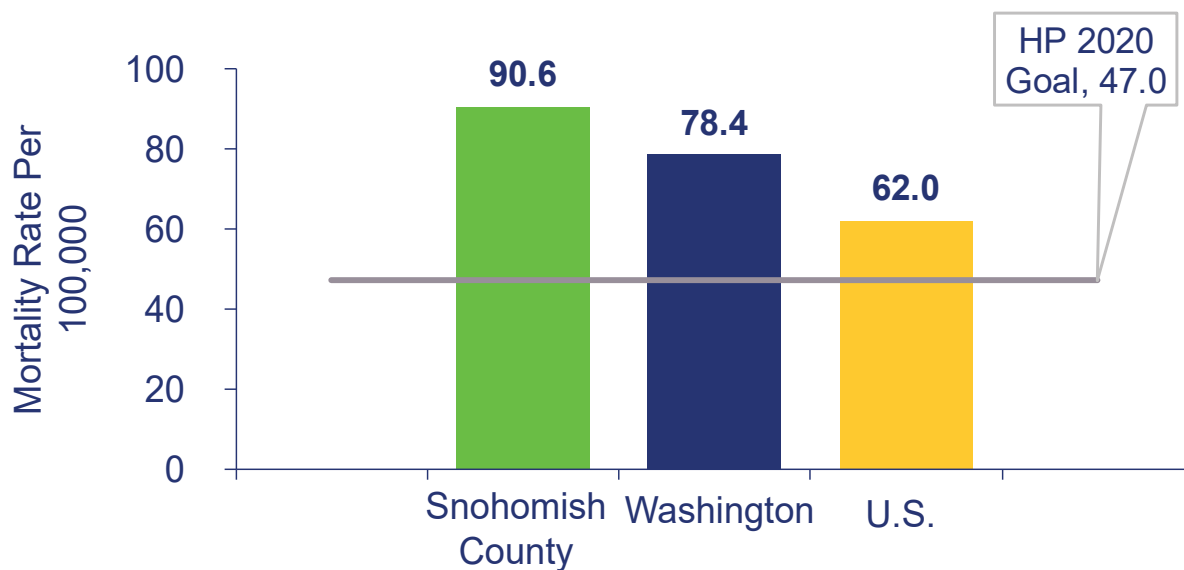
Of the 2,254 fall-related hospitalizations in county residents age 65 and older, 483 involved a fractured hip. The rate for hip fracture hospitalizations was far higher in females age 65 or older compared to males (557.4 compared to 256.8)¹⁹.

Older Adults & Aging (cont.)



In 2018, 104 people in Snohomish County who were 65 or older died from fall-related injuries. The mortality rate was 90.6 deaths per 100,000 older adults. The rate has been inconsistent over the last decade. Similar to fall hospitalizations, the rate was higher for females than males (96.1 compared to 83.8). The mortality rate in the county was worse than the state mortality rate of 78.4 per 100,000²⁰. However, neither rate is close to meeting the Healthy People 2020 goal of no more than 47 fall-related deaths per 100,000 older adults¹⁵.

Figure 40: 2018 Adults 65 and Older Fall Mortality



Older Adults & Aging (cont.)



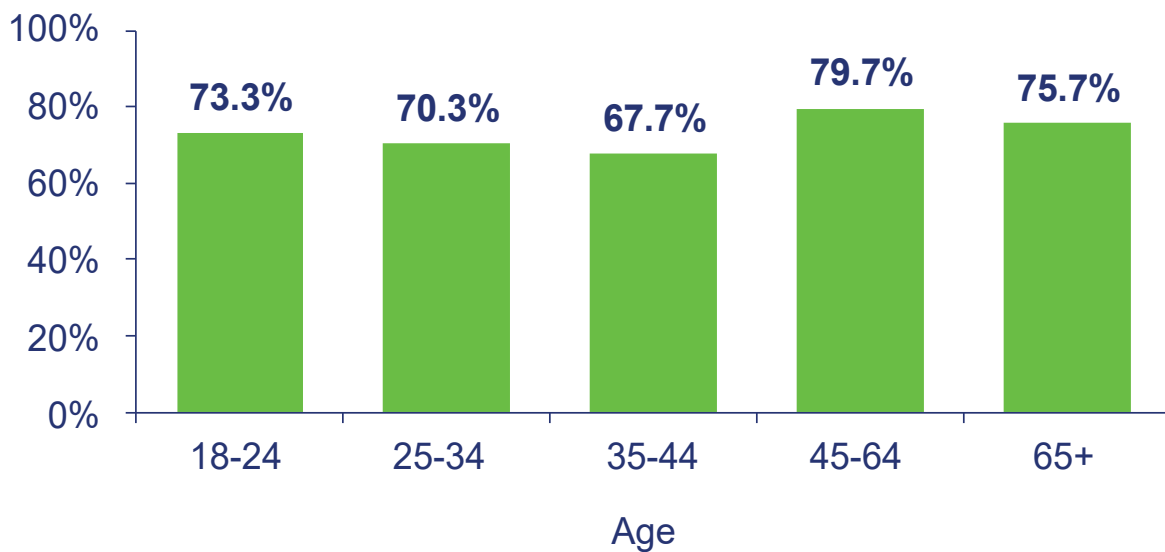
Health Issues Among Older Adults Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|----------------------------------|------------------|-------------|------------|-------------|
| 65+ fall mortality | -0.5 | 0 | -1 | -1.5 |
| 65+ influenza hospitalization | 0 | -1 | n/a | -1 |
| 65+ pneumonia vaccination | 0 | 1 | -1 | 0 |
| 65+ living alone | 0 | 0 | n/a | 0 |
| 65+ influenza vaccination | 0 | 0 | 0 | 0 |
| 65+ fall hospitalization | 0 | 0 | n/a | 0 |
| 65+ hip fracture hospitalization | 0 | 0 | n/a | 0 |



Dentist Visits: In Snohomish County, 74.4% of adults reported in 2018 that they had seen a dentist in the last year. As demonstrated in Figure 41, the percentage of adults who had seen a dentist was highest for ages 45 to 64 (79.7%), and lowest for ages 35 to 44 (67.7%)¹⁶.

Figure 41: 2018 Snohomish County Adults with Routine Dental Visit by Age



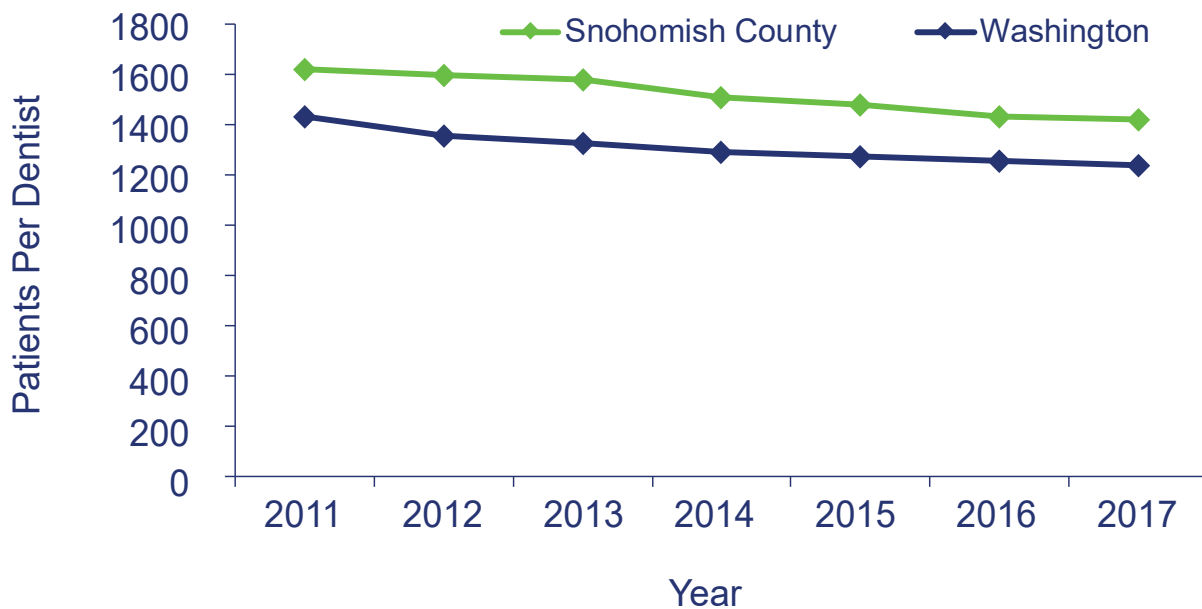
Of 10th grade students in Snohomish County, 77.6% reported having a non-orthodontic dental visit in the last year¹⁷. Both youth and adults in Snohomish County are exceeding the Healthy People 2020 goal, which is at least 49% of people age 2 or older having a dental visit in the last year¹⁵.

Oral Health (cont.)



Dentist Ratio: There was one dentist for every 1,623 Snohomish County residents in 2011. Since then, the ratio has improved. There now is one dentist for every 1,420 residents. The ratio is far better, with fewer patients per dentist, in Washington overall³³.

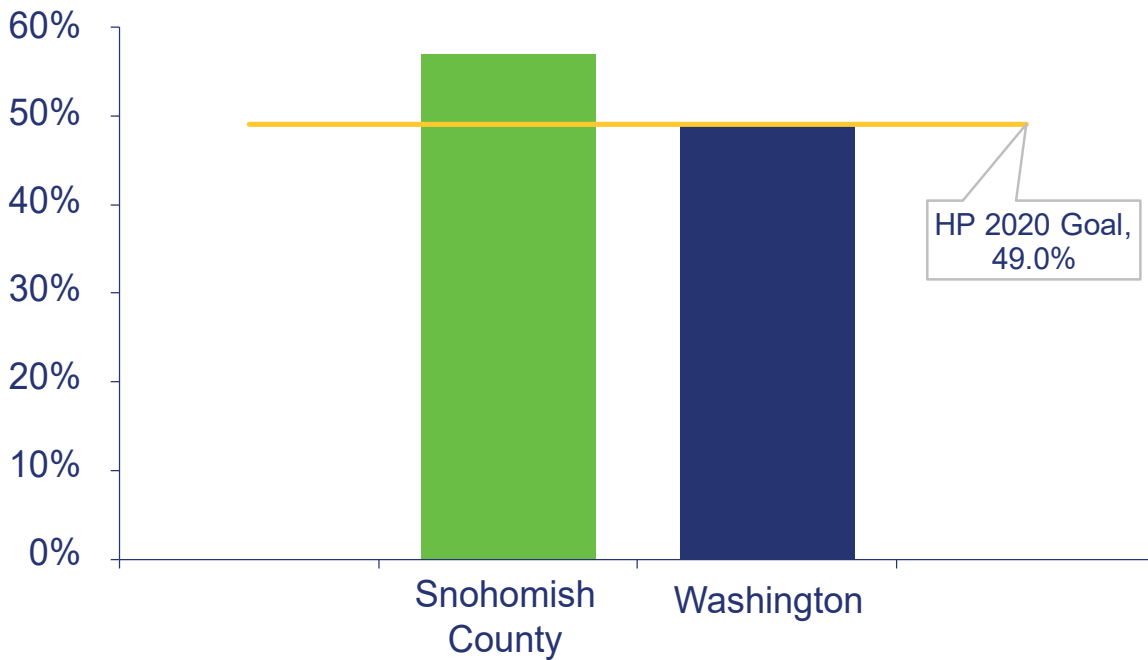
Figure 42: Patient-to-Dentist Ratio





Child Caries: Dental caries, also known as cavities, affected 46.3% of children ages 3 to 5 enrolled in Head Start and Early Childhood Education and Assistance Program (ECEAP) preschools, and 57.4% of public school children ages 6 to 9³⁷. While the county rate for 3- to 5-year-olds was similar to the state, the rate for 6- to 9-year-olds is higher³⁸. Snohomish County is not meeting the Healthy People 2020 goals for either age group (30% and 49%, respectively)¹⁵.

Figure 43: 2015 Dental Caries in Children Ages 6-9



Child Dental Sealants: Dental sealants on permanent teeth can help provide a barrier of protection against caries for children. Smile Survey data from 2015 found that 39.6% of children in the county between 6 and 9 years old have dental sealants on their teeth³⁷, compared to 44% of children in that age group statewide³⁸. The rate of sealants in Snohomish County was highest for Hispanic children at 52.6%³⁷.

Oral Health (cont.)



COMMUNITY INPUT

Oral health was one of the eight issues discussed during three community data walks. The largest concern (noted by groups at 10 out of 13 total tables at the events) was that the amount of children who have received dental sealants has been decreasing since 2005, according to the Smile Survey.

The group at the oral health table during the first data walk chose to focus on the larger amount of caries in American Indian/Alaska Native children ages 6 to 9 compared to children of other races or ethnicities. The group determined that while there are many factors that can contribute to racial or ethnic disparities, the root cause was a lack of cultural connection between patient and provider, and that fostering a better sense of trust and safety would reduce caries in American Indian/Alaska Native children.

Oral Health Scoring Table

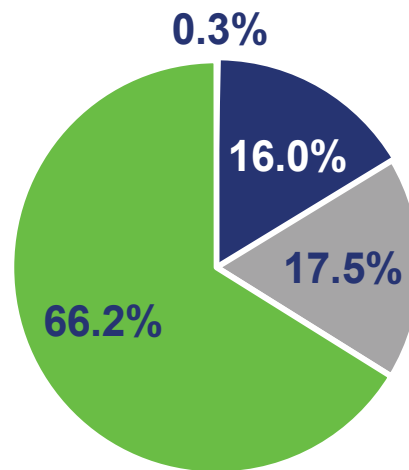
| Indicator | Comparison score | Trend score | Goal score | Total score |
|---|------------------|-------------|------------|-------------|
| Dental caries in children 6-9 years old | -0.5 | -1 | -1 | -2.5 |
| Dental caries in children 3-5 years old | 0 | 0 | -1 | -1 |
| Child dental sealants | 0 | -1 | 1 | 0 |
| Dentist ratio | 0 | 1 | -1 | 0 |
| Adult dental visit | 0 | 0 | 1 | 1 |
| Youth dental visit | 0 | 1 | 1 | 2 |



Violent Crime: Currently, the FBI violent crime database only monitors violent crimes reported by the Snohomish County Sheriff's Office, not by city precincts. The pie chart shows which category these violent crimes fell into in 2018³⁹.

Figure 44: 2018 Violent Crimes Reported to Snohomish County Sheriff's Office by Type

■ Murder ■ Rape ■ Robbery ■ Assault



Assault-Related Mortality: In 2018, Snohomish County had an assault-related mortality rate of 3 deaths per 100,000 people. This is slightly lower than the state rate of 3.8 per 100,000²⁰, and far lower than the U.S. rate of 6.1 per 100,000²².

Snohomish County is meeting the Healthy People 2020 goal of no more than 5.5 assault-related deaths per 100,000 people¹⁵.

Firearms: According to the 2018 Behavioral Risk Factor Surveillance System, 36.4% of households in Snohomish County owned at least one firearm. More than half (58.3%) of firearm owners in the county who keep their gun loaded do not have it securely locked up¹⁶.

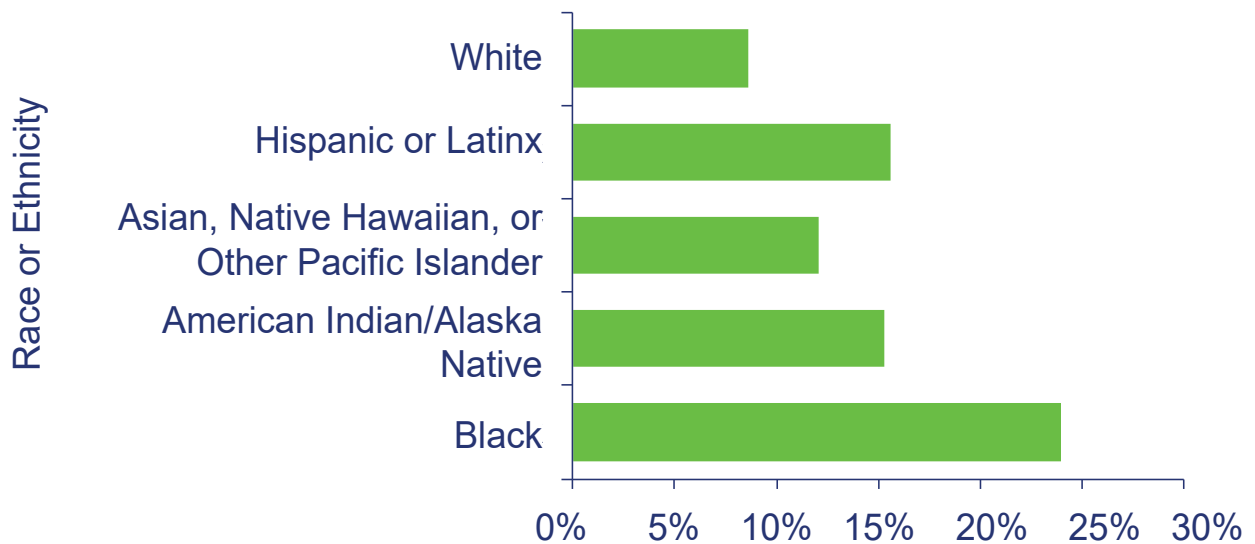
School Safety: When asked if they felt safe at school, 76.8% of 10th grade students in the county said they do feel safe. This is similar to the state rate of 79%¹⁷.

Safety & Violence (cont.)



Bullying: Nearly one in five (19.3%) 10th grade students in the county reported being physically or verbally bullied at least once in the past month in 2018. 11.5% of students reported being bullied due to their racial/ethnic background or country of origin (or what someone thought was their country of origin). Black students reported higher rates of being bullied (23.9%) due to race, ethnicity, or country of origin than their peers¹⁷.

Figure 45: 2018 Snohomish County 10th Grade Students Bullied due to Race, Ethnicity, or Country of Origin by Race or Ethnicity



Safety & Violence (cont.)



Abuse: Nearly a quarter (24.5%) of 10th grade students said they had been hurt on purpose by an adult at some point in their lives. Of the 12th grade students who had gone out with or dated someone in the past year, nearly one in five (17%) said a person they went out with had threatened them, limited their activities, or made them feel unsafe¹⁷.

Public Safety Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|---|------------------|-------------|------------|-------------|
| Youth dating intimidation | 0 | 0 | n/a | 0 |
| Youth bullying due to race/ethnicity/origin | 0 | 0 | n/a | 0 |
| Youth feeling safe at school | 0 | 0 | n/a | 0 |
| Loaded unlocked firearm in home | 0 | 0 | n/a | 0 |
| Youth hurt on purpose by adult | 0 | 1 | n/a | 1 |
| Youth bullying | 0 | 1 | n/a | 1 |
| Firearm hospitalizations | 0.5 | 1 | n/a | 1.5 |
| Assault-related mortality | 1 | 0 | 1 | 2 |

Substance Use



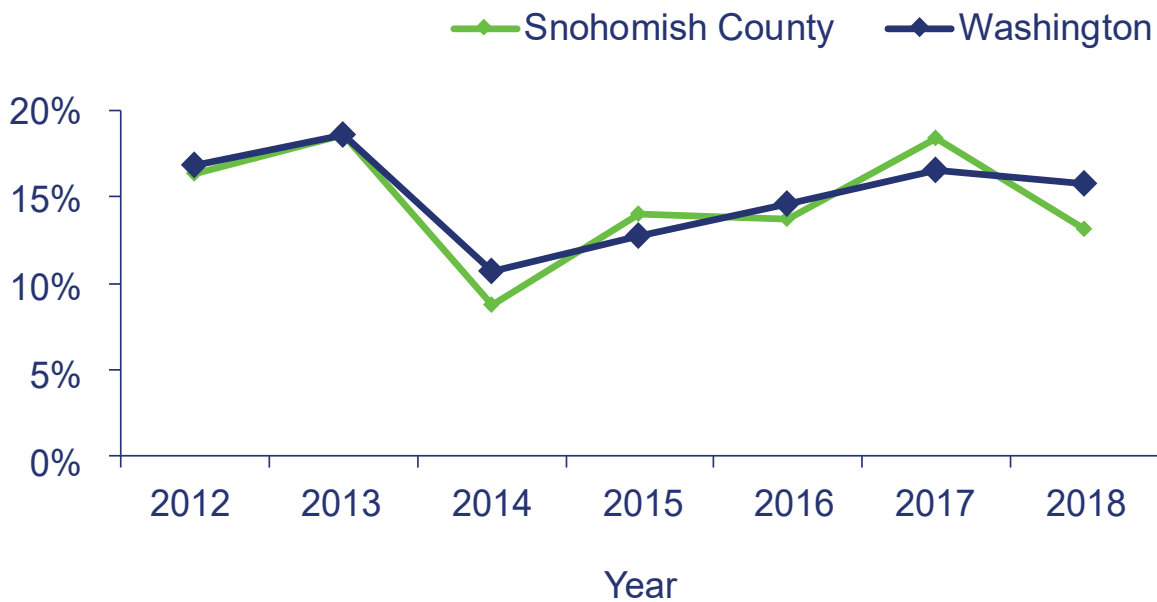
Cigarettes: In the 2018 Healthy Youth Survey, 4.9% of 10th grade students in Snohomish County reported smoking at least one cigarette in the past month¹⁷. That same year, the Behavioral Risk Factor Surveillance System found that 11.9% of adults reported smoking at least one cigarette in the past month¹⁶. Both youth and adults are meeting the Healthy People 2020 goal for their age groups¹⁵. Since 2008, the prevalence of youth smoking has decreased by nearly 75%.

A little over 4 percent (4.2%) of adults¹⁸ and 22.6% of 10th graders¹⁷ in the county reported using e-cigarettes or vapor devices in the past month. The 10th grade rate doubled since 2016, signaling a rapid rise and indicating adult use may have similarly increased since the question was asked in 2017.

Marijuana Use: After peaking in 2010, Snohomish County's youth marijuana use has been decreasing, with 17.3% of 10th graders reporting in 2018 that they'd used marijuana in the past month¹⁷.

Statewide, adult use increased linearly from 2014 to 2017 after recreational use was legalized in 2014. However, Snohomish County's adult use rates have fluctuated in that time. Adults between 18 and 24 years old are more likely to report using marijuana in the past month than other age groups¹⁶.

Figure 46: Adult Marijuana Use

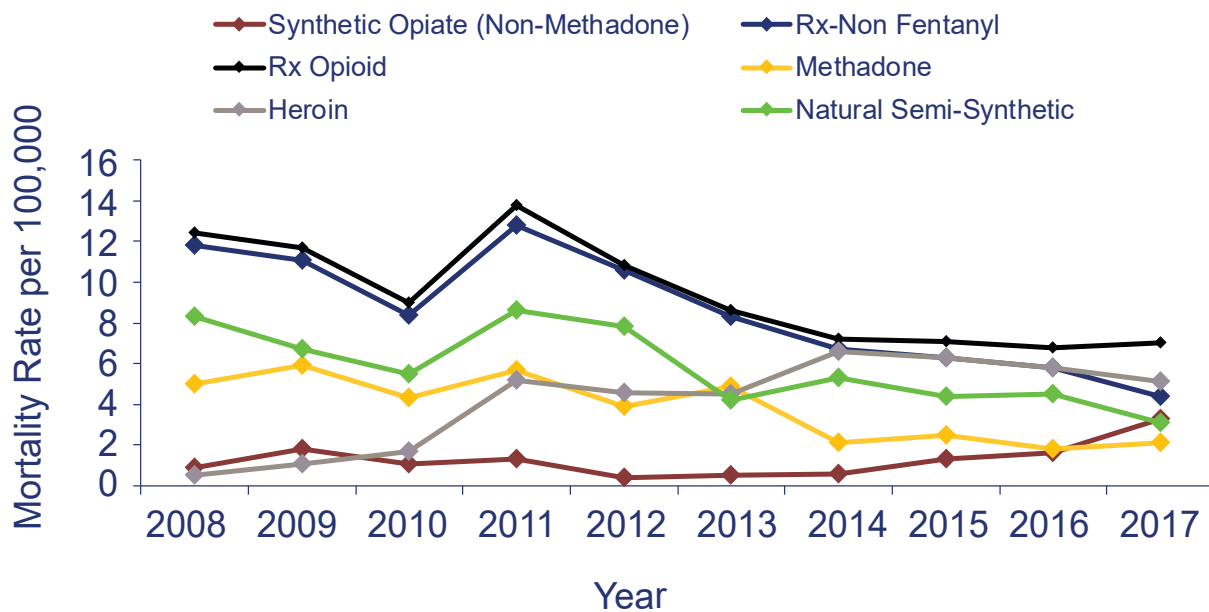


Substance Use (cont.)



Opioids: Opioid-related deaths have decreased since 2012. The county's rate in 2017 was 12 deaths per 100,000 people. This was higher than the state rate of 9.9 deaths per 100,000³⁸. The decrease in deaths likely can be attributed to the increased availability of the opioid overdose reversal drug naloxone (also known as Narcan). Analyses show that over time, only overdose deaths involving non-methadone synthetic opioids, such as fentanyl, are increasing in Snohomish County²⁰.

Figure 47: Snohomish County Opioid-Related Mortality by Opioid Type





Hospitalizations in Snohomish County for non-fatal opioid overdoses have been fluctuating. Narcan may be administered by police, fire or emergency medical technicians, as well as other trained non-medical professionals on the scene. This likely has decreased the number of overdose patients who need to be admitted to a hospital¹⁹.

Figure 48: Snohomish County Opioid-Related Hospitalizations



Substance Use (cont.)



COMMUNITY INPUT

Though opioid mortality and hospitalization did not score as poorly as some other community health indicators, the data task force chose opioids as one of the top issues to discuss during the three community data walks. Nearly unanimously (12 out of 13 groups at the data walk tables), participants noted that mortality from opioid-related causes has been decreasing in the county. They identified this as a great strength. However, rather than noting concerns about the data presented, participants focused on what data they wished was available. Due to privacy concerns, data around demographics such as age, gender, race, ethnicity, income, and housing is not currently available for opioid overdose mortality or hospitalizations.

There was a table dedicated to determining the root cause of opioid-related issues in the county at two of the data walks. No one self-selected into the opioid group at the third event. The second walk's opioid group zeroed in on the fact that something caused a spike in mortality between 2010 and 2011 before mortality rates began to plummet. The group concluded that if the availability of treatment and counseling, including access to medication assisted treatment like buprenorphine, were to increase, the number of opioid overdose deaths in Snohomish County would continue to decline.

Substance Use Scoring Table

| Indicator | Comparison score | Trend score | Goal score | Total score |
|--------------------------|------------------|-------------|------------|-------------|
| Youth e-cigarette use | -0.5 | -1 | n/a | -1.5 |
| Adult marijuana use | 0.5 | -1 | n/a | -0.5 |
| Youth illegal drug use | -0.5 | 0 | n/a | -0.5 |
| Youth marijuana use | 0 | 1 | -1 | 0 |
| Opiate hospitalization | 0 | 0 | n/a | 0 |
| Adult e-cigarette use | 0 | 0 | n/a | 0 |
| Opiate mortality | 0 | 0 | n/a | 0 |
| Youth binge drinking | 0 | 1 | n/a | 1 |
| Youth painkiller use | 0.5 | 1 | n/a | 1.5 |
| Youth alcohol use | 0.5 | 1 | n/a | 1.5 |
| Adult smoking cigarettes | 0.5 | 1 | 1 | 2.5 |
| Adult binge drinking | 0.5 | 1 | 1 | 2.5 |
| Youth smoking cigarettes | 0.5 | 1 | 1 | 2.5 |



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Appendix A: Data Analysis Methods



In order to determine what health topics were of greater importance for Snohomish County, more than 150 indicators were analyzed and assigned a score.

SCORING METHOD

For each indicator, the Snohomish County value was assigned a score based on three factors: comparison to the state and U.S. values; trend over time; and whether health goals or benchmarks are being met. Each factor could be scored between a negative one (-1) to a positive one (+1), giving the overall score a range from negative three (-3) to positive three (+3).



The ability to have a score for all three factors depended on the data source and changes or differences in methodology over time. For example, if the wording of a question in a survey changed, the old question's responses could not be compared to the new question's responses, so those indicators have an "n/a" for not applicable.

Comparison Score: Each indicator was compared to the state value and, if available, the U.S. value. If Snohomish County was doing better or worse than Washington by 20% or more, it scored a positive or negative 0.5 points. If Snohomish County was doing better or worse than the U.S. by 20% or more, it scored a positive or negative 0.5 points. The total comparison score ranged from a negative one (-1) to a positive one (+1). The decision to not look for statistical significance was made because some indicators do not have confidence intervals available.

Trend Score: For indicators with a minimum of three data points, a trend analysis going back up to 10 years was run using the coefficient of determination, also known as R^2 . Indicators with an R^2 value between -0.5 to -1 or 0.5 to 1 were given a score of a positive or negative one. For some indicators, the R^2 value was under the threshold to be awarded points, but had been going in the same direction for several years in a row. Those indicators will be monitored in the coming years to see if the trend worsens.

Goal Score: Snohomish County's value was compared to Healthy People 2020 objectives when available. Healthy People 2020 provides goals meant to be reached by the nation by the year 2020. The goals were set by the U.S. Department of Health and Human Services' (DHHS) Healthy People Initiative. In many cases, goals from Healthy People 2020 did not align with indicators. The 2019 County Health Rankings from the Robert Wood Johnson foundation served as a backup for many indicators where Healthy People 2020 goals were not available, with the value achieved by the top 10% of counties in the U.S. serving as the target value.

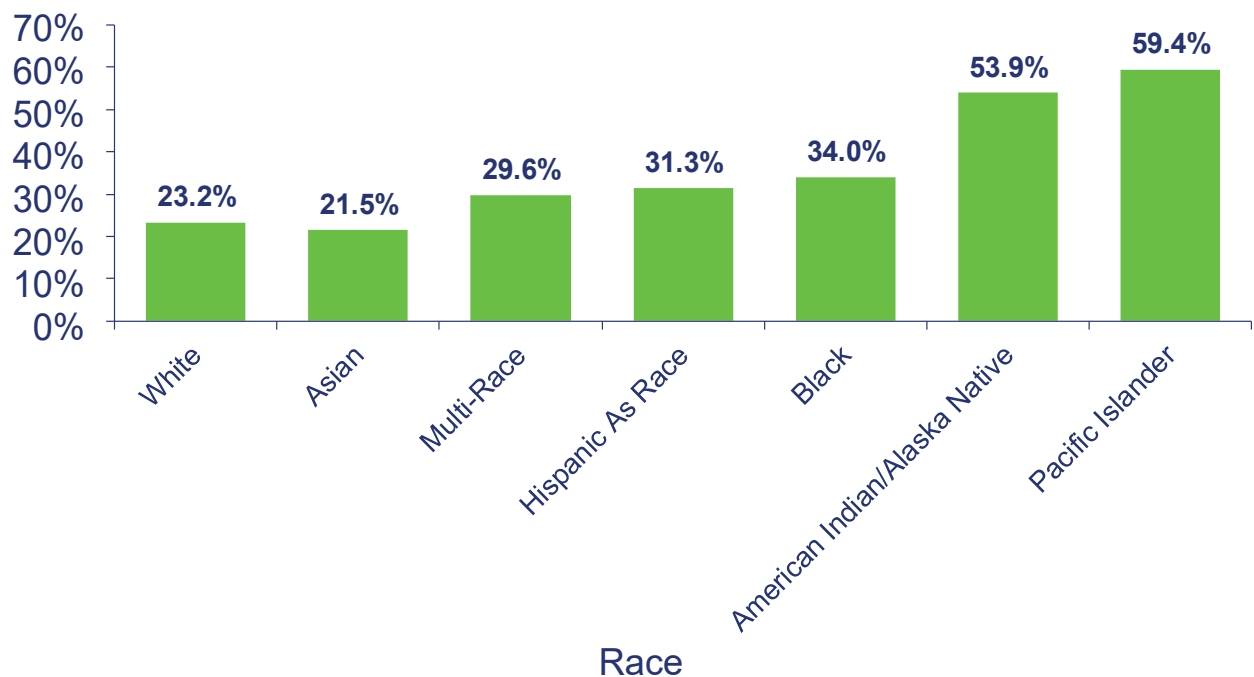
Total Score: Each of the three scores were added to determine the final score for the indicator. For ease of analysis, each topic in this report ends with a table showing how the indicators scored. The tables are ordered from lowest-scoring to highest-scoring and color coded as follows:

- Red: -3 to -2
- Yellow: -1.5 to 1.5
- Green: 2 to 3



Disparities Analysis: After the data task force began meeting to discuss the data, one group member pointed out that in the case of pregnant women initiating prenatal care in the first trimester, the score did not tell the whole story. The county value at the time of the presentation of 25.6% of women not receiving prenatal care compared neutrally to the state rate of 26.5%³⁴ and did not drastically differ from the U.S. rate of 22.9%⁴⁰. It was trending in the right direction but not meeting the Healthy People 2020 goal, so the indicator had a score of zero, a neutral value. However, when this indicator was sorted by race and ethnicity, the outcome was far more stark:

Figure 49: 2016 Snohomish County Pregnant Women with No Prenatal Care in First Trimester



At that time, only Asian mothers (21.5%) in Snohomish County were meeting the Healthy People 2020 goal of no greater than 22.1% not initiating prenatal care in the first trimester, with over half Pacific Island or American Indian/Alaska Native mothers not obtaining care in the first trimester. Early prenatal care is vital for catching complications and ensuring a healthy pregnancy and baby, so the higher rate of these groups not receiving that care was of great concern.

The member who noted the disparity proposed that the task force look at every measure though the lens of disparate groups. Snohomish County epidemiologists looked at all indicators and noted cases where there was a group that was disproportionately worse than the county figure by 20% or more. In some cases the disparities were by race or ethnicity, in others gender, age, or some combination.

Appendix A: Data Analysis Methods (cont.)



During the final meeting of the task force before the data walks were held in fall 2018, members voted anonymously on their top 20 health concerns when given a table with all scoring and disparity information. There was then a second vote amongst the indicators that had received votes to determine the top issues that would move forward at the community data walks. The top eight topics determined by the data task force were: opioids; disparities in the American Indian/Alaska Native population; children’s oral health; youth obesity; health care access; youth mental health; housing; and suicide.

Since the data walks were held, new data has been released for nearly two-thirds of the indicators. While a new disparity analyses has not been conducted, for the 2020 Community Health Improvement Plan the final indicators relating to the top priorities will again be assessed for disparities in-depth. This includes analyzing the data by ZIP code or economic figures when possible.

Appendix B: Data Tables



| Indicator | SC Value | WA Value | U.S. Value | Trend | Goal | Source |
|--|----------|----------|------------|-------|---|---|
| 65+ below Federal Poverty Level | 7.6% | 7.9% | 9.3% | ← | No goal | 2013-2017 American Community Survey 5-year estimates |
| 65+ fall hospitalization (per 100,000) | 1974.2 | 1789.6 | n/a | ↔ | No goal | 2018 Washington State Center for Health Statistics |
| 65+ fall mortality (per 100,000) | 90.6 | 78.4 | 61.3 | ↔ | HP 2020 47.0 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| 65+ hospitalized for hip fractures (per 100,000) | 423.0 | 407.9 | n/a | ↔ | No goal | 2018 Washington State Center for Health Statistics |
| 65+ influenza hospitalization (per 100,000) | 189.2 | 154.6 | n/a | ← | No goal | 2018 Washington State Center for Health Statistics |
| 65+ living alone | 43.4% | 42.8% | 42.9% | ↔ | No goal | 2013-2017 American Community Survey 5-year estimates |
| 65+ with influenza vaccination past year | 58.4% | 58.4% | 54.0% | ↔ | No goal | 2018 BRFSS |
| 65+ with pneumonia vaccination | 80.3% | 78.1% | 71.3% | → | HP 2020 90% | 2018 BRFSS |
| 6th grade students being physically active 60+ minutes/day | 26.0% | 26.8% | n/a | ↔ | No goal | 2018 HYS |
| Active Tuberculosis rate (per 100,000) | 2.7 | 2.4 | 2.8 | ↔ | HP 2020 1.0 | 2018 Washington State Tuberculosis Program; 2017 CDC Atlas Plus |
| Acute Hepatitis B rate (per 100,000) | 0.6 | 0.6 | 1.1 | ↔ | HP 2020 1.5 | 2017 Washington State Communicable Disease Epidemiology Office; 2017 CDC Atlas Plus |
| Acute Hepatitis C rate (per 100,000) | 1.1 | 1.1 | 1.0 | ← | HP 2020 0.25 | 2017 Washington State Communicable Disease Epidemiology Office; 2017 CDC Atlas Plus |
| Adult binge drinking | 13.0% | 14.7% | 16.4% | → | HP 2020 24.2% adults 18+ who drank 5+ drinks during a single occasion (men) or 4+ drinks during a single occasion (women) | 2018 BRFSS |
| Adult current e-cigarette use | 4.2% | 4.5% | 4.6% | ↔ | No goal | 2017 BRFSS |
| Adult current marijuana use | 13.1% | 15.8% | 11.1% | ← | No goal | 2018 BRFSS |
| Adult current texting and driving | 36.9% | 32.2% | n/a | ↔ | No goal | 2017 BRFSS |
| Adult drove a vehicle after smoking marijuana in past year | 25.4% | 24.6% | n/a | ↔ | No goal | 2018 BRFSS |
| Adult inadequate emotional support | 10.4% | 9.4% | n/a | n/a | No goal | 2018 BRFSS |

Appendix B: Data Tables (cont.)



| | | | | | | |
|--|-------|-------|-------|---|---------------|--|
| Adult mental health 'not good' 14+ days a month | 11.9% | 12.0% | 12.7% | ↔ | No goal | 2018 BRFSS |
| Adult physical health 'not good' 14+ days a month | 11.2% | 11.8% | 12.6% | ↔ | HP 2020 20.2% | 2018 BRFSS |
| Adult seatbelt usage 'always' | 95.4% | 93.1% | 87.5% | ↔ | HP 2020 92% | 2018 BRFSS |
| Adult workers 16+ who commute by public transportation | 5.3% | 6.3% | 5.1% | ↔ | HP 2020 5% | 2013-2017 American Community Survey 5-year estimates |
| Adults 50-75 meeting colorectal cancer screening guidelines | 66.1% | 64.2% | 64.1% | ↔ | HP 2020 70.5% | 2018 BRFSS |
| Adults current smoking cigarettes | 11.9% | 12.0% | 15.5% | → | HP 2020 12% | 2018 BRFSS |
| Adults ever told they have asthma | 17.7% | 15.9% | 14.5% | ↔ | No goal | 2018 BRFSS |
| Adults ever told they have COPD | 4.4% | 5.1% | 6.7% | ↔ | No goal | 2018 BRFSS |
| Adults ever told they have coronary heart disease/had an MI | 5.5% | 5.8% | 6.9% | ↔ | No goal | 2018 BRFSS |
| Adults ever told they have diabetes | 10.2% | 9.9% | 11.4% | ↔ | No goal | 2018 BRFSS |
| Adults ever told they have had a stroke | 2.6% | 3.01% | 3.4% | ↔ | No goal | 2018 BRFSS |
| Adults ever told they have high blood pressure | 29.4% | 27.2% | 29.9% | ↔ | HP 2020 26.9 | 2017 BRFSS |
| Adults ever told they have high cholesterol | 25.7% | 26.5% | 28.5% | → | No goal | 2017 BRFSS |
| Adults limited in any way in any activities because of physical, mental, or emotional problems | 21.9% | 22.2% | 19.3% | → | No goal | 2017 BRFSS |
| Adults meeting aerobic and strength physical activity recommendations | 21.7% | 23.6% | 20.4% | ↔ | HP 2020 47.9% | 2017 BRFSS |
| Adults on Medicare | 17.1% | 21.3% | 22.7% | ↔ | No goal | 2018 BRFSS |
| Adults visited dentist or dental clinic in past year | 74.4% | 69.2% | 66.5% | ↔ | HP 2020 49% | 2018 BRFSS |
| Adults who did not see a health care provider because of cost | 9.9% | 11.0% | 13.0% | → | No goal | 2018 BRFSS |
| Adults who did not seek out health care due to transportation | 3.54% | 4.15% | 4.4% | ↔ | No goal | 2018 BRFSS |
| Adults who had flu vaccination past year | 39.6% | 38.4% | 33.2% | ↔ | HP 2020 70% | 2018 BRFSS |

Appendix B: Data Tables (cont.)



| | | | | | | |
|--|--------|--------|--------|-----|--|---|
| Adults who have ever had an HIV test | 41.0% | 39.9% | 40.2% | ↔ | HP 2020 73.6% of those aged 15-44 | 2018 BRFSS |
| Adults with a personal doctor or health care provider | 77.6% | 76.0% | 77.2% | ↔ | HP 2020 83.9% | 2018 BRFSS |
| Adults with fair/poor overall health | 14.8% | 15.7% | 18.6% | ↔ | No goal | 2018 BRFSS |
| Adults with very low fruit intake | 34.6% | 32.1% | 36.3% | ↔ | No goal | 2017 BRFSS |
| Adults with very low vegetable intake | 16.0% | 16.9% | 19.4% | → | No goal | 2017 BRFSS |
| Adults without routine checkup within 2 years | 15.3% | 14.5% | 12.2% | → | No goal | 2018 BRFSS |
| Arsenic levels in water, % exposed | 0.0% | 0.2% | n/a | n/a | No goal | 2017 Washington State Office of Drinking Water |
| Assault-related mortality (per 100,000) | 3.0 | 3.8 | 6.1 | ↔ | HP 2020 5.5 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Asthma hospitalization (per 100,000) | 39.3 | 29.1 | n/a | ← | HP 2020 0-4: 18.2 5-64: 8.7 65+: 20.1 | 2018 Washington State Center for Health Statistics |
| Average days poor health interfered with ADLs | 4.8 | 4.7 | 5.1 | ↔ | No goal | 2018 BRFSS |
| Campylobacteriosis rate (per 100,000) | 34.5 | 29.7 | 17.7 | ← | No goal | 2017 Washington State Communicable Disease Epidemiology Office; 2016 CDC Notifiable Disease Reporting |
| Cancer incidence (per 100,000) | 527.5 | 497.6 | 436.0 | ↔ | No goal | 2016 Washington State Cancer Registry; 2016 National Program of Cancer Registries & Surveillance |
| Cancer mortality (per 100,000) | 140.9 | 144.5 | 152.5 | → | HP 2020 161.4 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Childhood mortality rate per 100,000 (1-14) | 10.49 | 13.19 | 16.6 | ↔ | HP 2020 26.5 for ages 1-4, 12.4 for ages 5-9, 14.8 for ages 10-14 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Children < 72 months of age screened for lead | 2.9% | 3.7% | n/a | → | No goal | 2018 Washington State Childhood Lead Program |
| Children below Federal Poverty Level | 11.1% | 15.8% | 20.3% | → | Robert Wood Johnson, 11% | 2013-2017 American Community Survey 5-year estimates |
| Children complete for all immunizations, K-12 | 86.4% | 87.3% | n/a | ← | No goal | Washington State Office of Immunization and Child Profile |
| Chlamydia rate (per 100,000) – females age 15-24 years | 2503.8 | 3050.0 | 3655.5 | ↔ | No goal | 2018 Washington State STD Services Section; 2016 CDC Atlas Plus |
| Colorectal cancer incidence (per 100,000) | 40.7 | 36.3 | 37.4 | ↔ | No goal | 2016 Washington State Cancer Registry; 2016 National Program of Cancer Registries & Surveillance |

Appendix B: Data Tables (cont.)



| | | | | | | |
|---|-----------|-----------|-----------|-----|---|---|
| Colorectal cancer mortality (per 100,000) | 13.9 | 11.3 | 13.4 | ↔ | HP 2020 14.5 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| COPD hospitalization (per 100,000) | 83.1 | 63.6 | n/a | ← | HP 2020 50.1 per 10,000 adults aged 45+ | 2018 Washington State Center for Health Statistics |
| Dental caries in elementary school children (6-9 years old) | 57.3% | 49.0% | n/a | ← | HP 2020 49% | 2015 Smile Survey |
| Dental caries in preschool children (3-5 years old) | 46.3% | 45.0% | n/a | n/a | HP 2020 30% | 2015 Smile Survey |
| Dentist ratio | 1420 to 1 | 1237 to 1 | 1642 to 1 | → | Robert Wood Johnson, 1260 to 1 | 2019 Robert Wood Johnson Community Health Rankings |
| Diabetes hospitalization (per 100,000) | 119.9 | 110.9 | n/a | → | No goal | 2018 Washington State Center for Health Statistics |
| Drive to work alone | 74.7% | 72.3% | 76.4% | ↔ | Robert Wood Johnson, 72% | 2013-2017 American Community Survey 5-year estimates |
| Families below Federal Poverty Level | 5.9% | 8.0% | 10.5% | ↔ | No goal | 2013-2017 American Community Survey 5-year estimates |
| Female breast cancer incidence (per 100,000) | 131.1 | 133.2 | 124.2 | ↔ | No goal | 2016 Washington State Cancer Registry; 2016 National Program of Cancer Registries & Surveillance |
| Female breast cancer mortality (per 100,000) | 17.3 | 19.5 | 19.9 | ↔ | HP 2020 20.7 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Females 21-65 meeting Pap test guidelines | 76.9% | 76.6% | 79.9% | ↔ | HP 2020 93% | 2018 BRFSS |
| Females 50-74 meeting mammogram guidelines | 75.4% | 75.1% | 78.9% | ↔ | HP 2020 73.7% | 2018 BRFSS |
| Firearm hospitalizations (per 100,000) | 4.4 | 6.4 | n/a | → | No goal | 2018 Washington State Center for Health Statistics |
| Free/Reduced cost lunch recipients | 33.3% | 43.4% | n/a | → | No goal | 2018 Office of Superintendent of Public Instruction |
| Giardia rate (per 100,000) | 8.0 | 9.0 | 4.5 | ↔ | No goal | 2017 Washington State Communicable Disease Epidemiology Office; 2016 CDC Notifiable Disease Reporting |
| Gonorrhea rate (per 100,000) | 116.0 | 159.1 | 170.6 | ← | No goal | 2018 Washington State STD Services Section; 2017 CDC Atlas Plus |
| Hepatitis A rate (per 100,000) | 0.2 | 0.4 | 1.0 | ↔ | HP 2020 0.3 | 2017 Washington State Communicable Disease Epidemiology Office; 2017 CDC Atlas Plus |
| Housing occupied by homeowners | 66.6% | 62.7% | 63.8% | ← | No goal | 2013-2017 American Community Survey 5-year estimates |
| Infant mortality rate (per 1,000) | 4.1 | 4.8 | 5.8 | ↔ | HP 2020 6.0 | 2017 Washington State Center for Health Statistics; 2017 National Vital Statistics Reports |

Appendix B: Data Tables (cont.)



| | | | | | | |
|--|--------------|--------------|--------------|-----|--|---|
| Influenza hospitalization (per 100,000) | 36.4 | 31.2 | 31.3 | ← | No goal | 2018 Washington State Center for Health Statistics; 2016 CDC Wonder |
| Influenza mortality (per 100,000) | 4.2 | 3.2 | n/a | ← | No goal | 2018 Washington State Center for Health Statistics |
| Life expectancy at birth | 80.4 years | 80.4 years | 78.6 Years | ↔ | No goal | 2018 Washington State Center for Health Statistics; 2017 CDC United States Life Tables |
| Live births with low birth weight (babies born weighing < 2,500 grams) | 6.4% | 6.6% | 8.3% | ↔ | Robert Wood Johnson, 6% | 2018 Washington State Center for Health Statistics; 2017 National Vital Statistics Report |
| Loaded and unlocked firearm in home | 6.6% | 5.8% | n/a | ↔ | No goal | 2018 BRFSS |
| Lung cancer incidence (per 100,000) | 55.2 | 53.7 | 56.0 | → | No goal | 2016 Washington State Cancer Registry; 2016 National Program of Cancer Registries & Surveillance |
| Lung cancer mortality (per 100,000) | 31.6 | 30.9 | 36.6 | → | HP 2020, 45.5 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Mean travel time to work | 31.8 minutes | 27.1 minutes | 26.4 minutes | ← | No goal | 2013-2017 American Community Survey 5-year estimates |
| Median gross rent for a 2 bedroom | \$ 1,205 | \$ 1,079 | \$ 964 | n/a | No goal | 2013-2017 American Community Survey 5-year estimates |
| Melanoma incidence (per 100,000) | 28.5 | 25.6 | 22.3 | ↔ | No goal | 2016 Washington State Cancer Registry; 2015 National Program of Cancer Registries & Surveillance |
| Melanoma mortality (per 100,000) | 1.5 | 2.3 | 2.1 | ↔ | HP 2020 2.4 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Mental health professional ratio | 328 to 1 | 310 to 1 | 426 to 1 | → | Robert Wood Johnson, 310 to 1 | 2019 Robert Wood Johnson Community Health Rankings |
| Motor vehicle crash hospitalization (per 100,000) | 50.7 | 48.5 | n/a | → | No goal | 2018 Washington State Center for Health Statistics |
| Motor vehicle crash mortality (per 100,000) | 6.5 | 8.6 | 12.6 | ↔ | HP 2020 12.4 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Mumps rate (per 100,000) | 11.3 | 10.7 | 0.4 | ↔ | No goal | 2017 Washington State Communicable Disease Epidemiology Office; 2016 CDC Notifiable Disease Reporting |
| New HIV diagnosis rate (per 100,000) | 4.9 | 7.1 | 14.0 | ↔ | No goal | 2017 CDC Atlas Plus |
| Nitrate levels in water, % exceedances | 0.0% | 0.3% | n/a | n/a | No goal | 2017 Washington State Office of Drinking Water |
| No breastfeeding | 3.5% | 4.2% | n/a | n/a | HP 2020 81.9%, was ever breastfed or fed breast milk | 2016 Pregnancy Risk Assessment Monitoring System |
| Obese adults | 30.86% | 28.66% | 30.94% | ↔ | HP 2020 30.5% | 2018 BRFSS |
| Obese youth | 15.1% | 13.7% | 14.9% | ← | HP 2020 16.1% | 2018 HYS; 2017 YRBS |
| On-time graduation rate | 79.5% | 79.3% | 84.6% (2017) | → | HP 2020 87% | 2017 Office of Superintendent of Public Instruction; 2019 National Center for Educational Statistics |

Appendix B: Data Tables (cont.)



| | | | | | | |
|--|-----------|-----------|-----------|-----|--------------------------------|---|
| Opioid hospitalization rate (per 100,000) | 21.5 | 20.2 | n/a | ↔ | No goal | 2017 Washington State Center for Health Statistics |
| Opioid mortality (per 100,000) | 12.0 | 9.9 | n/a | ↔ | No goal | 2017 Washington State Center for Health Statistics |
| Overall hospitalization rate (per 100,000) | 8410.9 | 7911.0 | n/a | → | No goal | 2018 Washington State Center for Health Statistics |
| Overall mortality rate (per 100,000) | 654.4 | 664.5 | 731.9 | → | No goal | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Overweight adults | 35.6% | 34.7% | 35.0% | ↔ | No goal | 2018 BRFSS |
| Overweight youth | 14.9% | 14.6% | 16.2% | ↔ | No goal | 2018 HYS; 2017 YRBS |
| Pertussis rate (per 100,000) | 6.7 | 11.2 | 4.9 | ↔ | No goal | 2017 Washington State Communicable Disease Epidemiology Office; 2016 CDC Notifiable Disease Reporting |
| Population 25+ with Bachelor's degree | 31.3% | 34.4% | 30.9% | → | No goal | 2013-2017 American Community Survey 5-year estimates |
| Population below Federal Poverty Level | 8.8% | 12.2% | 14.6% | ↔ | No goal | 2013-2017 American Community Survey 5-year estimates |
| Post-partum depression | 12.2% | 11.3% | 11.0% | n/a | No goal | 2016 Pregnancy Risk Assessment Monitoring System |
| Pregnant women diagnosed with gestational diabetes | 10.6% | 9.3% | 6.4% | ← | No goal | 2018 Washington State Center for Health Statistics; 2017 National Vital Statistics Reports |
| Pregnant women with no 1st trimester prenatal care | 22.7% | 26.4% | 22.7% | → | HP 2020 22.1% | 2018 Washington State Center for Health Statistics; 2017 National Vital Statistics Reports |
| Preterm births (<37 weeks) | 8.7% | 9.2% | 9.9% | ↔ | HP 2020 9.4% | 2018 Washington State Center for Health Statistics; 2017 National Vital Statistics Reports |
| Primary and secondary syphilis rate (per 100,000) | 5.2 | 10.5 | 9.4 | ← | No goal | 2018 Washington State STD Services Section; 2017 CDC Atlas Plus |
| Primary care provider ratio | 1969 to 1 | 1218 to 1 | 1320 to 1 | ← | Robert Wood Johnson, 1050 to 1 | 2019 Robert Wood Johnson Community Health Rankings |
| Prostate cancer incidence (per 100,000) | 105.3 | 96.7 | 101.4 | → | No goal | 2016 Washington State Cancer Registry; 2016 National Program of Cancer Registries & Surveillance |
| Prostate cancer mortality (per 100,000 males) | 19.5 | 19.9 | 18.7 | ↔ | HP 2020 21.8 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Renters spending >30% of monthly income on housing | 49.2% | 48.9% | 50.6% | ↔ | No goal | 2013-2017 American Community Survey 5-year estimates |
| Salmonella rate (per 100,000) | 10 | 11.1 | 17.2 | ↔ | No goal | 2017 Washington State Communicable Disease Epidemiology Office; 2016 CDC Notifiable Disease Reporting |
| Sealants in elementary school children (6-9 years old) | 39.6% | 44.0% | n/a | n/a | HP 2020 28.1% | 2015 Smile Survey |
| Single mothers below Federal Poverty Level | 28.6% | 34.4% | 38.7% | ← | No goal | 2013-2017 American Community Survey 5-year estimates |

Appendix B: Data Tables (cont.)

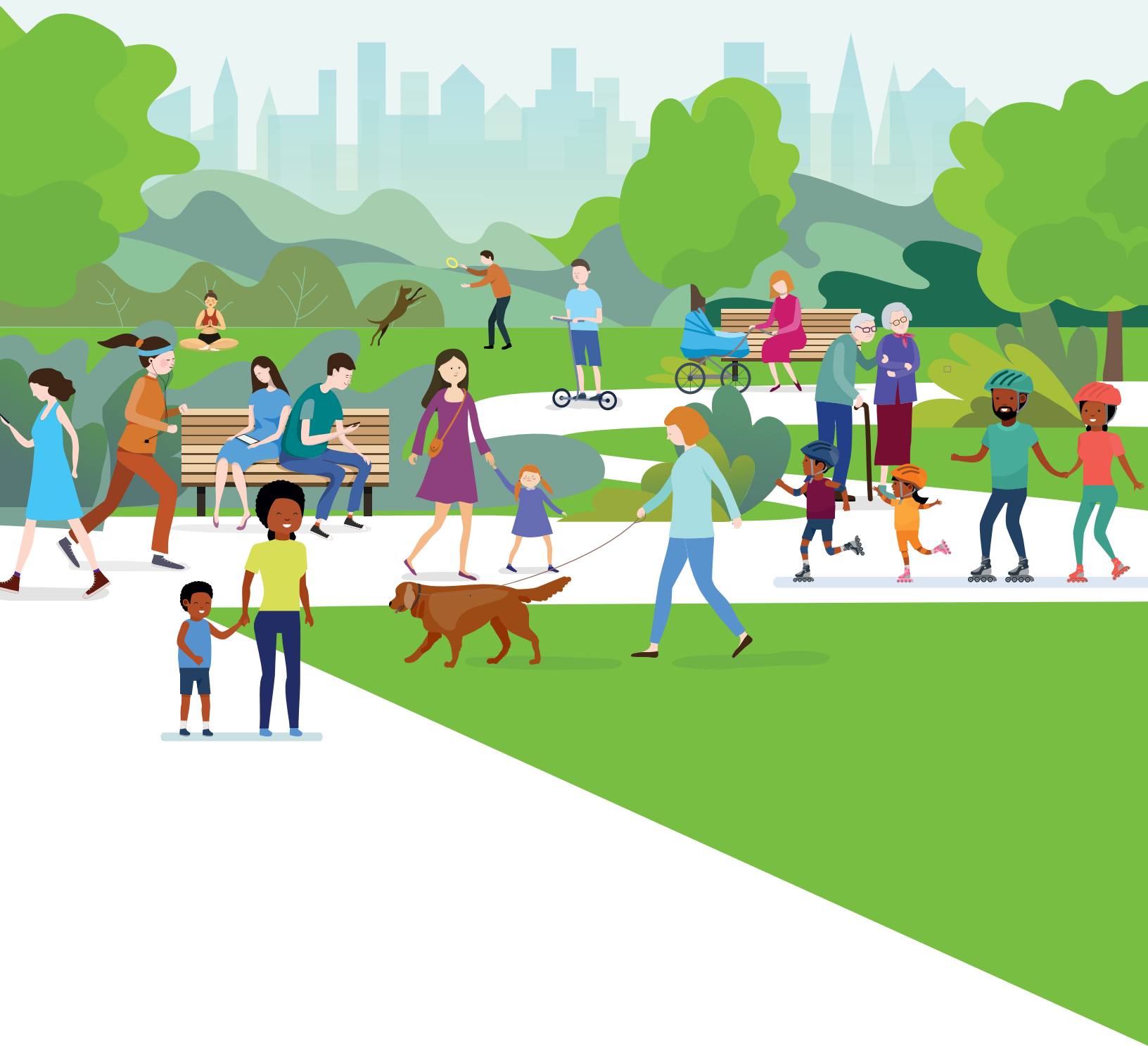


| | | | | | | |
|---|-------|-------|-------|-----|---------------------------------------|---|
| Smoking during pregnancy | 6.6% | 7.1% | 6.9% | ↔ | HP 2020 98.6% abstaining from smoking | 2018 Washington State Center for Health Statistics; 2017 National Vital Statistics Reports |
| SNAP recipients (last 12 months) | 11.1% | 13.3% | 12.6% | ← | No goal | 2013-2017 American Community Survey 5-year estimates |
| STEC e.coli rate (per 100,000) | 4.2 | 5.7 | 2.2 | ↔ | No goal | 2017 Washington State Communicable Disease Epidemiology Office; 2016 CDC Notifiable Disease Reporting |
| Stroke hospitalization (per 100,000) | 177.2 | 158.7 | n/a | → | No goal | 2018 Washington State Center for Health Statistics |
| Suicide hospitalization (per 100,000) | 53.0 | 44.9 | n/a | n/a | No goal | 2018 Washington State Center for Health Statistics |
| Suicide mortality (per 100,000) | 15.5 | 16.2 | 14.0 | ↔ | HP 2020 10.2 | 2018 Washington State Center for Health Statistics; 2017 CDC Wonder |
| Teen pregnancy (15-19) (per 1,000 women) | 19.1 | 21.9 | n/a | → | No goal | 2017 Washington State Center for Health Statistics; |
| Unemployment Rate | 3.8% | 4.5% | 4.4% | → | Robert Wood Johnson, 2.9% | 2019 Washington State Labor Market and Performance Analysis; U.S. Bureau of Labor & Statistics |
| Uninsured adults 18-64 | 7.6% | 8.7% | 12.1% | → | HP 2020 0% | 2017 U.S. Census Bureau |
| Uninsured youth | 2.5% | 2.6% | 5.3% | → | HP 2020 0% | 2017 U.S. Census Bureau |
| Vacancy rate | 6.0% | 8.9% | 12.2% | ↔ | No goal | 2013-2017 American Community Survey 5-year estimates |
| Youth binge drinking | 9.1% | 9.5% | n/a | → | No goal | 2018 HYS |
| Youth bullied due to race/ethnicity in past month | 11.5% | 11.0% | n/a | ↔ | No goal | 2018 HYS |
| Youth bullied within the past month | 19.3% | 19.3% | n/a | → | No goal | 2018 HYS |
| Youth consuming 0 sugar-sweetened beverages per day | 24.1% | 26.6% | n/a | ↔ | No goal | 2018 HYS |
| Youth current alcohol use | 17.5% | 18.5% | 27.0% | → | No goal | 2018 HYS; 2017 YRBS |
| Youth current e-cigarette use | 22.6% | 21.2% | 11.4% | ← | No goal | 2018 HYS; 2017 YRBS |
| Youth current illegal drug (not marijuana) use | 5.9% | 5.9% | 4.50% | ↔ | No goal | 2018 HYS; 2017 YRBS |
| Youth current marijuana use | 17.3% | 17.9% | 18.7% | → | HP 2020 6% (ages 12-17) | 2018 HYS; 2017 YRBS |
| Youth current painkiller use | 3.8% | 3.6% | 12.8% | → | No goal | 2018 HYS; 2017 YRBS |
| Youth current smoking cigarettes | 4.9% | 5.0% | 7.6% | → | HP 2020 16% (Grades 9-12) | 2018 HYS; 2017 YRBS |
| Youth dental visit in past year | 77.6% | 77.1% | 77.1% | → | HP 2020 49% | 2018 HYS; 2017 YRBS |

Appendix B: Data Tables (cont.)



| | | | | | | |
|---|-------|-------|-------|---|--------------------------------------|---------------------|
| Youth depression symptoms | 38.2% | 40.0% | 32.5% | ← | HP 2020 7.5% (ages 12-17) | 2018 HYS; 2017 YRBS |
| Youth drove a vehicle after marijuana use in past month | 13.1% | 16.2% | 18.3% | → | No goal | 2018 HYS; 2017 YRBS |
| Youth eating 5+ fruits and vegetables per day | 17.2% | 17.5% | n/a | ← | No goal | 2018 HYS |
| Youth eating breakfast | 55.1% | 58.9% | n/a | ↔ | No goal | 2018 HYS |
| Youth ever told they have asthma | 18.1% | 21.3% | 22.9% | ↔ | No goal | 2018 HYS; 2017 YRBS |
| Youth hurt on purpose by an adult | 24.5% | 25.2% | n/a | → | No goal | 2018 HYS |
| Youth made to feel unsafe by a boyfriend or girlfriend in the past year | 10.2% | 10.4% | n/a | ↔ | No goal | 2018 HYS |
| Youth meeting physical activity guidelines | 22.1% | 21.6% | 25.6% | → | HP 2020 31.6% (Grades 9-12) | 2018 HYS; 2017 YRBS |
| Youth seriously considering suicide | 22.5% | 23.0% | 17.3% | ← | No goal | 2018 HYS; 2017 YRBS |
| Youth texting and driving in past month | 37.8% | 38.7% | 59.3% | → | No goal | 2018 HYS; 2017 YRBS |
| Youth that drove after drinking alcohol | 5.5% | 7.1% | 8.1% | → | No goal | 2018 HYS; 2017 YRBS |
| Youth that feel safe at school | 76.8% | 79.0% | n/a | ↔ | No goal | 2018 HYS |
| Youth with 2+ hours of television on school nights | 62.5% | 60.8% | n/a | → | HP 2020 26.1% | 2018 HYS |
| Youth with 2+ hours of video games or computer time on school nights | 44.4% | 45.4% | n/a | ← | HP 2020 17.4% | 2018 HYS |
| Youth with an adult to turn to | 52.2% | 49.0% | n/a | → | HP 2020 83.2% (ages 12- 17) | 2018 HYS |



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APPENDIX 24

MELANOMA SURVIVAL AND COSTS

Survival and Cost-Effectiveness of Hospice Care for Metastatic Melanoma Patients

May 20, 2014

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The American Journal of Managed Care, May 2014, Volume 20, Issue 5
Hospice care is associated with improved median survival time for the patients diagnosed with metastatic melanoma, accompanied by decreased end-of-life costs.

Objectives

We analyzed the association of hospice use with survival and healthcare costs among patients diagnosed with metastatic melanoma.

Methods

We used the Surveillance, Epidemiology, and End Results (SEER)- Medicare-linked databases to identify patients 65 years or older with metastatic melanoma who died between 2000 and 2009. We analyzed claims data to ascertain cancer treatment utilization and costs. Survival, end-of-life costs, and incremental cost-effectiveness ratio were evaluated using propensity score methods. Costs were analyzed from the payer perspective in 2009 dollars.

Results

Of 862 patients, 225 (26%) received no hospice care, 523 (61%) received 1 to 3 days of hospice care, and 114 (13%) received 4 or more days of hospice care. The median survival time was 6.1 months for patients with no hospice care, 6.5 months for patients enrolled in hospice for 1 to 3 days, and 10.2 months for patients enrolled for 4 or more days ($P < .001$). The hazard ratio for survival among patients with 4 or more days of hospice use was 0.66; 95% confidence interval, 0.54-0.81, $P < .0001$ in the propensity score—matched model. Patients with 4 or more days of hospice care incurred lower end-of-life costs than the comparison groups (\$14,594 vs \$22,647 for the 1-to-3-days hospice care, and \$28,923 for patients with no hospice care; $P < .0001$).

Conclusions

Patients diagnosed with metastatic melanoma who enrolled in 4 or more days of hospice care had longer survival than those who had 1 to 3 days of hospice or no hospice care, and this longer overall survival was accompanied by lower end-of-life costs.

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- Patients who enrolled in hospice for 4 or more days showed longer median survival than patients who did not use hospice care or who enrolled in hospice care for only 1 to 3 days after diagnosis with metastatic melanoma.
- Among patients who were enrolled in 4 or more days of hospice care, the end-of-life costs decreased by \$14,680 in the model with the original cohort, and by \$9576 in the model with the propensity score—matched cohort.
- The incremental cost was \$29,426 per life-year gained for patients who received 4 or more days of hospice care.

The 5-year survival rate for patients with melanoma detected at the earliest stages is approximately 95%,¹ but falls precipitously to 15% for patients diagnosed with metastatic disease.² Melanoma also places a significant economic burden on society and patients.³ The estimated annual cost of melanoma care in the United States is \$249 million and the average lifetime disease-associated cost for a patient from the time of diagnosis with melanoma until death is approximately \$28,210.³ Furthermore, 40% of the annual cost is attributed to stage 4 melanoma, which includes only around 3% of melanoma patients.³

Since stage 4 melanoma is rarely curable, most medical treatment for these patients—including surgery, radiation therapy, chemotherapy, and biologic therapy—is prescribed

with limited expectations for long-term survival, and often with palliative intent. Increasingly, hospice care has become an acceptable alternative for patients with metastatic cancer. Hospices provide the necessary care, pain management, and emotional support to provide a comfortable end-of-life experience. The use of hospice also likely results in a decrease in utilization of surgery, radiation therapy, and chemotherapy,⁴ thus likely leading to a decrease in medical costs, although this has not been studied among patients with metastatic melanoma. Other investigators have shown that hospice utilization does not result in shortened survival for other terminal illnesses such as advanced lung cancer and pancreatic cancer.^{5,6} However, no studies have examined whether survival is reduced when patients elect hospice care for metastatic melanoma. Our goal is to examine the associations of use of hospice care with survival and costs among patients with metastatic melanoma and to analyze the cost-effectiveness for different durations of hospice care in patients with this disease.

METHODS

Data Source and Cohort Definition

We conducted this study using data from the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER)-Medicare-linked databases. This database covers 17 geographic areas in the United States and encompasses approximately 28% of the US population.⁷ The SEER registries are linked to the Medicare claims databases, which are updated biennially and include 97% of US citizens 65 years and older.⁸ All available Medicare claims files were used to obtain information on treatments and costs of care. The Patient Entitlement and Diagnosis Summary File (PEDSF) contains 1 record per person linked via encrypted identifiers to a corresponding file in the SEER database and provides basic information on sociodemographic and tumor characteristics. All data were de-identified such that no protected health information could be linked to individual patients. The institutional review board from the University of Texas MD Anderson Cancer Center, Houston, Texas, and the University of Texas Health Science Center, Houston, Texas, exempted this study.

We identified patients 65 years and older who were diagnosed with pathologically confirmed malignant melanoma (stage 4) between January 1, 2000, and December 31, 2009. Patients were excluded if their death year and month in the SEER data set and Medicare data sets did not match, or if their cancer diagnosis came from either an autopsy or death certificate. Patients were excluded if they did not have continuous coverage through enrollment in Medicare Part A and Part B from the date of melanoma diagnosis until death or if they had health maintenance organization coverage during this time.

Dependent Variables

Overall survival was defined as the time from diagnosis of melanoma to the patient's death due to the melanoma. The costs incurred in the last 3 months were used to estimate the incremental cost-effectiveness ratio, defined as cost per life-year gained.

Independent Variables

Independent variables in the analysis included age at diagnosis, sex, marital status, neighborhood income and education levels, geographic region, comorbidity score, and hospice density. Hospice density, defined as the number of hospice facilities available within each patient's health service area, was obtained from the Area Resource File.⁹ The Charlson Comorbidity Index score was calculated from an algorithm developed by Klabunde and colleagues.^{10,11} The use of hospice care was identified based on any hospice service date after the melanoma diagnosis date. Based on information relayed by hospice staff, Kris and colleagues concluded that 3 or fewer days was an insufficient amount of time for patients and hospice staff to fully communicate on the planning and implementation of hospice care, so we adopted this common classification approach whereby the number of hospice service days was categorized into 3 groups: no hospice care, 1 to 3 days of hospice care, and 4 or more days of hospice care.^{6,12}

Statistical Analysis

We conducted a univariate analysis using χ^2 test. Multivariate analysis was performed with a standard of $P < .05$ to determine the significance of association of outcomes and variables. A Cox proportional hazards model controlling for potential explanatory variables was used to assess the relationship between hospice use and overall survival. All hazard ratios (HRs) were calculated with 2-sided P value and 95% confidence intervals (CIs). Survival rates were calculated from Kaplan-Meier estimation. Since all patients died within the observation window, no censored cases occurred. The generalized linear model with a gamma distribution was used for validating the outcome of the Cox model.

To minimize potential selection bias, we used propensity score—based 1:N match (1 case matched with N controls) in the survival and cost models. Since a 3-group propensity score—matching algorithm is not available, and survival for patients with no hospice care was similar to that of patients who used 1 to 3 days hospice, we combined these 2 groups into 0 to 3 days of hospice use and further matched with patients who used 4 or more days of hospice care by applying a propensity score—based 1:N match algorithm developed by Parsons.¹³ In this algorithm, all the demographic variables were included in the propensity score logistic model to generate the predicted probability that is used for matching. To maximize the sample size from a 5-matching scenario (1:N, N is 1 to 5), we used a 1:5 match-optimized cohort by using an 8-to-1-digit matching

algorithm.¹³ In the matched cohort, a Cox proportional hazards model stratified by matched pair evaluated the associations between 4 or more days of hospice care or 0 to 3 days of hospice care and overall survival time in months.

To conduct the economic analysis, we divided the total cost of care after diagnosis into 3 phases based on the phase-of-care approach developed by Riley and colleagues.¹⁴ The majority of resources are typically consumed in the initial phase, when a patient's disease is diagnosed and treated, and during the final (end-of-life) phase, when extensive efforts are employed to extend the patient's life or to improve quality of life. Thus, the costs calculated from this method would follow a U-shaped pattern, with the highest costs on the 2 end points. In our study, the initial phase, which lasts an average of 3 months, was defined as the period during which medical intervention was implemented for advanced melanoma and might include the times of diagnosis, surgery, chemotherapy, and radiation therapy. The end-of-life phase is defined as the last 3 months immediately preceding death. The interim months of continuing care after the initial phase include surveillance and routine therapy costs.

We calculated the cost difference by comparing the total Medicare payments incurred by patients receiving 4 or more days of hospice care with those incurred by patients not receiving hospice care prior to death and those patients receiving 1 to 3 days of hospice care. The total cost of care for patients was calculated as the sum of reimbursements authorized by Medicare. Medicare claims reimbursements were adjusted for inflation to 2009 dollars using the Prospective Pricing Index for Part A claims and the Medicare Economic Index for Part B claims.¹⁵ Costs were adjusted for geographic variation using the geographic adjustment factor for Part A claims and the geographic practice cost index for Part B claims.¹⁵ These adjusting factors are acquired from direct communication with the National Cancer Institute's Health Services and Economics Branch of the Applied Research Program. These indices were matched via the state and county codes for each patient and then multiplied with the costs from each file in the database. Since the median survival time for metastatic melanoma patients is less than 1 year, discounting was not applied to cost or survival time. Costs were further analyzed in a generalized linear model with a gamma distribution controlling for patient demographic and clinical covariates.¹⁶

The cost-effectiveness analysis utilized the mean of costs from all 3 phases of cancer care and survival. The incremental cost-effectiveness ratio (ICER) = $(C_1 - C_2) / (E_1 - E_2) = \Delta C / \Delta E$, where C_x equals cost of group x and E_x is effectiveness at group x , with the quotient representing cost per life-year gained. In the cost-effectiveness model, a bootstrap simulation analysis was implemented to assess the statistical uncertainty. We performed an analysis with 1000 bootstrap estimates of the ICER in both the original

cohort and the 1:5 matched cohort. Statistical analysis was conducted using SAS version 9.3 (SAS Institute, Inc, Cary, North Carolina).

RESULTSPatient and Tumor Characteristics

Table 1

Characteristics of the entire cohort and matched cohort as well as univariate analysis of hospice use and patient characteristics are shown in . Of 862 patients, 225 (26%) had no hospice care after diagnosis, 523 (61%) had 1 to 3 days of hospice care, and 114 (13%) had 4 or more days of hospice care. All covariates were evenly balanced in the matched cohort.

Overall Survival

Figure 1A

Figure 1B

Table 2

At the end of the 60-month study period, the unadjusted survival curves for the entire cohort categorized by hospice use are shown in . The median survival time was 6.1 months for patients who did not enroll in hospice, 6.5 months for patients who enrolled in hospice for 1 to 3 days, and 10.2 months for patients who enrolled in hospice for 4 or more days. The survival curves for the propensity score—matched cohort after combining the groups of patients with no hospice use or only 1 to 3 days of hospice use are shown in . The overall survival rates at all-time points for the patients enrolling in 4 or more days of hospice care were significantly better than those for the comparison group (log-rank test, $P < .001$). In Cox proportional hazards models, 4 or more days of hospice care was associated with an improvement in survival when adjusting for other characteristics (). The estimated improvements in survival for 4 or more days of hospice use were similar in the original-cohort Cox proportional hazards model (HR, 0.63; 95% CI, 0.52-0.77, $P < .0001$) and propensity score—matched model (HR, 0.66; 95% CI, 0.54-0.81, $P < .0001$). Patients enrolled in 4 or more days of hospice care had 3.9 months longer median survival time in the unmatched cohort model ($P < .0001$), and 3.3 months longer median survival time in the propensity score—matched cohort model ($P < .0001$). The findings were similar across various models and cohorts, suggesting that the overall association between 4 or more days of hospice use and reduced mortality was not affected by statistical modeling methods.

Cost Analysis

Figure 2

A

B

C

The mean overall costs of care from diagnosis until death for patients with metastatic melanoma was \$56,266 for patients who received no hospice care, \$49,411 for patients enrolled in 1 to 3 days of hospice care, and \$66,022 for patients enrolled in 4 or more days of hospice care. As shown in (, , and), patients with 4 or more days of hospice care had lower costs in the last 3 months of life than did patients from the other 2 groups ($P < .0001$, \$14,594 vs \$22,647 for the patients with 1-3 days of hospice care, vs \$28,923 for patients with no hospice care). The end-of-life costs of care for patients with 1 to 3 days of hospice care were also lower than those of patients who received no hospice care.

Predictors of End-of-Life Cost

We found age and use of hospice care to be the only factors significantly associated with end-of-life costs. Among patients who were enrolled in 4 or more days of hospice care, the end-of-life costs decreased by \$14,680 ($P < .0001$) in the model with the original cohort, and by \$9576 ($P < .0001$) in the model with propensity score—matched cohort.

Cost-Effectiveness Analysis

Figure 3B

As shown in **Figure 3A**, mean incremental cost was \$29,426 (95% CI, \$723-\$63,634) per life-year gained for patients who received 4 or more days of hospice care. The incremental cost increased to \$33,209 (95% CI, \$12,852- \$66,280) per life-year gained in the propensity score—matched cohort in .

DISCUSSION

We observed that patients who enrolled in hospice for 4 or more days experienced longer median survival than patients who did not use hospice care or who enrolled in hospice care for only 1 to 3 days after being diagnosed with metastatic melanoma. We performed sensitivity analyses to examine the survival time for a relatively

homogeneous cohort in which we excluded patients who died within 3 months of diagnosis to eliminate those with particularly rapid pace of disease. The positive association between 4 or more days of hospice use and longer survival was similar to that for the initial study cohort.

Our results are consistent with those of previous studies showing that election of hospice care does not shorten survival after metastatic cancer diagnosis.^{5,6} In a study by Connor and colleagues, patients with congestive heart failure, lung cancer, or pancreatic cancer who enrolled in hospice experienced significantly longer median overall survival than those who did not. Our findings that median survival time did not differ between patients who received no hospice care and those who only received 1 to 3 days of hospice care is consistent with results from Earle and colleagues,¹⁷ suggesting that a short stay in hospice may not impact survival.^{7,18-20}

We also found that the costs of care in the final 3 months of life were lower among patients who received 4 or more days of hospice care after metastatic melanoma diagnosis. Other researchers have shown that patients close to the end of life who received hospice care incurred less cost than other patients.^{21,22} Pyenson and colleagues analyzed Medicare claims from 1999 to 2000 and found that hospice enrollment was a significant predictor of lower costs among patients with congestive heart failure, liver cancer, and pancreatic cancer, even when controlling for age and gender.²¹ The cost difference we observed between the patients receiving 4 or more days of hospice care and those who received 0 to 3 days of hospice care is consistent with that observed by Pyenson and colleagues. Furthermore, our observed incremental cost-effectiveness ratio for patients who received 4 or more days of hospice care (\$29,000 per life-year gained) lies well below the current willingness- to-pay thresholds.²³

Our study has current policy relevance given that the proportion of Medicare expenditures during the last year of life has been stable for 20 years, with 26.9% to 30.6% of all Medicare expenditures occurring during that interval.²⁴ Furthermore, Lubitz and colleagues found that 70% of total costs of care is attributable to the consumption of healthcare resources in the last 6 months of life, with the largest percentage of this cost burden falling to Medicare (61% of costs), followed by Medicaid (10%), other payers (12%), and patients or families (paying the remaining 18% out of pocket).^{24,25} Taylor and colleagues quantified the cost savings for the Medicare patients who received hospice care²⁶ and found the average cost savings for hospice users to be \$2309 for the last year of life compared with the costs of care for patients not receiving hospice care.²⁶

Emanuel²⁷ challenged studies showing cost savings with hospice care, noting that several methodological issues could invalidate the findings of cost savings for hospice care,

such as selection bias, different time frames for assessing costs, fewer cost components evaluated, and generalizability of the studies. Since that 1996 report, the methodology for analyzing cost implications of hospice care has improved—for instance, more medical cost data are available for evaluation compared with the 1990s, when only Medicare Part A was available. Moreover, the author concluded that the use of hospice does not increase costs and does yield better quality of life and increased autonomy at the end of life.²⁷ Of the inherent limitations to the use of retrospective claims data, our study's main limitation was inability to obtain data on patient and provider preferences regarding hospice election. Another limitation is that the outcome variable examined was limited to survival time, which does not capture effects on quality of life; therefore, quality-adjusted life-years, the preferred measure in cost-effectiveness studies, cannot be estimated. This measure is of particular value for patients at the end of life. Hospice care aims to provide a better quality of life, and indeed, previous studies have shown better quality of life for patients who enroll in hospice care.²⁸⁻³⁰ However, that the survival time of patients enrolled in hospice was longer than that of patients not electing hospice remains notable. Another consideration is that patients who survived longer might have had more opportunity to use hospice care and for longer durations than those who survived for a shorter period of time. Finally, the years encompassed by our study predate the diffusion of targeted molecular agents such as vemurafenib and ipilimumab, which have recently been shown to improve outcomes for patients with metastatic melanoma.³¹ Therefore, it remains to be seen whether continued treatment with newer life-prolonging treatments such as those mentioned might mitigate the survival improvement associated with 4 or more days of hospice use observed in our study.

CONCLUSIONS

Our study showed a significantly longer median survival time for the patients diagnosed with metastatic melanoma who enrolled in 4 or more days of hospice care compared with those who had 0 to 3 days of hospice care, and this improved overall survival was accompanied by lower end-of-life costs. Our evaluation of the survival times and costs of care contributes to the understanding of the potential clinical and economic effects of hospice care on outcomes for patients with metastatic melanoma. Implications of our findings are that communication and education regarding the benefits of hospice care should be a particular priority for patients diagnosed with metastatic melanoma. **Author Affiliations:** Department of Health Services Research, University of Texas, MD Anderson Cancer Center, Houston, TX (JH); Division of Management, Policy and Community Health, University of Texas School of Public Health, Houston, TX (JH, DRL, XLD); Division of Epidemiology and Disease Control, University of Texas School of Public Health, Houston, TX (XLD); Division of Biostatistics, University of Texas School of Public Health,

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Authorship Information: Concept and design (JH, DRL, TAB, BAG); analysis and interpretation of data (JH, XLD, WC, BAG); drafting of the manuscript (JH, XLD, TAB, BAG); critical revision of the manuscript for important intellectual content (JH, DRL, XLD, WC, TAB, BAG); statistical analysis (JH, XLD, WC, BAG); administrative, technical, or logistic support (JH); supervision (DRL, BAG).

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APPENDIX 25

HALF OF OLDER AMERICANS SEENS IN ER IN LAST MONTH OF LIFE

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Half Of Older Americans Seen In Emergency Department In Last Month Of Life; Most Admitted To Hospital, And Many Die There

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Abstract

Emergency department use contributes to high end-of-life costs and is potentially burdensome for patients and family members. We examined emergency department use in the last months of life for patients age sixty-five or older who died while enrolled in a longitudinal study of older adults in the period 1992–2006. We found that 51 percent of the 4,158 decedents visited the emergency department in the last month of life, and 75 percent in the last six months of life. Repeat visits were common. A total of 77 percent of the patients seen in the emergency department in the last month of life were admitted to the hospital, and 68 percent of those who were admitted died there. In contrast, patients who enrolled in hospice at least one month before death rarely visited the emergency department during that period. Policies that encourage the preparation of patients and families for death and early enrollment in hospice may prevent emergency department visits at the end of life.

Emergency departments are not designed to provide end-of-life care and in many ways are poorly suited to do so. Nonetheless, they are visited with surprising frequency by severely ill patients whose deaths are approaching.(1) The often overcrowded and seemingly chaotic nature of the emergency department may add to the stress that patients and their families feel.

Most people say they prefer to receive end-of-life care at home.(2, 3) But pain, worsening symptoms, or other urgent needs may force an emergency department visit. In such cases, patients often arrive in the emergency department acutely ill, with their care plan uncertain and their families deeply anxious at the approach of a dreaded event.(1, 3, 4)

Emergency department care is expensive, and it is a major component of escalating costs of care at the end of life.(5) Most patients who are hospitalized at that point are admitted through the emergency department, and it is there that care pathways are often determined, including the balance between palliative and life-sustaining treatments.(6, 7)

We used a nationally representative data set linked to Medicare claims data to study emergency department use by older adults at the end of life. The objective of this study was to use these data to describe the prevalence and frequency of, and factors associated with, emergency department use in the last months of life, as well as care following the visit, including hospitalization and death in the hospital.

Early versions of this article were presented in oral abstract form at the annual meetings of the Society of General Internal Medicine in Minneapolis, Minnesota, April 29 2010, and the American Geriatrics Society in Orlando, Florida, May 13 2010.

Study Data And Methods

Setting And Participants

The Health and Retirement Study was designed to examine changes in health and wealth as people age.(8) It provided a data set that enabled us to assess patient characteristics and health status as well as family-level end-of-life concerns that can be linked to dying patients' emergency department visits.

Health and Retirement Study participants are more than fifty years old and living in the community at the time of enrollment in the study, which began in 1992. Participants are interviewed every two years following enrollment. Additional participants are added every six years so that the study remains representative of the US population over fifty. Follow-up rates are very high (84–93 percent), and date of death is determined for 99 percent of participants using the National Death Index, a centralized record of death certificate information maintained by the National Center for Health Statistics.(9)

The study's interviews are conducted over the phone. For participants who are age eighty or older, are too sick to be interviewed by phone, or do not have access to a phone, interviews are conducted in person. If participants are too sick or cognitively unable to complete the interview, interviews are conducted with proxies. Interviews after death are conducted with participants' next of kin. Details of the sampling frame and complex survey design are available elsewhere.(10)

We linked Health and Retirement Study data to Medicare claims to ascertain emergency department use, using previously described methods.(11) Because the timing of death is often unpredictable, we examined the relationship between emergency department use and death in two directions.

For the first analysis, we included 8,338 participants age sixty-five or older who were continuously enrolled in Medicare fee-for-service Parts A and B from 1992 to 2006 and visited the emergency department. For these participants, we asked what percentage of older adults died within six months of visiting the emergency department.

For the second analysis, we focused on the subset of 4,585 participants who died, and for whom there were 4,158 next-of-kin interviews completed with the measures necessary for our analysis. For these participants, we asked what percentage of older adults who died had visited the emergency department in the last 6 months and last month before death.

Finally, we matched each decedent participant to a Health and Retirement Study subject who was alive at the time the participant died, categorized by age group (65–74, 75–84, and 85 or older) and sex. This allowed us to compare decedents' and nondecedents' rates of emergency department use.

This study was approved by the Institutional Review Board of the University of California, San Francisco.

Measures

We used Medicare claims to measure emergency department use, hospitalization, and intensive care unit use.(12) We examined factors that might be correlated with emergency department use in the last months of life, based on our clinical experience and review of the literature. Demographic factors included age, sex, race or ethnicity, and net worth.

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Clinical factors were drawn from Health and Retirement Study interviews with next of kin conducted after the subject's death. Next of kin were asked to describe the participant's clinical condition during the last three months life. Factors included the presence or absence of four chronic conditions (cancer, lung disease, stroke, and heart condition), need for help in activities of daily living, cognitive impairment, and the presence of moderate or severe pain.

Health system factors included census region, urban versus rural residence, hospice use prior to the last month of life (hereafter referred to as "early hospice use"), nursing home residence, and year of death. We examined what we categorized as "anticipatory/preparatory" factors—for example, whether the subject's next of kin reported that the death was expected or unexpected at the time it occurred and whether or not there was an advance directive.

Statistical Analysis

First, using the sample of 10,364 patients (both living and deceased), we calculated the percentage of emergency department visits by patients who died within six months of the visit.

The remainder of our analysis focused on the 4,158 decedents. We began by determining the proportion of these older people who visited the emergency department in the last six months and in the last month of life.

To understand which factors were independently associated with emergency department use by participants in the last month of life, we created a multivariable model adjusted for the demographic and clinical factors described above. The results of the multivariable logistic regression are presented as probabilities of emergency department use across different levels for each predictor of interest adjusted for age, sex, race or ethnicity, net worth, chronic conditions, physical dependency, cognitive impairment, and pain. We present time trends in emergency department use in the last month of life adjusted for variations in age of the Health and Retirement Study decedent sample across years and increasing rates of early hospice use (Appendix Exhibit 1).(11

We examined care patterns following emergency department visits in the last month of life. Specifically, we examined hospitalization following the emergency department visit, intensive care unit use, and location of death.

The Health and Retirement Study purposely oversamples certain key subpopulations and also carefully tracks nonresponse rates by subpopulation. To produce nationally representative statistical estimates and to attach correct standard errors to these estimates, we performed a survey-weighted analysis using weights provided by the Health and Retirement Study.(13, 14) The statistical analyses were performed using the statistical software Stata, version 10.1, and the statistical analysis software SAS, version 9.2.

Limitations

We were unable to discern the specific reason for emergency department visits. A diagnostic code for congestive heart failure, for example, is not particularly informative as to the reason for the emergency department visit, such as shortness of breath, or the reasons that led to that condition, such as difficulty contacting an outpatient provider, lack of access to medications for symptom relief, or a family that was unprepared to manage end-of-life symptoms. Similarly, we could not definitively state that certain emergency department visits were avoidable. Finally, although our findings suggest that changes over time have

been modest, the latest available Medicare claims data files are from 2006, and practice may have changed since that time.

Study Results

In this nationally representative study of older adults, 8,338 living and dead participants visited the emergency department. Of the total, 15 percent, or about one out of every seven emergency department visits, were made by a patient who died in the six months after that visit. Among the oldest participants (those over age eighty-four), the proportion was 24 percent, or about one out of four. Among the 4,158 participants who died, seventy-five percent transited through the emergency department in the last six months of life (Exhibit 2); half did so in the last month of life.

The rate of emergency department use in the last month of life was much higher than the rate among participants matched by age and sex to the subject who were alive at the time the subject died. In the matched group, only 4 percent visited the emergency department in a one-month time period.

Focusing on decedents, we found that the mean age of the 4,158 participants who had died was eighty-three (standard deviation eight), and 47 percent were women (Exhibit 1). Among the decedents, the burden of chronic conditions, functional dependency, and cognitive impairment was high: The mean number of chronic diseases was 1.4 (out of 4); 77 percent of patients were dependent in at least one activity of daily living, and 67 percent were in three or more (data not shown). In addition, over one-third were cognitively impaired, experienced moderate or severe pain, and resided in a nursing home (Exhibit 1). The top three primary diagnoses for emergency department visits in the last six months of life were congestive heart failure (8.0 percent of visits), pneumonia (6.6 percent), and acute stroke (4.9 percent) (see Appendix Exhibit 2 for the rest of the top ten primary diagnoses).(15

Routine visits were common. In fact, 41 percent of the 4,158 participants who died had made more than one visit in that time period, and 12 percent had gone to the emergency department more than once in the last month of life (data not shown).

Hospitalization also was common following an emergency department visit toward the end of life. Among the 2,157 participants who visited the emergency department in the last month of life, 77 percent were subsequently hospitalized. Of those who were hospitalized, 39 percent were admitted to an intensive care unit, and 68 percent died in the hospital (Appendix Exhibit 3).(15)

Early hospice use and death in the home, nursing home, or other setting outside the hospital was more common among participants who did not visit the emergency department in the last month of life (Appendix Exhibit 3).(15)

Exhibit 3 shows emergency department use in the last month of life by various characteristics, after adjustment for demographic and clinical factors. For example, patients who were African American or Latino were more likely to visit the emergency department than white patients. (for a complete list of factors, see Appendix Exhibit 4).(15) After adjustment, patients who experienced moderate or severe pain were 4 percent more likely to visit the emergency department in the last month of life than patients who had less pain. Having an advance directive had little effect after adjustment. These differences were modest in comparison to those between patients who did and did not enroll in hospice early.

The rise in emergency department use between 1994 and 2006 was marginally significant in analyses adjusted for age (p for trend = 0.048) (Appendix Exhibit 1).(15) However, when

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adjusting for early utilization of hospice, there was a modest increase in emergency department use over time (p for trend < 0.001), suggesting that a rise in early utilization of hospice (5 percent in 1994; 15 percent in 2006) may have blunted what would have otherwise been a greater increase in emergency department use over time (Appendix Exhibit 1).(15)

Discussion

High Rates Of Emergency Department Use

As noted above, seventy-five percent of the decedents in our study transited through the emergency department in the last six months of life, and half in the last month of life. Yet we also found substantial variation in emergency department use in the last month of life by age, race or ethnicity, illness burden, functional dependency, cognitive impairment, pain, region, year of death, and whether or not death was expected. Early enrollment in hospice was by far the strongest predictor of emergency department use or lack thereof. Specifically, emergency department use was relatively rare among people enrolled in hospice at least one month before death.

Improving The Quality Of Outpatient Care

These high rates of emergency department use in the last months of life suggest opportunities for improvement in the outpatient setting. As was the case in our sample, the last months of life for older adults are often characterized not by sudden death, but by chronic illness, pain, functional decline, and cognitive impairment.(16, 17) Many health problems and symptoms in late life are predictable, and some visits to the emergency department could potentially be avoided with access to high-quality outpatient care.(18, 19)

Most people prefer to die at home, and rates of end-of-life hospitalization are unlikely to decrease without reducing rates of emergency department use. The emergency department is seldom the best place for discussions about the goals of care.

Primary providers can plan for the eventuality of death by preparing patients and families for end-of-life symptoms, engaging in discussions about goals of care, arranging treatment that matches the patient's wishes, and documenting preferences in ways that will be accessible to emergency department providers.(20–24) To this end, recent policy initiatives, such as those passed in 2008 in California(25) and 2010 in New York(26) that require physician disclosure of prognosis, may reduce costly and potentially burdensome use of the emergency department at the end of life.

Federal Initiatives

At the federal level, legislation that would have provided reimbursement under Medicare for physicians to address end-of-life planning was stripped from national health reform amid a furor over so-called death panels. In our study, advance directives were not associated with emergency department visits after adjustment.

Advance care planning is much more than the advance directive document, however. It also includes the discussion of and planning and preparation for future events by patients, caregivers, and physicians. There is some evidence to suggest that such discussions have an effect on high-cost, high-intensity health services.(27)

The Medicare hospice benefit was recently criticized for spending increases primarily caused by increases in lengths-of-stay over the past decade.(28, 29) However, these critiques do not account for the avoidance of costly acute care services by early enrollees in hospice.

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(29) In our study, early enrollment was associated with 80 percent less use of the emergency department in the last month of life, and dramatically reduced rates of hospitalization and of death in the hospital, compared to the rates for patients who did not enroll early. Although hospice use at the end of life has increased over the past decade, most patients enroll in hospice late, less than a month before death.(30)

Many analysts have viewed this delayed entry into hospice as a problem in the quality of end-of-life care.(30, 31) In fact, the type of care that patients receive in hospice—such as symptom control, family support, and discussion of preferences—are of benefit long before the final days of life.

The Medicare hospice benefit is available to all adults age sixty-five or older, and rising rates of early hospice use are encouraging. Yet we found that only 9 percent of the older adults in our study who died had enrolled in hospice before the last month of life. Policy initiatives should be directed toward increasing early hospice enrollment among elderly patients. Strong consideration should be given to removing from the Medicare hospice benefit the requirement of a prognosis of six months or less to live, basing eligibility and reimbursement instead on need for hospice services.(32)

The Role Of Palliative Care

Part of the Affordable Care Act directs support to chronically ill elderly people in the outpatient setting, avoiding high-cost repeat emergency department visits and hospital readmissions. Potential avenues for supporting chronically ill elderly people on an outpatient basis include promoting early hospice use and mandating that inpatient and outpatient palliative care services are incorporated into accountable care organizations.(33, 34)

Palliative care is focused on improving quality of life for patients with serious illness. Its major areas of expertise include pain and symptom management and communication about goals of care. Palliative care is ideally initiated at the time of diagnosis of advanced heart disease, dementia, cancer, or other serious conditions, and can be delivered concurrently with life-prolonging care. Specialized palliative care is delivered by interdisciplinary palliative care teams.

Early enrollment in outpatient palliative care services has shown great promise in improving the quality of life for patients with serious illness, but access to these services remains limited.(19, 20, 35) Prognosis is inherently challenging, and even when prognosis is limited, some patients may elect not to enroll in hospice early. Our research suggests that many of these patients will transit through the emergency department at the end of life, and palliative care needs to be integrated into emergency services.

The majority of palliative care in emergency departments, however, is delivered not by palliative care specialists but by emergency department doctors, nurses, and social workers. (21) Hospice, in contrast, is a specific palliative service and Medicare benefit for patients with a prognosis of six months or less.

Emergency departments should be supported in their growing efforts to improve palliative care for patients, such as the well-respected Education on Palliative and End-of-Life Care Project curriculum, newly developed for training emergency medicine professionals.(36) The American Board of Emergency Medicine is one of 11 specialty boards that sponsors palliative medicine as a recognized subspecialty.(37)

In qualitative research, emergency providers and terminally ill patients and their caregivers suggested a change in emergency care, recognizing that the goals of patients near the end of

life often do not fit well within the traditional emergency department model.(1, 3, 38, 39) Some providers suggested that emergency protocols could be modified by creating an explicit triage category of supportive care focused on symptom stabilization.

Structural barriers to change need to be overcome, including a pervading fear of litigation among emergency physicians, logistical hurdles to emergency providers rapidly coordinating home or hospice services with outpatient clinicians, and a general lack of access to palliative medicine consultation services in the emergency department, particularly at night and on weekends.(3, 39, 40)

Conclusion

Emergency department visits are common at the end of life, and a substantial minority of all visits to the emergency department by older adults are made by patients who will die within six months of the visit. For patients whose terminal trajectories are clear, we can do better in the outpatient setting.(22–24) Outpatient providers can help prepare families for the eventuality of death, including by giving them early referrals to hospice and, where available, outpatient palliative care services. Policies that require physicians to disclose a terminal prognosis and that provide reimbursement for advance care planning should be encouraged.

For other older adults, serious illness is unexpected and emergency department visits are unavoidable.(41) Therefore, emergency departments should be supported in their efforts to incorporate palliative and end-of-life care principles into their practices. Ultimately clinicians and policy makers need to work together to ensure high-quality care experiences for patients and families seen in the emergency department during a vulnerable time.

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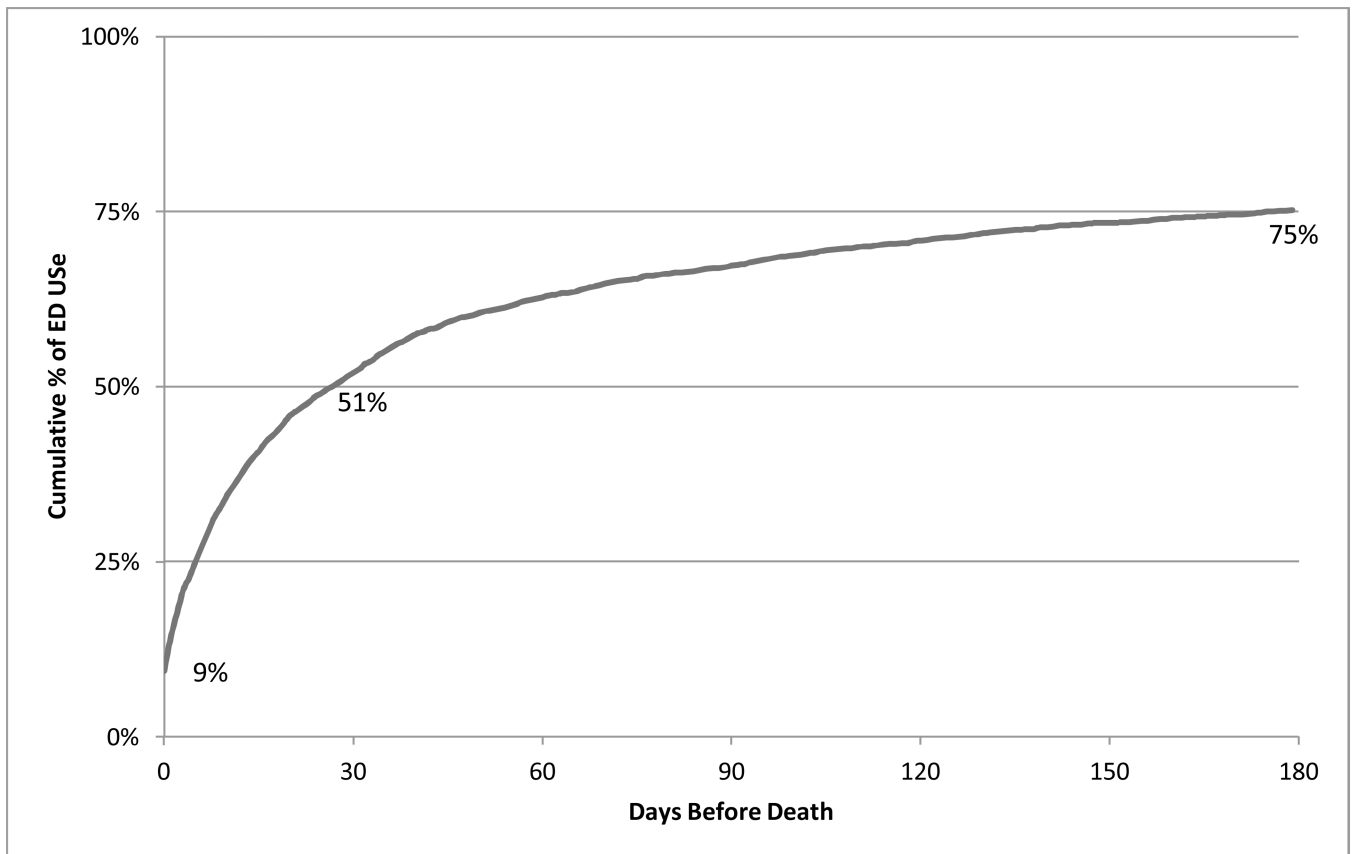


Exhibit 2.

Cumulative Incidence of emergency department (ED) visits during the last 6 months of life, noting the incidence on the last day of life (9%), and the cumulative incidence at 30 days before death (51%) and 180 days before death (75%).

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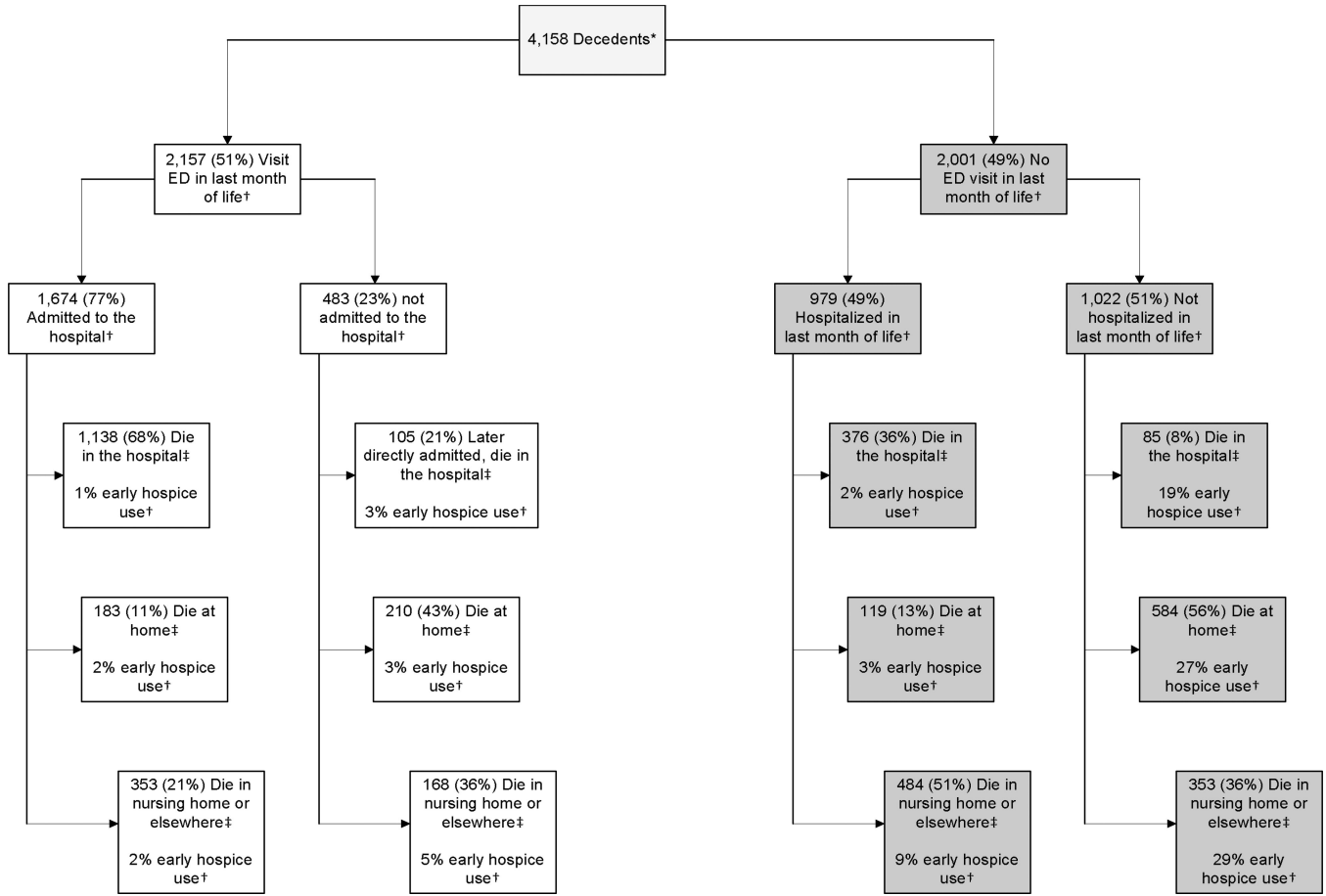
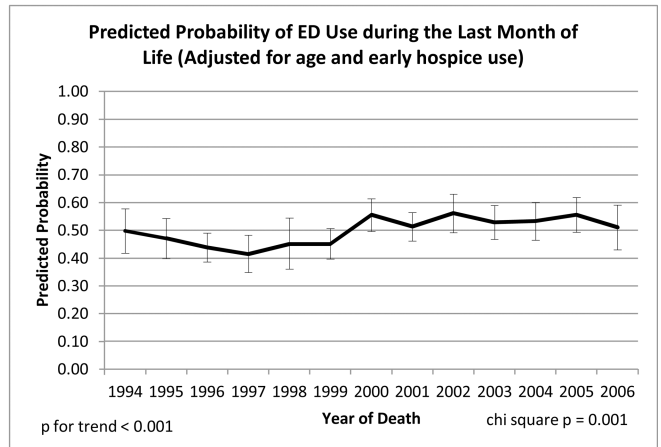
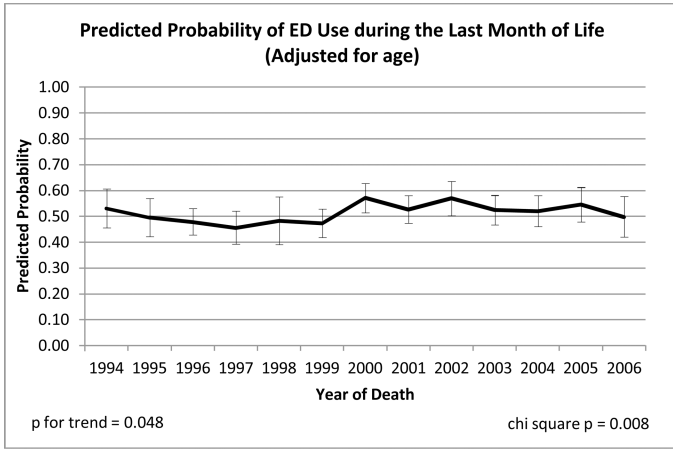


Exhibit 3. Flow diagram outlining emergency department, hospitalization, and location of death among the 4,58 patients in the Health and Retirement Study (HRS) who died between 1992 and 2006. Early hospice use indicates hospice use prior to the last month of life. Discrepancies between hospitalization and location of death may be explained by direct admissions to the hospital and differential sources of information for these factors. Sources of data are: * HRS and National Death Index mortality files; † Medicare claims data; ‡ HRS interviews with next-of-kin following subject’s death. Abbreviation: ED – emergency department.

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Appendix 1.

Time trends in emergency department (ED) use in the last month of life 1994 to 2006 are displayed. Sample sizes of decedents were too small in 1992 and 1993 to generate reliable estimates. Panel A: Time trends in ED use adjusted for age at death. Panel B: time trends adjusted for age at death and rising rates of early hospice use (hospice use before the last month of life) over the examined time period (1994, 5%; 2006, 15%).

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Exhibit 1**Characteristics Of Decedents In The Health and Retirement Study, 1992–2006**

| Characteristic | Median/Percent |
|-----------------------------------|----------------|
| Net worth ^a | \$79,000 |
| Female | 47% |
| Age | |
| 65–74 | 19% |
| 75–84 | 40 |
| 85 | 41 |
| Race/ethnicity | |
| White | 87% |
| African American | 9 |
| Latino | 3 |
| Other | 1 |
| Chronic conditions | |
| Cancer | 31% |
| Lung disease | 25 |
| Heart condition | 57 |
| Stroke | 31 |
| Status, last three months of life | |
| 3 ADL dependencies ^b | 67% |
| Cognitive impairment | 43 |
| Moderate or severe pain | 46 |
| Health system factors | |
| Early hospice use ^c | 9% |
| Nursing home residence | 36 |
| Communication factors | |
| Death expected | 61% |
| Advanced care plan | 45 |

SOURCE Authors' analysis of the Health and Retirement Study data linked to Medicare claims. NOTES *N* = 4,158. Percentages are weighted to reflect national estimates.

^aNet worth includes housing and non-housing assets. Interquartile range is \$10,000–\$214,000.

^bADL is activities of daily living, such as getting into and out of bed, walking across the room, eating, dressing, bathing, and toileting.

^cHospice use at least one month before death.

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Exhibit 3

Characteristics Associated With Emergency Department (ED) Use During The Last Month Of Life, 1992–2006

| Characteristic | Visited ED last month of life (%), unadjusted | 95% CI, unadjusted | p value | Visited ED last month of life (%), adjusted ^a | 95% CI, adjusted ^a | p value |
|---------------------------|---|--------------------|----------|--|-------------------------------|----------|
| Net worth | | | | | | |
| >\$79,000 | 51 | 48, 53 | <i>b</i> | 51 | 49, 54 | <i>b</i> |
| \$79,000 | 52 | 49, 55 | 0.345 | 52 | 49, 55 | 0.775 |
| Sex | | | | | | |
| Male | 53 | 51, 55 | <i>b</i> | 52 | 49, 55 | <i>b</i> |
| Female | 50 | 47, 53 | 0.066 | 51 | 49, 53 | 0.438 |
| Age | | | | | | |
| 65–74 | 56 | 52, 60 | <i>b</i> | 56 | 52, 60 | <i>b</i> |
| 75–84 | 54 | 50, 57 | 0.365 | 53 | 50, 56 | 0.305 |
| 85 | 47 | 44, 50 | 0.003 | 48 | 44, 52 | 0.011 |
| Race/ethnicity | | | | | | |
| White | 50 | 48, 53 | <i>b</i> | 51 | 49, 53 | <i>b</i> |
| African American | 56 | 52, 61 | 0.008 | 56 | 52, 60 | 0.038 |
| Latino | 62 | 55, 69 | 0.003 | 61 | 53, 68 | 0.02 |
| Chronic conditions | | | | | | |
| No cancer | 54 | 51, 57 | <i>b</i> | 54 | 52, 57 | <i>b</i> |
| Cancer | 46 | 43, 49 | <0.001 | 46 | 43, 49 | <0.001 |
| No lung disease | 51 | 48, 53 | <i>b</i> | 51 | 49, 54 | <i>b</i> |
| Lung disease | 53 | 50, 57 | 0.302 | 52 | 48, 56 | 0.721 |
| No heart condition | 48 | 46, 51 | <i>b</i> | 49 | 46, 51 | <i>b</i> |
| Heart condition | 54 | 51, 56 | 0.001 | 54 | 51, 57 | 0.001 |
| No stroke | 51 | 49, 53 | <i>b</i> | 51 | 49, 53 | <i>b</i> |
| Stroke | 52 | 49, 55 | 0.507 | 53 | 50, 57 | 0.219 |

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| Characteristic | Visited ED last month of life (%), unadjusted | 95% CI, unadjusted | p value | Visited ED last month of life (%), adjusted ^a | 95% CI, adjusted ^a | p value |
|--|---|--------------------|--------------------------------------|--|-------------------------------|--------------------------------------|
| ADL dependency, last 3 months of life ^c | | | | | | |
| 0 | 63 | 59, 67 | <u> </u> ^b | 62 | 58, 66 | <u> </u> ^b |
| 1-2 | 71 | 67, 75 | 0.012 | 70 | 66, 74 | 0.008 |
| 3 | 44 | 42, 47 | <0.001 | 45 | 42, 48 | <0.001 |
| Cognitive impairment, last 3 months of life | | | | | | |
| No | 56 | 53, 58 | <u> </u> ^b | 54 | 51, 57 | <u> </u> ^b |
| Yes | 46 | 43, 49 | <0.001 | 49 | 46, 52 | 0.018 |
| Moderate or severe pain, last 3 months of life | | | | | | |
| No | 51 | 48, 53 | <u> </u> ^b | 50 | 47, 53 | <u> </u> ^b |
| Yes | 52 | 50, 55 | 0.31 | 54 | 51, 57 | 0.038 |
| Health system factors | | | | | | |
| Census region | | | | | | |
| Northeast | 53 | 50, 55 | 0.487 | 53 | 50, 56 | 0.672 |
| Midwest | 49 | 44, 54 | 0.123 | 50 | 45, 54 | 0.144 |
| South | 54 | 50, 58 | <u> </u> ^b | 54 | 50, 58 | <u> </u> ^b |
| West | 45 | 42, 49 | 0.001 | 46 | 40, 51 | 0.012 |
| Urban/rural | | | | | | |
| Urban | 50 | 48, 51 | <u> </u> ^b | 50 | 48, 52 | <u> </u> ^b |
| Rural | 54 | 49, 59 | 0.082 | 55 | 50, 60 | 0.05 |
| Early hospice use ^d | | | | | | |
| No | 56 | 53, 58 | <u> </u> ^b | 55 | 53, 58 | <u> </u> ^b |
| Yes | 10 | 6, 13 | <0.001 | 11 | 8, 15 | <0.001 |
| Nursing home residence | | | | | | |
| No | 55 | 53, 57 | <u> </u> ^b | 53 | 50, 55 | <u> </u> ^b |
| Yes | 45 | 41, 9 | <0.001 | 50 | 46, 53 | 0.172 |

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| Characteristic | Visited ED last month of life (%), unadjusted | 95% CI, unadjusted | p value | Visited ED last month of life (%), adjusted ^d | 95% CI, adjusted ^d | p value |
|-----------------------|---|--------------------|----------|--|-------------------------------|----------|
| Communication factors | | | | | | |
| Death expected | | | | | | |
| No | 60 | 57, 62 | <i>b</i> | 56 | 53, 59 | <i>b</i> |
| Yes | 46 | 43, 49 | <0.001 | 49 | 46, 52 | 0.006 |
| Advanced care plan | | | | | | |
| No | 55 | 52, 58 | <i>b</i> | 55 | 52, 58 | <i>b</i> |
| Yes | 49 | 45, 52 | 0.001 | 52 | 49, 55 | 0.081 |

SOURCE Authors' analysis of the Health and Retirement Study data linked to Medicare claims. NOTES: N = 4,158. For a complete list of factors associated with ED use, see Appendix Exhibit 4 (see Note 15 in text). CI is confidence interval. ^aNetworth includes housing and non-housing assets. Interquartile range is \$10,000-\$214,000.

^a < 5% missing for all variables except history of an advance care plan (19.2% missing). The question about presence of an advance care plan was not asked in interviews after death in the 1998 wave of the Health and Retirement Study; therefore, the analyses of advance care plans included only the 3,494 participants who responded to this question. Percentages were weighted to reflect national estimates.

^b reference.

^c ADL is activities of daily living, such as getting into and out of bed, walking across the room, eating, dressing, bathing, and toileting.

^d Hospice use at least one month before death.

Appendix 2

Leading Primary Diagnoses for the 6,824 Emergency Department Visits that Occurred During the Last Six Months of Life for the 4,158 Decedents *

| Count | % | Diagnosis |
|-------|------|---|
| 532 | 8.0% | Congestive heart failure; nonhypertensive |
| 435 | 6.6% | Pneumonia (except caused by tuberculosis or sexually transmitted disease) |
| 326 | 4.9% | Acute cerebrovascular disease |
| 277 | 4.2% | Septicemia (except in labor) |
| 248 | 3.7% | Acute myocardial infarction |
| 215 | 3.3% | Cardiac arrest and ventricular fibrillation |
| 213 | 3.2% | Fluid and electrolyte disorders |
| 206 | 3.1% | Chronic obstructive pulmonary disease and bronchiectasis |
| 198 | 3.0% | Urinary tract infections |
| 171 | 2.6% | Aspiration pneumonitis; food/vomitus |

* The diagnostic group assigned by the Clinical Classification Software using the primary ICD-9-CM diagnosis code for the emergency department (ED) visit. Percentages were weighted to reflect national estimates.

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 26

**LENGTH OF STAY AND PERCEPTION
OF TOO LATE REFERRAL**

NHPCO *Original Article*

Timing of Referral to Hospice and Quality of Care: Length of Stay and Bereaved Family Members' Perceptions of the Timing of Hospice Referral

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Abstract

Previous research has noted that many persons are referred to hospice in the last days of life. The National Hospice and Palliative Care Organization collaborated with Brown Medical School to create the Family Evaluation of Hospice Care (FEHC) data repository. In 2005, 106,514 surveys from 631 hospices were submitted with complete data on the hospice length of stay and bereaved family member perceptions of the timing of hospice care. Of these surveys, 11.4% of family members believed that they were referred "too late" to hospice. This varied from 0 to 28.1% among the participating hospice programs with 30 or more surveys. Among those with hospice lengths of stay of less than a month, only 16.2% reported they were referred "too late." Although the bereaved family member perceptions of the quality of end-of-life care did not vary by length of stay for each of the FEHC domains, the perception of being referred "too late" was associated with more unmet needs, higher reported concerns, and lower satisfaction. Our results suggest that family members' perception of the timing of hospice referral—not the length of stay—is associated with the quality of hospice care. This perception varies substantially among the participating hospice programs. Future research is needed to understand this variation and how hospice programs are delivering high quality of care despite short length of stay. J Pain Symptom Manage 2007;34:120–125. © 2007 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.

Key Words

Hospice, quality of end-of-life care, timing of referral

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Introduction

Hospice was developed to provide comprehensive services that allow dying persons to live their lives to the fullest. Originally, the concept of hospice was introduced as an ongoing program to ease suffering during the transition between life and death. Although many experts recommend a hospice stay of at least three months to provide adequate services,¹ the average length of stay is less than 60 days. In the United States, the median length of stay declined from 29 days in 1995 to 26 days in 2005, with 30% of those served by hospice dying in 7 days or less (www.nhpco.org). Short hospice stays are not desirable due to their impact on the dying persons' and the caregivers' quality of life and the quality of end-of-life care. Recent studies have shown lower satisfaction with hospice services was correlated with family members' reports of late referrals,² and shorter length of stay was associated with family members' reports of decreased number of services provided.³ Furthermore, although many patients prefer to die at home,⁴ patients with hospice enrollment less than 7 days are less likely to receive care at home.⁵

Over the past 10 years, the Brown Medical School Center for Gerontology and Health Care Research has collaborated with the National Hospice and Palliative Care Organization (NHPCO) to create an actionable tool to measure consumer perceptions of the quality of end-of-life care. The Family Evaluation of Hospice Care (FEHC) has been validated⁶ and used in the national study of dying in the United States.⁷ The survey is currently used as part of an ongoing NHPCO performance measurement program, with a web-based repository that allows hospice programs to submit their data and receive a 30-page quarterly report regarding their quality of end-of-life care.⁸ As of 2006, nearly 1000 hospices are submitting their data online. The FEHC data repository allows us to examine at a national level the relationship of length of stay, perceived timing of hospice referral, and quality of end-of-life care.

Methods

Development of Survey

Based on expert opinion, a structured review of existing guidelines, and consumer focus

groups, Teno and colleagues developed the FEHC.⁹ The original instrument was shortened and a mode test was conducted that found the survey could be self-administered, with similar results to telephone administration. The FEHC is based on a conceptual model of patient-focused, family-centered medical care. Under this model, a health care institution provides excellent end-of-life care when it: 1) provides the desired physical comfort and emotional support; 2) supports shared decision making; 3) treats the patient with respect; 4) attends to the needs of the family for emotional support and the needed information; and 5) coordinates care effectively. Detailed information on how to calculate the problem and modified domain score is available in the paper by Connor and colleagues.⁸ Although the analysis was done with full problem scores, we summarize the findings by reporting the percent of persons who report one or more concerns with the quality of care.

In this study, our goal was to examine the association of the perceptions of the quality of care with both hospice length of stay and bereaved family members' perceptions of the timing of hospice referral. For the latter, respondents were asked the following question, "In your opinion, was [PATIENT] referred to hospice too early, at the right time, or too late during the course of [HIS/HER] final illness?" Hospice length of stay was based on the bereaved family member report.

Data Collection

Brown Medical School's Center for Gerontology and Health Care Research, in collaboration with the NHPCO, developed a Web site for hospices to submit data for the repository used by this report. The Web site was piloted at Brown and then modified by the NHPCO. Participation in the FEHC survey is voluntary, although the NHPCO has encouraged all hospices nationwide to take part. Hospices or third-party vendors contact bereaved family members between one to three months after the patient's death to invite them to participate in the survey. The surveys are usually completed by paper and pencil and returned to the hospice program or a data vendor hired to compile the results. The response rate as calculated based on the one-year total number of surveys completed over the number mailed out is 45%.

Table 1
Characteristics of Decedents
(n = 106,514 Surveys)

| Characteristics | Decedents n = 106,514 (%) | Perceived | Perceived |
|---|---------------------------------|---|---------------------------------------|
| | | Appropriate Timing of Referral n = 92,899 (%) | Late Referral n = 12,182 (%) |
| Age 85 years and older at time of patient's death | 49.1 | 32.6 | 47.1 |
| Sex | | | |
| Male | 41.3 | 41.4 | 41.7 |
| Primary illness leading to hospice admission | | | |
| Cancers—all types | 42.7 | 43.0 | 39.9 |
| Heart & circulatory disease | 9.9 | 9.8 | 10.2 |
| Lung & breathing disease | 7.6 | 7.5 | 8.4 |
| Kidney disease | 2.2 | 2.2 | 2.3 |
| Liver disease | 1.6 | 1.6 | 1.5 |
| Stroke | 3.9 | 4.03 | 3.3 |
| Dementia & Alzheimer's disease | 7.8 | 7.7 | 7.8 |
| AIDS & other infectious diseases | 0.2 | 0.2 | 0.2 |
| Frailty & decline due to old age | 5.7 | 5.7 | 5.6 |
| Other illness | 4.2 | 4.04 | 5.2 |
| Highest grade or level of school completed | | | |
| 8th grade or less | 8.9 | 9.01 | 8.1 |
| Race | | | |
| American Indian or Alaskan Native | 0.7 | 0.6 | 0.8 |
| Asian or Pacific Islander | 0.7 | 0.7 | 0.7 |
| Black or African American | 3.3 | 3.4 | 2.6 |
| White | 82.9 | 83.0 | 82.5 |
| Another race or multiracial | 1.6 | 1.2 | 1.4 |
| Length of time patient received hospice services | | | |
| 2 days or less | 10.0 | 8.2 | 24.7 |
| 3–7 days | 21.7 | 20.4 | 32.5 |
| 8–14 days | 15.08 | 15.0 | 15.9 |
| 15–29 days | 11.5 | 11.9 | 9.7 |
| 1–3 months | 25.7 | 27.3 | 14.1 |
| 4–6 months | 8.2 | 9.0 | 2.0 |
| 7–9 months | 3.0 | 3.3 | 0.6 |
| 10–12 months | 1.9 | 2.0 | 0.3 |
| >1 year | 2.8 | 3.0 | 0.3 |

Analytic Approach

For this study, we report the descriptive results and examine the association of length of stay, bereaved family member of the timing of hospice referral, and the perception of quality of end-of-life care with each of the

domains of the FEHC. Because of the large number of cases, even minor differences achieve statistical significance; we set a threshold of 5% difference as being clinically relevant. For those hospices contributing 30 or more surveys to the repository, we reported the variation in bereaved family members' report that referral to hospice was "too late."

Results

Perception of Timeliness of Hospice Referral

Eighty-seven percent reported that the patient was referred at the right time, whereas 11.4% felt that hospice services were initiated "too late." Only 1.4% ($n = 1433$) reported that the patient was referred at a time too early for hospice services (Table 1). There were no statistically significant differences in perception of appropriate vs. late referrals when patients were grouped by age at time of death, sex, primary illness leading to hospice admission, education, race, or ethnicity.

Length of Stay, Perception of Being Referred "Too Late," and Perceived Quality of End-of-Life Care

Fig. 1 depicts the association between length of stay and the quality-of-care domains in the FEHC. For each domain and overall satisfaction, there is essentially a flat line, indicating the lack of an association between hospice lengths of stay and bereaved family members' perceptions of the quality of care. In contrast, bereaved family members who believed their relative was referred "too late" reported more unmet needs, higher reported number of concerns, and lower satisfaction with the quality of end-of-life care than those who indicated referral was made at the "right time" (Table 2). More family members who felt that the referral was "too late" reported unmet needs of the patient for management of pain (9.7 vs. 5.0%), dyspnea (10.0 vs. 4.1%), and emotional support (18.2 vs. 8.1%). Similarly, family members reported having greater unmet needs for their own emotional support (18.8 vs. 10.0%). More family members also felt that they were less informed about what to expect (41.4 vs. 25.2%) and about management of symptoms (17.9 vs. 9.0%). Furthermore, family members who perceived a late

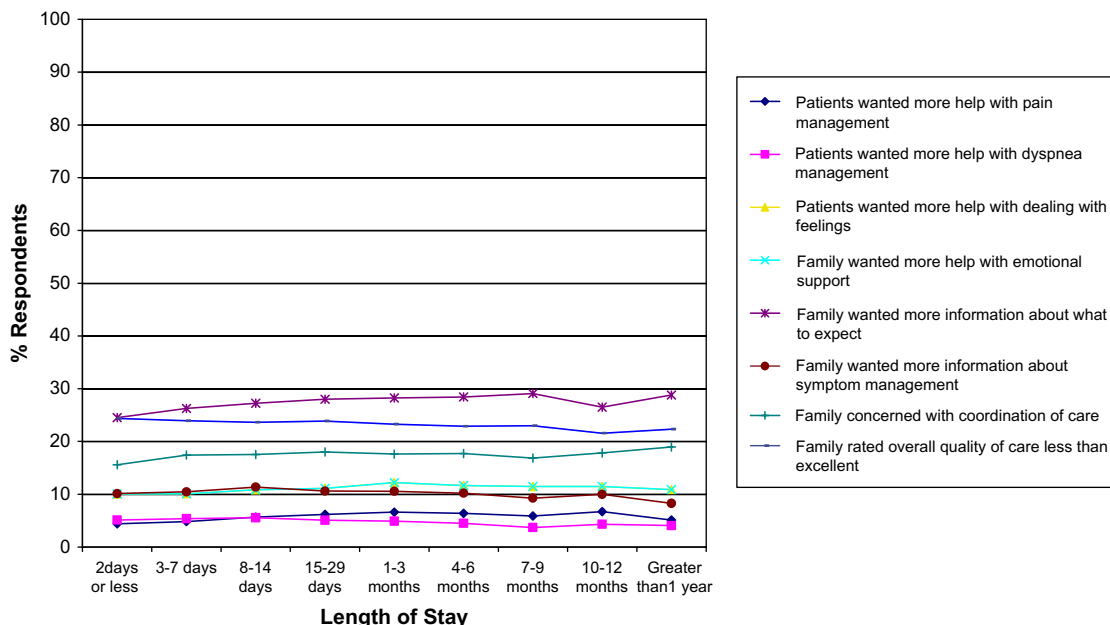


Fig. 1. Length of stay and reported hospice outcomes.

referral were more dissatisfied with the coordination of care (23.7 vs. 16.4%) and the overall quality of care (33.5 vs. 21.9%). This trend of unmet needs and greater dissatisfaction with care among those who reported referral that was “too late” was also found with reports of hospice staff not always treating the patient with respect, although the difference was less marked (5.4 vs. 2.8%).

Geographic and Hospice Variation of Perceptions of Late Referrals

Bereaved family member perceptions of being referred “too late” varied by both state and hospice program. Fig. 2 shows variation of perceptions of late referrals by a state-by-state basis, ranging from 7.8% in Vermont to 15.0% in South Carolina. Among the 521 hospices with 30 or more surveys, the variation of the

Table 2
Bereaved Family Members’ Perceptions of Timing of Referral and Quality of Care

| | “At the Right Time” n = 92,899 (%) | “Too Late” n = 12,182* (%) |
|---|---------------------------------------|-------------------------------|
| <i>Provide desired physical comfort and emotional support</i> | | |
| Patient did not receive appropriate amount of help with | | |
| Pain | 5.03 | 9.66 |
| Dyspnea | 4.14 | 9.96 |
| Dealing with feelings | 8.14 | 18.18 |
| <i>Treat dying person with respect</i> | | |
| Not always treating patient with respect | 2.77 | 5.43 |
| <i>Attend to the needs of the family: one or more concerns with</i> | | |
| Emotional support | 9.96 | 18.77 |
| Being informed about what to expect | 25.18 | 41.37 |
| Being informed about symptoms | 9.03 | 17.77 |
| <i>Coordination of care</i> | | |
| One or more concerns | 16.41 | 23.73 |
| <i>Overall quality of care</i> | | |
| Response less than excellent | 21.86 | 33.48 |

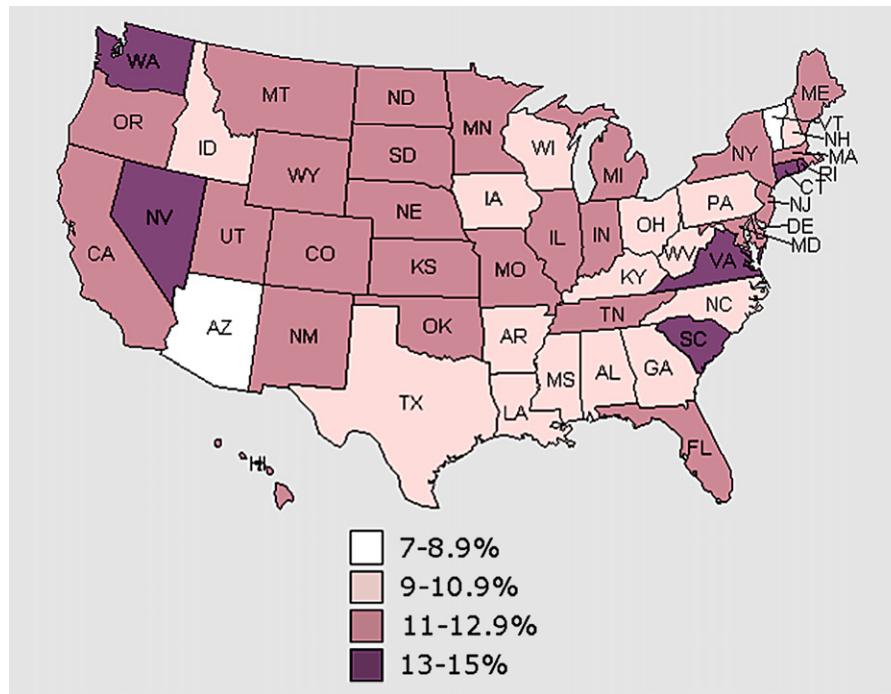


Fig. 2. Depicted is the state variation in bereaved family member response that their dying relative was referred "too late." Among the 819 participating hospices, 12,182 (11.4%) bereaved family members believe their loved one was referred "too late" to hospice services. This varied from 7.8% (VT) to 15.0% (SC).

perception of being referred "too late" ranged from 0 to 28.1% (mean 11.5%, 25th percentile 9.2, 75th percentile 14.0%).

Discussion

Slightly less than one in five bereaved family members with a hospice length of stay of less than one month stated that their family member was referred "too late" to hospice services. Unfortunately, this result raises more questions than it answers. Why aren't more bereaved family members reporting they were referred "too late" despite a short length of stay? It would appear that families need to be educated about the importance of a longer hospice length of stay. However, in some cases, an earlier hospice referral may not be possible. Waldrop et al.¹⁰ used open-ended interviews with 59 bereaved caregivers of hospice patients who died with short lengths of stay and found that 44% were diagnosed too late and 17% refused hospice services at an earlier time point. Schockett and colleagues² found that about one in four cases referred "too late" to hospice may not be easily changed to access hospice at

an earlier point in time, in that 13% of dying persons refused an earlier hospice referral and 10% were diagnosed at a late point in their illness. Based on these two studies, the rate of short stays that *could not* have been referred earlier to hospice varied between 23% and 61%. These two small studies suggest that it might not be possible for some dying persons to have been referred at an earlier time point.

Our data suggest that the perception of being referred "too late," rather than length of stay, is associated with greater unmet needs, more concerns, and lower satisfaction. One could hypothesize that hospice programs have become very adept at "rallying the troops" to provide excellent end-of-life care for those persons with short lengths of stay. The perception of being referred "too late" is not easily predicted by the existing sociodemographic data available in this data set. This perception of being referred "too late" varied between 0% and 28% among hospice programs with 30 or more surveys completed in 2005.

The striking variation in the perception of being referred "too late" calls for research to

understand whether hospices are using different organizational interventions to improve access to hospice services. For example, many hospices are now adopting “open access” policies to allow dying patients to receive potentially “life-prolonging treatment.” This intervention potentially could improve access to hospice services, reducing bereaved family members’ perceptions that their dying relatives or friends were referred “too late” to hospice services. Future research is needed to characterize this variation by hospice program in regard to whether there are different processes of care, consumer education efforts, and/or different hospice policies that lead to improved perceptions of the quality of care.

When interpreting these results, certain limitations of this study should be kept in mind. Data were collected from family members of deceased hospice patients using self-administered surveys. Respondents may have inaccurately perceived patients’ unmet needs for emotional support and pain management. A recent review of studies on the reliability of information provided by proxies found that they were more reliable regarding observable symptoms and quality of services than subjective features of the patient experience.¹¹ However, it is unlikely that this discrepancy would be different among this study’s comparison groups. Also, the response rate is 45%, thus adding a concern of possible selection bias.

In conclusion, the majority of respondents believed they were referred to hospice “at the right time,” despite a reported short length of stay. Short hospice lengths of stay were not associated with perceptions of poor quality end-of-life care. Rather, the family members’ perception that they were referred “too late” to hospice was associated with lower satisfaction, more unmet needs, and higher reported concerns. This perception of late referral varied by state and by hospice program. An important opportunity exists to educate the public about the benefits of longer hospice lengths of stay. Future research should seek to understand whether there are differences in state policies and regulations that may be contributing to late hospice referrals. Additionally, research is needed to understand whether hospices with lower rates of persons

being referred “too late” are using innovative programs to better meet the needs of dying patients and their families.

Acknowledgments

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Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 27

**WASHINGTON STATE HOSPICE COST,
QUALITY AND OUTCOME STUDIES**

August 2019

Report for Washington Managed Fee-for-Service (MFFS)

Final Demonstration Year 3 and Preliminary Demonstration Year 4 Medicare Savings Estimates: Medicare-Medicaid Financial Alignment Initiative

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REPORT FOR WASHINGTON MANAGED FEE-FOR-SERVICE (MFFS) FINAL
DEMONSTRATION YEAR 3 AND PRELIMINARY DEMONSTRATION YEAR 4
MEDICARE SAVINGS ESTIMATES: MEDICARE-MEDICAID FINANCIAL ALIGNMENT
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Executive Summary

The Washington Health Homes MFFS demonstration leverages Medicaid health homes to integrate care for full-benefit Medicare-Medicaid beneficiaries by targeting high-cost, high-risk dual eligible enrollees. The State's existing delivery systems for primary, acute, behavioral and LTSS remain unchanged and health homes serve as the bridge for integrating care across these existing delivery systems. The demonstration service area originally included all but two counties (King and Snohomish) in the state and began enrollment on July 1, 2013. As of April 1, 2017, the demonstration was extended statewide and Demonstration Year 4 (DY4) includes beneficiaries from all counties.

This report includes an analysis of Medicare savings during the 24-month period from January 1, 2016 through December 31, 2017: final Medicare savings estimates for DY3 (January 1, 2016 through December 31, 2016) and preliminary Medicare savings estimates for DY4 (January 1, 2017 through December 31, 2017). Final Medicare savings estimates for DY1 and DY2 and preliminary Medicare savings estimates for DY3 appeared in previously released Washington Medicare savings reports. Future reports will include Medicaid data for Demonstration Years 1, 2, 3 and 4, if available.

The method used to perform the Medicare saving calculations in this report is referred to as the "actuarial method," to distinguish it from the multivariate regression-based method that has been used to estimate the impact of the demonstration on quality and cost outcomes in the annual demonstration evaluation reports. The actuarial method relies on assigning beneficiaries in both the intervention and comparison groups to cohorts and then constructing an eligibility timeline for each beneficiary to determine whether claims occurred during a period of demonstration eligibility. Medicare per member per month (PMPM) expenditures for eligible beneficiaries are tabulated from claims.

The basic approach to the savings calculation is to compare the trend of PMPM Medicare expenditures of those beneficiaries in the intervention group with the trend of the PMPM of those beneficiaries in the comparison group. This is achieved by comparing the actual PMPM of the intervention group beneficiaries with a target PMPM, which represents the baseline intervention group PMPM projected forward by the trend of the actual experience observed in the comparison group going from the baseline period to the Demonstration Year.

Results of the savings calculations are summarized below and include results for multiple cohorts as applicable.

- Total Medicare savings in Demonstration Year 3 were calculated as \$38.8 million or 10.9 percent. An additional \$7.7 million in attributed savings (savings attributed to eligible months prior to the start of the most recent cohort) sums to a grand total final calculated Demonstration Year 3 Medicare savings amount of \$46.6 million.
- Preliminary total Medicare savings in Demonstration Year 4 were calculated as \$46.5 million or 9.7 percent. Including preliminary attributed Medicare savings estimates of \$5.5 million results in a grand total preliminary Demonstration Year 4 Medicare savings estimate of \$55.2 million.

- Per the previous Washington Medicare Savings reports, total Demonstration Year 1 Medicare savings were calculated as \$34.9 million and total Demonstration Year 2 savings were calculated as \$30.2 million.
- The current estimate of grand total Demonstration Medicare savings for all cohorts through Demonstration Year 4 to \$166.8 million.

1. Introduction

The Washington Health Homes MFFS demonstration leverages Medicaid health homes, established under Section 2703 of the Affordable Care Act, to integrate care for full-benefit Medicare-Medicaid beneficiaries. Washington has targeted the demonstration to high-cost, high-risk Medicare-Medicaid enrollees based on the principle that focusing intensive care coordination on those with the greatest need provides the greatest potential for improved health outcomes and cost savings. The demonstration is organized around the principles of patient activation and engagement, and support for enrollees to take steps to improve their own health. In the course of integrating care for enrollees across primary care, long-term services and supports (LTSS), and behavioral health delivery systems, health home care coordinators are charged with conducting assessments, and engaging enrollees to develop Health Action Plans (HAPs) and increase their self-management skills to achieve optimal physical and cognitive health.

The State's existing delivery systems for primary, acute, behavioral, and LTSS remain unchanged. Health homes serve as the bridge for integrating care across these existing delivery systems. Even though the Washington State MFFS demonstration provides services through the traditional fee-for-service Medicare and Medicaid programs and does not affect beneficiaries' choice of providers or limit availability of services, beneficiaries have the option to opt out of receiving health home services. Beneficiaries are auto-assigned to a health home to coordinate their services, and they may choose not to use or engage with that health home. Their Medicare and Medicaid services are not disrupted if they decide not to engage with the health home.

Washington used a competitive Request for Application process to select qualified health homes. Applicants were required to demonstrate a wide range of administrative capabilities, have experience in conducting care coordination, offer multiple vehicles for beneficiary access to supports, and present a network of diverse organizations that can serve enrollees with a range of needs. The organizations selected were Community Choice (a provider consortium); Northwest Regional Council (an Area Agency on Aging); Optum (a Mental Health Regional Support Network); and Southeast Washington Aging and Long Term Care (an Area Agency on Aging). Two managed care plans were also selected to be health homes, Community Health Plan of Washington and United Health Care Community Plan. The State prioritized beneficiary enrollment into the non-managed care health homes and as a result, as of July 2015, less than 5 percent, 4.7 percent, of all enrollees were in new managed care health homes.

During the 2015 Washington legislative session, State funding for the health home program was terminated, effective December 31, 2015. According to a joint statement released by the Washington Department of Social and Health Services (DSHS) and the Health Care Authority (HCA) (DSHS and HCA, 2015), the legislature's decision to terminate funding was based on a lack of supporting information about whether the demonstration would meet its projected savings target amid a challenging budget climate. During the several months following the close of the legislative session in June 2015, the State suspended auto enrollment into the demonstration and began planning for termination.

In late October 2015, new information became available about projected savings for the demonstration. As a result, the State changed course and decided to continue health home services through June 2016, to give the legislature time to review savings projections. During the 2016 legislative session funding for health homes was reinstated. Effective April 1, 2017, the demonstration began to serve King and Snohomish counties, extending the demonstration service area statewide.

This report provides a final Medicare Parts A & B savings analysis of the Washington managed fee-for-service (MFFS) demonstration for Demonstration Year 3 and a preliminary analysis of Medicare data for Demonstration Year 4 under the Medicare-Medicaid Financial Alignment Initiative. During the first three Demonstration Years, Washington had enrolled beneficiaries in the demonstration in all but two counties (King and Snohomish) in the State. Washington began enrollment on July 1, 2013. As of April 1, 2017, the demonstration was extended statewide and Demonstration Year 4 includes beneficiaries from all counties.

This report includes an analysis of Medicare savings during the 24-month period from January 1, 2016 through December 31, 2017 separated into Demonstration Year 3 for the Washington demonstration (January 1, 2016 through December 31, 2016) and Demonstration Year 4 (January 1, 2017 through December 31, 2017). CMS previously released two Medicare savings reports by RTI entitled (1) Final Demonstration Year 1 and Preliminary Demonstration Year 2 Medicare Savings Estimates: Medicare-Medicaid Financial Alignment Initiative and (2) Final Demonstration Year 2 and Preliminary Demonstration Year 3 Medicare Savings Estimates: Medicare-Medicaid Financial Alignment Initiative. These reports provided final estimates of Medicare savings for Demonstration Years 1 and 2 and preliminary estimates of Medicare savings for Demonstration Years 2 and 3, respectively, for Washington. Demonstration Years 1, 2 and 3 experience and Medicare savings calculations are considered complete.¹ This report provides final Medicare savings estimates for Demonstration Year 3 and preliminary Medicare savings estimates for Demonstration Year 4, the additional 12-month period spanning from January 1, 2017 through December 31, 2017. In addition to developing a savings report for subsequent Demonstration Years, future reports will include Medicaid data for Demonstration Years 1, 2, 3 and 4, if available. Currently, we do not have sufficient Medicaid data for the periods covered in this report to perform any analyses.

The method used to perform the Medicare savings calculations in this report will be referred to as the “actuarial method,” to distinguish it from the multivariate regression-based method that will be used to estimate the impact of the demonstration on quality and cost outcomes in the annual evaluation reports for the Washington demonstration. Because the actuarial method constructs cohorts of beneficiaries from the comparison group (as will be explained later), the actuarial savings calculation uses a subset of the comparison group that was constructed for the other descriptive and regression-based analyses that RTI will perform as part of the evaluation. The Centers for Medicare & Medicaid Services (CMS) will use the results of the actuarial method to determine whether Washington is eligible for a performance payment

¹ Any reference to Demonstration Years 1 and 2 experience and savings included in this report is pulled directly from the previous report and does not incorporate any new information or calculations.

under the MFFS Financial Alignment Model. The Medicare and Medicaid savings calculation results will be a factor in that determination.

The Medicare results presented in this report should be viewed as final for Demonstration Year 3, but preliminary for Demonstration Year 4. The Demonstration Year 4 Medicare Parts A and B expenditure data includes 10 months of claims runout (i.e., through October 2018). Note that final the evaluation report will include an analysis of Medicare Part D data, however under the MFFS financial alignment model, Part D spending does not inform the amount of any performance payment to the State and is not included in this report. The preliminary Demonstration Period 3 results included in the previous report included 12 months of claims runout. This final Medicare savings report for Demonstration Year 3 has been updated to include any retroactive adjustments to eligibility data and additional claims runout for beneficiaries in both the intervention and comparison groups.

Compared to earlier reports, there was one important methodological change made to the Demonstration Year 3 final Medicare savings estimate. This change is detailed in section 3.2 below. In brief, the comparison group for Demonstration Year 3 was updated to reflect a lack of reliable eligibility information reported for dual enrollees in Arkansas beginning in Demonstration Year 3.

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2. Data Sources for PMPM Cost Analysis

2.1 Eligibility Data

As a part of performing cost calculations on a per member per month (PMPM) basis, it was necessary to construct an eligibility timeline for each beneficiary to determine whether claims occurred during periods of eligibility for the demonstration. ARC used beneficiary eligibility information extracted from the appropriate tables on the Integrated Data Repository (IDR) in December 2018, to construct an analytic file that contains eligibility occurrences for Part A coverage, Part B coverage, and primary payer status; eligibility occurrences for State/county codes of residence and, as applicable, the date of death; Group Health Organization (GHO) enrollment (e.g., Medicare Advantage [MA] or the Program of All-Inclusive Care for the Elderly [PACE]); and periods of hospice coverage. Specific eligibility criteria are described in Section 3.2. All of this information was used to construct a historical eligibility record for each beneficiary in all cohorts and Demonstration Years. Thus, these new data were used to produce the final estimate of Medicare savings for demonstration year 3 and preliminary Medicare savings estimates for demonstration year 4.

After creating the historical eligibility file, ARC determined the days on which a beneficiary was eligible for the demonstration. Claims were used to calculate the Medicare PMPM payments only if the beneficiary was eligible to participate in the demonstration on the admission date (for institutional claims) or service date (for all other types of service) on the claim. For future reports, retroactive changes will be applied so that the daily eligibility file for Demonstration Year 4 will include updated values for all months in Demonstration Year 4.

2.2 Claims Data

The source of Medicare Parts A and B claims data for this report was CMS's Chronic Condition Warehouse (CCW). For each of the beneficiary cohorts included in this report, the claims data employed in the analysis were extracted from the CCW and represent claims incurred from the start date of each cohort through December 31, 2017 and processed by CMS through October 2018. The paid claim amounts tabulated for this report do not include estimates of incurred-but-not-reported (IBNR) claims for medical services performed during all 24 months but not yet paid by the end of October 2018. We have assumed the claims runout is effectively 100 percent complete for Demonstration Year 3.

Medicare payments were separated into seven claim categories:

1. Inpatient
2. Skilled Nursing Facility (SNF)
3. Hospice
4. Outpatient
5. Home Health

6. Professional
7. Durable Medical Equipment (DME)

3. Basic Approach

The basic approach to the savings calculation is to compare the trend (as opposed to the level) of per member per month (PMPM) Medicare expenditures of those beneficiaries in the intervention group (i.e., the demonstration group) with the trend of the PMPM of those beneficiaries in the comparison group. This is done by comparing the actual PMPM of the individuals in the intervention group with a target PMPM, which is determined by projecting forward the PMPM of the intervention group in the baseline period to the Demonstration Year. The trend used for the projection is based on the actual experience observed in the comparison group during the baseline period and the Demonstration Year.

For Medicare, the PMPM amounts are calculated by dividing total Medicare Parts A and B expenditures by the number of member months of eligibility. Medicare-paid amounts do not include the amounts for deductibles, coinsurance, or balance billing. For hospital claims, the paid amount is reduced for Medicare Disproportionate Share (DSH) payments and Indirect Medical Education (IME) payments, because these payments are not directly related to the cost of care provided to individual beneficiaries.

3.1 Categories of Beneficiaries

The basic approach is refined by disaggregating the beneficiaries in the intervention and comparison groups by characteristics that affect their level of care and costs. The disaggregation is performed using three characteristics that result in 12 categories, or cells, of beneficiaries:

1. Basis of Medicare eligibility:
 - i) Age (65+) or
 - ii) Disability (<65)
2. Level of Long-Term Services and Supports (LTSS):
 - i) Institution,
 - ii) Home and Community-Based Services (HCBS), or
 - iii) Community
3. Presence of Severe and Persistent Mental Illness (SPMI):
 - i) Yes or
 - ii) No

It is important to note that beneficiaries are placed into categories according to their characteristics at the time that they are first assigned to a cohort, even if these characteristics subsequently change. This is done to ensure that the PMPMs in each category change only from the effects of the demonstration and not from the effects of changing the mix of individuals in the category. This will also capture the effect of the demonstration to potentially slow the progression of the use of LTSS. For example, during the demonstration, some of the beneficiaries originally placed in the community category may begin using HCBS or institutional services, which usually result in increased costs of care. If the transition rate of beneficiaries in the community category who move to categories requiring more intensive services during the

demonstration is higher for the comparison group than for the intervention group, then the PMPM of the comparison group would increase faster and the savings model would show demonstration savings.

3.2 Cohorts

The beneficiaries are also disaggregated according to when they become eligible for the demonstration. Beneficiaries are placed into cohorts based on when they first meet the eligibility requirements of the demonstration. Those who met the requirements for eligibility on July 1, 2013 are in Cohort 1. In order to (1) not include the experience of beneficiaries before they become eligible for the demonstration and (2) create closed groups, intervention group Cohort 1 beneficiaries were subdivided into six subgroups; those who first became eligible for the demonstration in each of the 6 months July through December 2013. These subgroups are designated as Cohort 1A through Cohort 1F, respectively. All subsequent cohorts are assigned as follows:

- Cohort 2: Those who met the requirements for eligibility on January 1, 2014 (and who are not in Cohort 1)
- Cohort 3: Those who met the requirements for eligibility on January 1, 2015 (and are not in Cohort 1 or Cohort 2)
- Cohort 4: Those who met the requirements for eligibility on January 1, 2016 (and are not in Cohorts 1, 2 or 3)
- Cohort 5A: Those who met the requirements for eligibility on January 1, 2017 (and are not in Cohorts 1, 2, 3 or 4)
- Cohort 5B: Those residing in King and Snohomish counties who met the requirements for eligibility on April 1, 2017.

Note that the beneficiaries in Cohort 1 and Cohort 2 have experience after the start date of the cohort during Demonstration Year 1 (which spans July 2013 through December 2014), but that Cohort 3 does not. Cohorts 1, 2 and 3 have experience after the start date of the cohort in Demonstration Year 2 (which spans January 2015 through December 2015), but Cohort 4 does not. Cohorts 1, 2, 3 and 4 have experience in Demonstration Year 3. The demonstration extended to include King and Snohomish counties effective April 1, 2017, and as such Cohort 5A has experience for the entirety of Demonstration Year 4 (which spans January 2017 through December 2017) but Cohort 5B only has 9 months of experience in Demonstration Year 4 (April 2017 through December 2017.) In subsequent Demonstration Years, beneficiaries in King and Snohomish counties will continue to be kept in separate sub-cohorts because there was a separate comparison group constructed for these individuals. However, the time periods of experience will be identical.

Washington provided CMS with a file that flags the beneficiaries who have been determined to be eligible for the demonstration, including those having a score of 1.5 or greater

on the Predictive Risk Intelligence System (PRISM)². This eligibility flag is provided for months starting in July 2013, but not for the months in the baseline period. We performed some basic eligibility checks on the beneficiaries and excluded them from the savings calculation if, on the date that we place them in cohorts, they failed to meet any of the following criteria. We also excluded from the baseline period any month for which an eligible beneficiary does not meet these basic eligibility requirements

1. Are eligible for Medicaid
2. Reside in a demonstration county
3. Have not elected hospice care
4. Have both Part A and Part B coverage
5. Are not enrolled in a Group Health Organization
6. Do not have Medicare as a secondary payer
7. Have at least 90 days of experience during the baseline period
8. Are not in another CMS Medicare shared savings initiative.

For beneficiaries in the comparison group, we applied the same checks, except that residence was checked for the appropriate counties in the comparison states.

Each MSA consists of a group of counties. For each state, a non-MSA area was constructed from the counties that do not belong to an MSA. In addition, RTI simulated the PRISM score of each comparison group beneficiary for each quarter of the Demonstration Years. We checked that the comparison group beneficiaries had an RTI-generated simulated PRISM score of at least 1.5 in the first quarter of the demonstration for Cohort 1, in the third quarter of the demonstration for Cohort 2, in the seventh quarter of the demonstration for Cohort 3, in the eleventh quarter of the demonstration for Cohort 4 and in the fifteenth quarter of the demonstration for Cohorts 5A and 5B.

Special Note 1: RTI constructed the comparison group for the original demonstration area from selected Metropolitan Statistical Areas (MSAs) in three States—Georgia, Arkansas, and West Virginia—based on similarities between the demonstration and comparison areas. For the demonstration extension to King and Snohomish counties, RTI constructed the comparison group from selected MSAs in four states—Michigan, North Carolina, Virginia and West Virginia.³ The use of a separate comparison group for these two counties reflects how they are notably different in composition from other regions of Washington.

² The PRISM score is based on a proprietary algorithm developed by the state of Washington.

³ A description of the comparison group selection methodology will be included in the Washington annual report.

Special Note 2: During the early stages of the Demonstration Year 4 Medicare savings analysis, information was provided to CMS and the evaluation contractor that critically undermined the validity of the eligibility information reported for Arkansas, one of the comparison states, beginning in Demonstration Year 3. Upon further investigation, it became clear that including beneficiaries from Arkansas in the comparison group for purposes of the actuarial savings analysis for Demonstration Years 3 and 4 was not a credible option and they were dropped after consultation with CMS. The paragraph below describes the relative distribution of the intervention and comparison group beneficiaries after the updates.

The intervention group and the comparison group had roughly the same distribution by basis of eligibility. Both groups had roughly 44 percent of individuals aged 65 or older. The distribution by prevalence of SPMI and facility status showed more variation. In the intervention group, there was 35 percent prevalence of SPMI compared with 42 percent in the comparison group. In the intervention group, 41 percent of members used HCBS and 11 percent used facility-based LTSS, whereas the prevalence in the comparison group was 17 percent HCBS and 28 percent facility-based services. Because the savings were calculated for each facility status category separately and weighted according to the intervention group distribution, the savings calculation appropriately takes into account these distributions.

For each cohort after the first, some or all of the baseline experience includes months that are also Demonstration Year months for which the beneficiary could have also been eligible for the demonstration. These are the first few months of eligibility before the start of the cohort, which occurs on January 1. According to the Final Demonstration Agreement, it was agreed to attribute the savings experience of the prior cohort to these months. Thus, for Demonstration Year 1, the savings percentage experienced by Cohort 1 was attributed to these few months of Cohort 2, and for Demonstration Years 2, 3 and 4, the savings percentage experienced by Cohorts 2, 3 and 4 were attributed to these few months for Cohorts 3, 4 and 5A, respectively. Cohorts 6A and 6B will consist of those who were eligible for the demonstration in January 2018 in the original demonstration area and who were not in Cohorts 1, 2, 3, 4 or 5A and those who were eligible for the demonstration in January 2018 in King and Snohomish counties who were not in Cohort 5B. For this report, we have tabulated the eligible member months in Demonstration Year 4 (January 2017 through December 2017 for the original demonstration area and April 2017 through December 2017 for King and Snohomish counties) of preliminary Cohorts 6A and 6B and attribute the PMPM savings achieved for Cohorts 5A and 5B, respectively, to these first few months of eligibility of Cohorts 6A and 6B. As noted in section 5.4 below, these preliminary attributions of savings can change significantly once additional data becomes available.

The reason for employing cohorts for the analysis is to create closed groups of beneficiaries (similarly in the intervention group and the comparison group) whose monthly expenditures (PMPM) can be tracked to determine the effects of the demonstration. If new entrants were allowed into these groups over time, the new entrants would change the PMPM of the groups for reasons unrelated to the effects of the demonstration, but instead related only to the change in the mix of the groups. If the mix of the groups were changing every month in terms of characteristics affecting costs such as age, gender, risk score, and area of residence, then adjustment factors would need to be introduced to take these monthly changes into account. The

use of closed groups means that these characteristics are not changing significantly between the intervention and comparison groups and monthly adjustment factors are not needed.

When the idea of the cohorts was first conceived before the drafting of the preliminary report for demonstration year 1, Cohort 1 was to consist of all of those beneficiaries first identified as eligible for the demonstration in or before July 2013 without any sub-cohorts. However, from those beneficiaries who were dually eligible in July 2013, Washington determined their first month of eligibility for the demonstration in stages over the first 6 months of operations as the demonstration was being rolled out in different areas. That is, a beneficiary was not considered to be eligible for the demonstration for savings calculation purposes until the demonstration had been implemented in the beneficiary's geographic area. It is not possible to re-create this process of rolling entry for the comparison group. Thus, Cohort 1 for the comparison group consists of those beneficiaries who were both dually eligible in July 2013 and deemed eligible for the demonstration in July 2013 by RTI, which simulated the Washington PRISM criteria.

The baseline period for all cohorts is shown below:

- Cohort 1: July 1, 2011 through June 30, 2013.
- Cohort 2: January through December 2013.
- Cohort 3: January through December 2014.
- Cohort 4: January through December 2015.
- Cohort 5A: January through December 2016.
- Cohort 5B: April 2016 through March 2017.

The same beneficiaries are in the baseline and the Demonstration Years and an individual beneficiary must have 3 months of baseline experience before being included in a cohort for the savings calculation. This means that the beneficiary must have met the basic eligibility requirements for at least 3 months during the applicable baseline period. Because the savings calculation methodology relies on determining the trend in PMPM expenditures between the baseline period and the Demonstration Year, it is essential that each beneficiary have relevant experience in both of these periods.

3.3 Determining Member Months

Savings are determined by comparing intervention and comparison group PMPM Medicare expenditures. The first step in determining PMPM amounts is determining the number of member months that are used in the calculation for each beneficiary. For Cohort 1, member months are calculated for each beneficiary starting on July 1, 2013 (or the first day of demonstration eligibility for sub-cohorts) and accruing until one of the following dates or the end of the analytic period (i.e., the first day that is not included as a member month):

1. January 1, 2018.
2. The day after death.
3. The day after moving outside of the intervention area or comparison area.
4. The day of joining a Group Health Organization (GHO).
5. The day that Medicare is no longer the primary payer.
6. The day of loss of coverage for either Medicare Part A or Part B.
7. The day of loss of Medicaid eligibility.
8. For intervention beneficiaries, the day that Washington determines that the beneficiary is no longer eligible for the demonstration.
9. For Cohorts 1 and 2, January 1, 2015 if the beneficiary was a part of a Medicare shared savings program in 2015 but had not been a part of a shared savings program prior to 2015.
10. For Cohorts 1, 2 and 3, January 1, 2016 if the beneficiary was part of a Medicare shared savings program in 2016, but had not been part of a shared savings program prior to 2016.
11. For Cohorts 1, 2, 3 and 4, January 1, 2017 if the beneficiary was part of a Medicare shared savings program in 2017, but had not been part of a shared savings program prior to 2017.

When one of the above occurs during a month, a prorated number of member months are calculated, so that the number of member months contains fractions of whole months. For Cohorts 2, 3, 4, 5A and 5B, the member months are calculated beginning on January 1, 2014 - 2017, and April 1, 2017, respectively, and accrue until one of the above termination events or the end of the analytic period. Also, if a beneficiary meets the demonstration eligibility criteria after being terminated previously, his or her experience would once again be included. Note that a beneficiary is not dropped from the analysis if his or her PRISM score falls below 1.5 or if the beneficiary elects hospice care. Thus, although having a PRISM score below 1.5 or being in hospice care prevents a beneficiary from becoming eligible for the demonstration, these events do not cause a beneficiary who is previously eligible from losing eligibility.

3.4 Calculation of PMPM

For Medicare, the PMPM expenditures for both the baseline period and the Demonstration Years are calculated separately for the intervention and comparison groups, each of the 12 categories of beneficiaries, each cohort, each type of service, and for each month of the Demonstration Year. For the intervention group, when aggregating across months, cells, types of service, or cohorts, expenditures and member months are simply tabulated and divided to obtain the aggregate PMPMs. For the comparison group, however, when aggregating across months,

cells, type of service, or cohorts, expenditures are obtained by multiplying the PMPM of the corresponding comparison group by the member months (MM) of the intervention group, which represents the expenditures that the comparison group would have experienced if it had the same enrollment structure and distribution as the intervention group. Totals obtained in this way are referred to as “reweighted” in subsequent tables.

For each cohort, cell, type of service, and demonstration month, a “target” PMPM is obtained by multiplying the corresponding PMPM of the intervention group in the baseline period (all 24 months combined for Cohort 1 and all 12 months combined for subsequent cohorts) times the ratio of (1) the comparison group PMPM in the demonstration month and (2) the comparison group PMPM in the baseline period. The target represents the PMPM in the baseline period of the intervention group projected forward by the trend in the comparison group. The difference between this target PMPM and the actual PMPM in the intervention group in a Demonstration Year reflects the impact of the demonstration.

3.5 AGA and Outlier Adjustments

Adjustments to the target PMPMs are needed to reflect Federal and State policies and market forces that affect the costs in the comparison States differently from those in the demonstration States and to ensure that calculated savings result only from the demonstration and not from these differences in other factors. For Medicare expenditures, the only necessary adjustment is applying an Average Geographic Adjustment (AGA) factor.⁴ The AGA factor reflects varying FFS cost trends in each county over time compared with the costs of the entire nation. The AGA changes at different rates for each geographic area. The target PMPMs are adjusted so that the comparison group trend is what it would be if the AGA factors in the comparison States had changed by the same percentage as the change in the demonstration State between the baseline period and the Demonstration Year.

Another adjustment is calculated for both the intervention and the comparison PMPMs to account for outliers. Average health care expenditures (as represented by the PMPMs) for a group of beneficiaries can be significantly affected by a few very high-cost beneficiaries. Although it is possible to save by managing the care of such high-cost beneficiaries in the intervention group, this savings cannot be measured unless there are corresponding and similar high-cost beneficiaries in the comparison group. The outlier adjustment process begins by combining the intervention and comparison group beneficiaries and ranking them by their annual Medicare expenditures. A threshold amount is set at the 99th percentile of these annual beneficiary-level costs. The expenditures for any individual that exceed this threshold amount are winsorized to the threshold amount. The costs above the threshold are subtracted from the total costs, and the PMPMs are recalculated by excluding the amounts above the threshold.

⁴ Other adjustments will have to be made to the Medicaid expenditures.

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4. Analysis of Cohorts

As described above, the purpose of closed cohorts is to ensure that the trend in per member per month (PMPM) results from changes in spending on beneficiaries initially placed in each category, not from new higher or lower cost beneficiaries joining the cohort over time. Although no new entrants are allowed into each cohort after it is created, there will be some terminations, and these will affect the mix of beneficiaries slightly. We have calculated the number and rates of termination for each cohort to determine whether these rates are sufficiently small and similar between the intervention and comparison groups so as to not materially affect the analysis.

Cohort 1 consists of 13,979 Medicare-Medicaid enrollees in the intervention group and 23,233 Medicare-Medicaid enrollees in the comparison group. After 54 months of operations, there were 6,160 eligible intervention group members and 7,405 eligible comparison group members as of December 31, 2017. The monthly attrition rates for the intervention and comparison groups were 1.60 percent and 2.15 percent, respectively. The most common reason for attrition was death and the monthly death rate for the intervention group was 0.77 percent, which was lower than the monthly death rate of 1.07 percent for the comparison group. The intervention group also experienced a lower rate of attrition due to a beneficiary moving out of area or participating in a shared savings program (SSP). However, the intervention group experienced higher monthly rates of attrition from (1) loss of dual eligibility (i.e., loss of Medicare or Medicaid eligibility) or (2) when Washington indicated that the beneficiary was no longer eligible for the demonstration (0.46 percent vs. 0.19 percent⁵).

Cohort 1 for the intervention group was divided into six subgroups denoted by 1A through 1F. The six subgroups consist of those beneficiaries that Washington first identified as being eligible for the demonstration at the start of each of the 6 months from July 2013 through December 2013. The following table of overall monthly attrition rates shows the number of beneficiaries in each subgroup, the monthly death rate, and the total monthly attrition rate for each subgroup.

**Table 1. —
Cohort Composition**

| Subgroup | Number of beneficiaries | Monthly death rate | Total monthly attrition rate |
|----------|-------------------------|--------------------|------------------------------|
| 1A | 2,216 | 0.99% | 1.67% |
| 1B | 3,844 | 0.61% | 1.45% |
| 1C | 390 | 0.77% | 1.80% |
| 1D | 6,017 | 0.81% | 1.66% |
| 1E | 724 | 0.68% | 1.65% |
| 1F | 788 | 0.64% | 1.58% |

⁵ Note that eligibility for the intervention group is determined using Washington provided eligibility criteria including PRISM score. Eligibility for the comparison group is based on the application of Washington eligibility criteria to a comparison group which includes an RTI simulated PRISM score.

Cohort 2 consists of 690 Medicare-Medicaid enrollees in the intervention group and 4,331 Medicare-Medicaid enrollees in the comparison group. After 48 months, there were 265 eligible intervention group members and 1,521 eligible comparison group members. The monthly attrition rates for the intervention and comparison groups were 2.14 percent and 2.29 percent, respectively.

Cohort 3 consists of 5,645 Medicare-Medicaid enrollees in the intervention group and 6,444 Medicare-Medicaid enrollees in the comparison group. After 36 months of operations, there were 2,751 eligible intervention group members and 2,740 eligible comparison group members. The monthly attrition rates for the intervention and comparison groups were 2.00 percent and 2.45 percent, respectively.

Cohort 4 consists of 5,823 Medicare-Medicaid enrollees in the intervention group and 7,219 Medicare-Medicaid enrollees in the comparison group. After 24 months of operations, there were 3,329 eligible intervention group members and 4,061 eligible comparison group members. The monthly attrition rates for the intervention and comparison groups were 2.34 percent and 2.42 percent, respectively.

Cohort 5A consists of 6,165 Medicare-Medicaid enrollees in the intervention group and 5,469 Medicare-Medicaid enrollees in the comparison group. After 12 months of operations, there were 4,574 eligible intervention group members and 4,151 eligible comparison group members. The monthly attrition rates for the intervention and comparison groups were 2.51 percent and 2.32 percent, respectively.

Cohort 5B consists of 5,930 Medicare-Medicaid enrollees in the intervention group and 20,441 Medicare-Medicaid enrollees in the comparison group. After 9 months of operations, there were 4,802 eligible intervention group members and 16,946 eligible comparison group members. The monthly attrition rates for the intervention and comparison groups were 2.34 percent and 2.08 percent, respectively.

Table 1.A summarizes the reasons for ineligibility for members of Cohort 1 who became ineligible during the first 54 months of demonstration operations. *Table 1.B* summarizes the reasons for ineligibility for members of Cohort 2 who became ineligible during their 48 months of demonstration operations. *Tables 1.C–F* summarize the reasons for ineligibility for members of Cohorts 3, 4, 5A and 5B who became ineligible during their 36, 24, 12 and 9 months of demonstration operations, respectively.

**Table 1.A —
Reasons for ineligibility for Cohort 1**

| Final ineligibility reason | Intervention group | | Comparison group | |
|---|--------------------|------------------------|------------------|------------------------|
| | Number of events | Monthly attrition rate | Number of events | Monthly attrition rate |
| Death | 3,747 | 0.77% | 7,903 | 1.07% |
| Loss of Part A or B | 47 | 0.01% | 71 | 0.01% |
| GHO enrollment | 1,072 | 0.22% | 2,036 | 0.28% |
| Medicare secondary payer | 221 | 0.05% | 341 | 0.05% |
| Moved out of service area | 352 | 0.07% | 884 | 0.12% |
| Participation in SSP | 153 | 0.03% | 3,163 | 0.43% |
| Loss of eligibility | 2,227 | 0.46% | 1,430 | 0.19% |
| All ineligibles ¹ | 7,819 | 1.60% | 15,828 | 2.15% |
| Beneficiaries as of 1 st day of 1 st month of eligibility | | 13,979 | | 23,233 |
| Beneficiaries as of 12/31/2017 | | 6,160 | | 7,405 |
| Total member months | | 488,824 | | 735,431 |

GHO = Group Health Organization.

¹ For Cohorts 1, 2 and 3 we included attrition experience from Demonstration Years 1 and 2 in the count of events, the total member months of exposure and the calculation of the monthly attrition rate in order to show a full picture of the demonstration attrition to date. Because the Demonstration Years 1 and 2 experience was finalized, it was not re-run, but the total beneficiary counts for first day eligible and eligible as of 12/31/2017 reflect most recent run. This can lead to small discrepancies whereby beneficiaries remaining do not equal starting total beneficiaries minus all ineligibles due to retroactive eligibility changes.

**Table 1.B —
Reasons for ineligibility for Cohort 2**

| Final ineligibility reason | Intervention group | | Comparison group | |
|--------------------------------|--------------------|------------------------|------------------|------------------------|
| | Number of events | Monthly attrition rate | Number of events | Monthly attrition rate |
| Death | 143 | 0.72% | 1,179 | 0.96% |
| Loss of Part A or B | 5 | 0.03% | 14 | 0.01% |
| GHO enrollment | 62 | 0.31% | 349 | 0.28% |
| Medicare secondary payer | 17 | 0.09% | 56 | 0.05% |
| Moved out of service area | 29 | 0.15% | 206 | 0.17% |
| Participation in SSP | 11 | 0.06% | 620 | 0.51% |
| Loss of eligibility | 158 | 0.80% | 386 | 0.31% |
| All ineligibles | 425 | 2.14% | 2,810 | 2.29% |
| Beneficiaries as of 1/1/2014 | 690 | | 4,331 | |
| Beneficiaries as of 12/31/2017 | 265 | | 1,521 | |
| Total member months | 19,859 | | 122,673 | |

**Table 1.C —
Reasons for ineligibility for Cohort 3**

| Final ineligibility reason | Intervention group | | Comparison group | |
|--------------------------------|--------------------|------------------------|------------------|------------------------|
| | Number of events | Monthly attrition rate | Number of events | Monthly attrition rate |
| Death | 968 | 0.67% | 1,562 | 1.03% |
| Loss of Part A or B | 11 | 0.01% | 24 | 0.02% |
| GHO enrollment | 429 | 0.30% | 385 | 0.25% |
| Medicare secondary payer | 95 | 0.07% | 72 | 0.05% |
| Moved out of service area | 149 | 0.10% | 253 | 0.17% |
| Participation in SSP | 52 | 0.04% | 908 | 0.60% |
| Loss of eligibility | 1,190 | 0.82% | 500 | 0.33% |
| All ineligibles | 2,894 | 2.00% | 3,704 | 2.45% |
| Beneficiaries as of 1/1/2015 | 5,645 | | 6,444 | |
| Beneficiaries as of 12/31/2017 | 2,751 | | 2,740 | |
| Total member months | 144,347 | | 150,997 | |

**Table 1.D —
Reasons for ineligibility for Cohort 4**

| Final ineligibility reason | Intervention group | | Comparison group | |
|--------------------------------|--------------------|------------------------|------------------|------------------------|
| | Number of events | Monthly attrition rate | Number of events | Monthly attrition rate |
| Death | 758 | 0.71% | 1,357 | 1.04% |
| Loss of Part A or B | 17 | 0.02% | 14 | 0.01% |
| GHO enrollment | 422 | 0.40% | 385 | 0.30% |
| Medicare secondary payer | 69 | 0.06% | 67 | 0.05% |
| Moved out of service area | 154 | 0.14% | 234 | 0.18% |
| Participation in SSP | 30 | 0.03% | 600 | 0.46% |
| Loss of eligibility | 1,044 | 0.98% | 501 | 0.38% |
| All ineligibles | 2,494 | 2.34% | 3,158 | 2.42% |
| Beneficiaries as of 1/1/2016 | 5,823 | | 7,219 | |
| Beneficiaries as of 12/31/2017 | 3,329 | | 4,061 | |
| Total member months | 106,497 | | 130,359 | |

**Table 1.E —
Reasons for ineligibility for Cohort 5A**

| Final ineligibility reason | Intervention group | | Comparison group | |
|--------------------------------|--------------------|------------------------|------------------|------------------------|
| | Number of events | Monthly attrition rate | Number of events | Monthly attrition rate |
| Death | 419 | 0.66% | 641 | 1.13% |
| Loss of Part A or B | 9 | 0.01% | 8 | 0.01% |
| GHO enrollment | 235 | 0.37% | 231 | 0.41% |
| Medicare secondary payer | 43 | 0.07% | 42 | 0.07% |
| Moved out of service area | 84 | 0.13% | 70 | 0.12% |
| Loss of eligibility | 801 | 1.26% | 326 | 0.57% |
| All ineligibles | 1,591 | 2.51% | 1,318 | 2.32% |
| Beneficiaries as of 1/1/2017 | 6,165 | | 5,469 | |
| Beneficiaries as of 12/31/2017 | 4,574 | | 4,151 | |
| Total member months | 63,414 | | 56,699 | |

**Table 1.F —
Reasons for ineligibility for Cohort 5B**

| Final ineligibility reason | Intervention group | | Comparison group | |
|--------------------------------|--------------------|------------------------|------------------|------------------------|
| | Number of events | Monthly attrition rate | Number of events | Monthly attrition rate |
| Death | 334 | 0.69% | 1,549 | 0.92% |
| Loss of Part A or B | 8 | 0.02% | 34 | 0.02% |
| GHO enrollment | 266 | 0.55% | 600 | 0.36% |
| Medicare secondary payer | 41 | 0.09% | 153 | 0.09% |
| Moved out of service area | 397 | 0.82% | 336 | 0.20% |
| Loss of eligibility | 82 | 0.17% | 823 | 0.49% |
| All ineligibles | 1,128 | 2.34% | 3,495 | 2.08% |
| Beneficiaries as of 4/1/2017 | 5,930 | | 20,441 | |
| Beneficiaries as of 12/31/2017 | 4,802 | | 16,946 | |
| Total member months | 48,134 | | 167,717 | |

5. Results of PMPM Cost Analysis

5.1 Medicare Savings before Adjustments

The savings are determined by comparing the rate of growth in expenditures between the intervention group (WA) and the comparison group (the comparison states) as measured by the average monthly costs per beneficiary, the per member per month (PMPM) costs. We begin this calculation by tabulating the PMPM costs for the comparison group in both the baseline period and the Demonstration Years as shown in *Tables 2A–F*. These tables show the incurred claims, member months, and per member per month (PMPM) costs for Cohort 1 (*Table 2.A*), Cohort 2 (*Table 2.B*), Cohort 3 (*Table 2.C*), Cohort 4 (*Table 2.D*), Cohort 5A (*Table 2.E*) and Cohort 5B (*Table 2.F*) for the baseline period and for Demonstration Years 3 and 4 by category of beneficiary.

The overall results are summarized in *Table 2G*.

- For comparison group Cohort 1, the PMPM increases by 7.9 percent from \$1,600 during the baseline period to \$1,727 during Demonstration Year 3 and increases by 10.8 percent to \$1,773 during Demonstration Year 4.
- For comparison group Cohort 2, the PMPM decreases by 15.8 percent from \$1,607 to \$1,353 during Demonstration Year 3 and decreases by 9.2 percent to \$1,460 during Demonstration Year 4.
- For comparison group Cohort 3, the PMPM decreases by 21.6 percent from \$1,674 to \$1,312 during Demonstration Year 3 and decreases by 18.5 percent to \$1,364 during Demonstration Year 4.
- For comparison group Cohort 4, the PMPM decreases by 8.7 percent from \$1,738 to \$1,587 during Demonstration Year 3 and decreases by 14.4 percent to \$1,488 during Demonstration Year 4.
- For comparison group Cohort 5A, the PMPM decreases by 7.3 percent from \$1,817 to \$1,684 during Demonstration Year 4.
- For comparison group cohort 5B, the PMPM increases by 4.1 percent from \$1,581 to \$1,646 during Demonstration Year 4.

Cohorts 5A and 5B have no experience during Demonstration Year 3.

One significant difference between Cohorts 1 and 5B as compared to Cohorts 2, 3, 4 and 5A is that Cohorts 1 and 5B represent a cross-section of demonstration-eligible beneficiaries, whereas Cohorts 2, 3, 4 and 5A represent newly demonstration-eligible beneficiaries. In other words, Cohorts 1 and 5B beneficiaries could have first met the requirements for demonstration eligibility at any time during the past (perhaps years ago), whereas Cohorts 2, 3, 4 and 5A beneficiaries first met the requirements for demonstration eligibility more recently (otherwise they would have been included in Cohort 1).

Prior to comparison with the intervention group, as will be shown in subsequent tables, the PMPMs in each cell (i.e., the specific category of beneficiary and month) are reweighted by the number of member months in the intervention group. The resulting totals represent the costs that would have occurred in the comparison group if it had the same number and distribution of beneficiaries as the intervention group.

The re-weighted PMPM costs are then further adjusted for two reasons before savings are calculated: (1) to reflect the difference in the trend in the Average Geographic Adjustment factor between Washington and the comparison States, and (2) to include an adjustment for the trimming of outlier costs above the 99th percentile of annual costs of total paid claims.

Table 2.A.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 3,
by category of beneficiary: Cohort 1

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|----------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 495,181.0 | \$792,439,622 | \$1,600.30 | 125,982.4 | \$217,509,711 | \$1,726.51 | 1.07886 |
| Facility, age 65+, with SPMI | 32,115.2 | \$66,311,502 | \$2,064.80 | 6,478.9 | \$11,037,036 | \$1,703.54 | 0.82504 |
| Facility, age 65+, no SPMI | 80,858.8 | \$139,945,392 | \$1,730.74 | 13,384.4 | \$22,137,586 | \$1,653.99 | 0.95565 |
| HCBS, age 65+, with SPMI | 10,838.8 | \$20,539,243 | \$1,894.97 | 2,808.0 | \$6,420,223 | \$2,286.41 | 1.20657 |
| HCBS, age 65+, no SPMI | 51,925.0 | \$84,282,667 | \$1,623.16 | 11,226.5 | \$25,133,273 | \$2,238.74 | 1.37925 |
| Community, age 65+, with SPMI | 12,587.9 | \$16,488,055 | \$1,309.84 | 3,811.3 | \$6,628,937 | \$1,739.29 | 1.32787 |
| Community, age 65+, no SPMI | 92,332.0 | \$108,551,869 | \$1,175.67 | 24,172.9 | \$38,552,059 | \$1,594.85 | 1.35654 |
| Facility, age <65, with SPMI | 10,531.3 | \$26,564,713 | \$2,522.45 | 3,125.2 | \$6,095,464 | \$1,950.43 | 0.77323 |
| Facility, age <65, no SPMI | 12,082.5 | \$28,804,414 | \$2,383.97 | 3,240.1 | \$5,746,960 | \$1,773.69 | 0.74401 |
| HCBS, age <65, with SPMI | 18,074.4 | \$30,515,893 | \$1,688.35 | 5,390.8 | \$8,751,191 | \$1,623.34 | 0.96150 |
| HCBS, age <65, no SPMI | 28,593.8 | \$55,535,580 | \$1,942.22 | 8,398.6 | \$20,014,187 | \$2,383.04 | 1.22697 |
| Community, age <65, with SPMI | 58,269.0 | \$76,748,751 | \$1,317.15 | 18,355.8 | \$23,787,670 | \$1,295.92 | 0.98389 |
| Community, age <65, no SPMI | 86,972.3 | \$138,151,543 | \$1,588.45 | 25,589.9 | \$43,205,125 | \$1,688.37 | 1.06290 |

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Table 2.A.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 4,
by category of beneficiary: Cohort 1

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|----------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 495,181.0 | \$792,439,622 | \$1,600.30 | 97,449.8 | \$172,819,600 | \$1,773.42 | 1.10818 |
| Facility, age 65+, with SPMI | 32,115.2 | \$66,311,502 | \$2,064.80 | 4,790.4 | \$8,117,651 | \$1,694.55 | 0.82069 |
| Facility, age 65+, no SPMI | 80,858.8 | \$139,945,392 | \$1,730.74 | 8,663.2 | \$13,801,555 | \$1,593.12 | 0.92049 |
| HCBS, age 65+, with SPMI | 10,838.8 | \$20,539,243 | \$1,894.97 | 2,141.7 | \$5,151,617 | \$2,405.41 | 1.26936 |
| HCBS, age 65+, no SPMI | 51,925.0 | \$84,282,667 | \$1,623.16 | 7,979.6 | \$19,102,744 | \$2,393.93 | 1.47486 |
| Community, age 65+, with SPMI | 12,587.9 | \$16,488,055 | \$1,309.84 | 3,113.9 | \$5,668,192 | \$1,820.31 | 1.38972 |
| Community, age 65+, no SPMI | 92,332.0 | \$108,551,869 | \$1,175.67 | 18,567.8 | \$32,642,278 | \$1,758.00 | 1.49532 |
| Facility, age <65, with SPMI | 10,531.3 | \$26,564,713 | \$2,522.45 | 2,546.6 | \$5,033,598 | \$1,976.56 | 0.78359 |
| Facility, age <65, no SPMI | 12,082.5 | \$28,804,414 | \$2,383.97 | 2,467.8 | \$4,659,232 | \$1,888.02 | 0.79197 |
| HCBS, age <65, with SPMI | 18,074.4 | \$30,515,893 | \$1,688.35 | 4,171.4 | \$6,195,328 | \$1,485.21 | 0.87968 |
| HCBS, age <65, no SPMI | 28,593.8 | \$55,535,580 | \$1,942.22 | 6,689.3 | \$15,091,472 | \$2,256.05 | 1.16158 |
| Community, age <65, with SPMI | 58,269.0 | \$76,748,751 | \$1,317.15 | 15,016.5 | \$19,075,847 | \$1,270.32 | 0.96445 |
| Community, age <65, no SPMI | 86,972.3 | \$138,151,543 | \$1,588.45 | 21,301.5 | \$38,280,085 | \$1,797.06 | 1.13133 |

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Table 2.B.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 3,
by category of beneficiary: Cohort 2

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------|---------------------------|---------------------|-------------------|---------------------------|---------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 42,008.3 | \$67,515,192 | \$1,607.19 | 25,382.6 | \$34,342,597 | \$1,353.00 | 0.84184 |
| Facility, age 65+, with SPMI | 2,059.8 | \$5,419,492 | \$2,631.14 | 1,031.5 | \$2,104,890 | \$2,040.68 | 0.77559 |
| Facility, age 65+, no SPMI | 6,716.7 | \$14,724,625 | \$2,192.23 | 3,268.4 | \$4,105,157 | \$1,256.03 | 0.57295 |
| HCBS, age 65+, with SPMI | 613.4 | \$1,053,551 | \$1,717.67 | 451.5 | \$819,233 | \$1,814.60 | 1.05643 |
| HCBS, age 65+, no SPMI | 3,544.0 | \$5,267,521 | \$1,486.32 | 2,011.1 | \$3,653,367 | \$1,816.62 | 1.22222 |
| Community, age 65+, with SPMI | 1,074.8 | \$1,446,270 | \$1,345.67 | 757.9 | \$1,275,799 | \$1,683.37 | 1.25095 |
| Community, age 65+, no SPMI | 9,976.7 | \$13,004,722 | \$1,303.52 | 6,088.1 | \$8,259,460 | \$1,356.67 | 1.04077 |
| Facility, age <65, with SPMI | 668.8 | \$2,180,795 | \$3,260.87 | 448.3 | \$958,474 | \$2,138.16 | 0.65570 |
| Facility, age <65, no SPMI | 794.5 | \$2,553,958 | \$3,214.35 | 563.6 | \$1,128,734 | \$2,002.86 | 0.62310 |
| HCBS, age <65, with SPMI | 1,076.6 | \$1,473,625 | \$1,368.80 | 591.4 | \$544,289 | \$920.30 | 0.67234 |
| HCBS, age <65, no SPMI | 1,902.1 | \$2,801,867 | \$1,473.05 | 1,359.9 | \$2,009,565 | \$1,477.78 | 1.00321 |
| Community, age <65, with SPMI | 5,313.9 | \$6,380,978 | \$1,200.82 | 3,637.0 | \$3,202,716 | \$880.58 | 0.73332 |
| Community, age <65, no SPMI | 8,267.2 | \$11,207,788 | \$1,355.69 | 5,174.1 | \$6,280,913 | \$1,213.92 | 0.89543 |

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Table 2.B.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 4,
by category of beneficiary: Cohort 2

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------|---------------------------|---------------------|-------------------|---------------------------|---------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 42,008.3 | \$67,515,192 | \$1,607.19 | 19,817.2 | \$28,929,588 | \$1,459.82 | 0.90831 |
| Facility, age 65+, with SPMI | 2,059.8 | \$5,419,492 | \$2,631.14 | 687.1 | \$955,684 | \$1,390.98 | 0.52866 |
| Facility, age 65+, no SPMI | 6,716.7 | \$14,724,625 | \$2,192.23 | 2,330.4 | \$3,434,943 | \$1,473.99 | 0.67237 |
| HCBS, age 65+, with SPMI | 613.4 | \$1,053,551 | \$1,717.67 | 361.7 | \$786,879 | \$2,175.70 | 1.26665 |
| HCBS, age 65+, no SPMI | 3,544.0 | \$5,267,521 | \$1,486.32 | 1,490.7 | \$2,601,758 | \$1,745.29 | 1.17423 |
| Community, age 65+, with SPMI | 1,074.8 | \$1,446,270 | \$1,345.67 | 555.4 | \$944,672 | \$1,700.94 | 1.26400 |
| Community, age 65+, no SPMI | 9,976.7 | \$13,004,722 | \$1,303.52 | 4,691.6 | \$7,788,394 | \$1,660.08 | 1.27354 |
| Facility, age <65, with SPMI | 668.8 | \$2,180,795 | \$3,260.87 | 339.4 | \$422,828 | \$1,245.97 | 0.38210 |
| Facility, age <65, no SPMI | 794.5 | \$2,553,958 | \$3,214.35 | 425.8 | \$678,649 | \$1,593.68 | 0.49580 |
| HCBS, age <65, with SPMI | 1,076.6 | \$1,473,625 | \$1,368.80 | 541.3 | \$626,540 | \$1,157.46 | 0.84560 |
| HCBS, age <65, no SPMI | 1,902.1 | \$2,801,867 | \$1,473.05 | 1,123.1 | \$1,752,241 | \$1,560.24 | 1.05918 |
| Community, age <65, with SPMI | 5,313.9 | \$6,380,978 | \$1,200.82 | 2,996.5 | \$3,484,578 | \$1,162.89 | 0.96841 |
| Community, age <65, no SPMI | 8,267.2 | \$11,207,788 | \$1,355.69 | 4,274.3 | \$5,452,421 | \$1,275.62 | 0.94094 |

Table 2.C.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 3,
by category of beneficiary: Cohort 3

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 65,614.5 | \$109,816,298 | \$1,673.66 | 48,033.3 | \$63,024,948 | \$1,312.11 | 0.78398 |
| Facility, age 65+, with SPMI | 4,878.2 | \$11,042,653 | \$2,263.65 | 3,546.3 | \$5,709,401 | \$1,609.94 | 0.71121 |
| Facility, age 65+, no SPMI | 12,137.4 | \$26,728,998 | \$2,202.20 | 7,433.4 | \$10,976,491 | \$1,476.64 | 0.67053 |
| HCBS, age 65+, with SPMI | 1,111.6 | \$1,593,577 | \$1,433.58 | 841.9 | \$1,427,482 | \$1,695.57 | 1.18275 |
| HCBS, age 65+, no SPMI | 4,599.1 | \$7,305,283 | \$1,588.42 | 3,657.7 | \$5,803,834 | \$1,586.73 | 0.99893 |
| Community, age 65+, with SPMI | 2,510.0 | \$3,725,198 | \$1,484.15 | 1,842.2 | \$2,127,567 | \$1,154.92 | 0.77817 |
| Community, age 65+, no SPMI | 12,485.8 | \$16,640,967 | \$1,332.79 | 9,178.2 | \$12,360,981 | \$1,346.77 | 1.01049 |
| Facility, age <65, with SPMI | 1,125.0 | \$3,949,081 | \$3,510.30 | 777.2 | \$1,608,422 | \$2,069.57 | 0.58957 |
| Facility, age <65, no SPMI | 1,435.9 | \$4,985,720 | \$3,472.12 | 943.6 | \$1,827,140 | \$1,936.39 | 0.55770 |
| HCBS, age <65, with SPMI | 2,068.1 | \$2,424,892 | \$1,172.54 | 1,715.6 | \$1,426,750 | \$831.65 | 0.70928 |
| HCBS, age <65, no SPMI | 2,938.7 | \$3,982,170 | \$1,355.08 | 2,536.5 | \$2,921,454 | \$1,151.74 | 0.84995 |
| Community, age <65, with SPMI | 10,202.2 | \$11,555,501 | \$1,132.64 | 7,989.3 | \$6,918,357 | \$865.96 | 0.76454 |
| Community, age <65, no SPMI | 10,122.4 | \$15,882,259 | \$1,569.02 | 7,571.4 | \$9,917,068 | \$1,309.81 | 0.83480 |

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Table 2.C.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 4,
by category of beneficiary: Cohort 3

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 65,614.5 | \$109,816,298 | \$1,673.66 | 35,741.0 | \$48,752,067 | \$1,364.04 | 0.81500 |
| Facility, age 65+, with SPMI | 4,878.2 | \$11,042,653 | \$2,263.65 | 2,410.3 | \$3,459,712 | \$1,435.36 | 0.63409 |
| Facility, age 65+, no SPMI | 12,137.4 | \$26,728,998 | \$2,202.20 | 5,125.0 | \$8,030,688 | \$1,566.97 | 0.71155 |
| HCBS, age 65+, with SPMI | 1,111.6 | \$1,593,577 | \$1,433.58 | 605.2 | \$993,281 | \$1,641.12 | 1.14477 |
| HCBS, age 65+, no SPMI | 4,599.1 | \$7,305,283 | \$1,588.42 | 2,481.8 | \$4,680,502 | \$1,885.96 | 1.18732 |
| Community, age 65+, with SPMI | 2,510.0 | \$3,725,198 | \$1,484.15 | 1,438.7 | \$1,597,600 | \$1,110.42 | 0.74818 |
| Community, age 65+, no SPMI | 12,485.8 | \$16,640,967 | \$1,332.79 | 6,789.0 | \$9,265,529 | \$1,364.79 | 1.02401 |
| Facility, age <65, with SPMI | 1,125.0 | \$3,949,081 | \$3,510.30 | 526.2 | \$595,272 | \$1,131.34 | 0.32229 |
| Facility, age <65, no SPMI | 1,435.9 | \$4,985,720 | \$3,472.12 | 663.2 | \$1,046,474 | \$1,577.99 | 0.45448 |
| HCBS, age <65, with SPMI | 2,068.1 | \$2,424,892 | \$1,172.54 | 1,422.5 | \$1,267,900 | \$891.34 | 0.76018 |
| HCBS, age <65, no SPMI | 2,938.7 | \$3,982,170 | \$1,355.08 | 2,090.2 | \$2,764,806 | \$1,322.76 | 0.97615 |
| Community, age <65, with SPMI | 10,202.2 | \$11,555,501 | \$1,132.64 | 6,312.8 | \$6,068,366 | \$961.29 | 0.84871 |
| Community, age <65, no SPMI | 10,122.4 | \$15,882,259 | \$1,569.02 | 5,876.2 | \$8,981,936 | \$1,528.53 | 0.97420 |

Table 2.D.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 3,
by category of beneficiary: Cohort 4

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|----------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 74,886.5 | \$130,154,124 | \$1,738.02 | 76,497.7 | \$121,404,786 | \$1,587.04 | 0.91313 |
| Facility, age 65+, with SPMI | 8,799.9 | \$23,177,043 | \$2,633.77 | 9,280.7 | \$18,930,494 | \$2,039.76 | 0.77446 |
| Facility, age 65+, no SPMI | 10,464.5 | \$21,506,946 | \$2,055.23 | 10,738.3 | \$17,435,867 | \$1,623.71 | 0.79004 |
| HCBS, age 65+, with SPMI | 2,013.0 | \$3,798,610 | \$1,887.04 | 2,023.0 | \$4,147,191 | \$2,050.01 | 1.08636 |
| HCBS, age 65+, no SPMI | 4,656.9 | \$6,769,043 | \$1,453.55 | 4,780.3 | \$8,495,985 | \$1,777.28 | 1.22272 |
| Community, age 65+, with SPMI | 3,872.4 | \$6,423,922 | \$1,658.90 | 3,895.8 | \$5,826,666 | \$1,495.62 | 0.90157 |
| Community, age 65+, no SPMI | 13,747.0 | \$17,606,796 | \$1,280.78 | 13,928.8 | \$17,043,224 | \$1,223.60 | 0.95536 |
| Facility, age <65, with SPMI | 2,039.5 | \$7,820,424 | \$3,834.53 | 2,159.4 | \$6,170,804 | \$2,857.61 | 0.74523 |
| Facility, age <65, no SPMI | 1,184.9 | \$4,054,838 | \$3,422.18 | 1,196.4 | \$2,740,358 | \$2,290.54 | 0.66932 |
| HCBS, age <65, with SPMI | 2,214.7 | \$2,946,358 | \$1,330.34 | 2,322.2 | \$3,587,370 | \$1,544.80 | 1.16121 |
| HCBS, age <65, no SPMI | 2,526.6 | \$3,932,951 | \$1,556.63 | 2,569.5 | \$4,388,774 | \$1,708.02 | 1.09725 |
| Community, age <65, with SPMI | 11,399.1 | \$13,242,226 | \$1,161.69 | 11,586.0 | \$13,455,602 | \$1,161.37 | 0.99973 |
| Community, age <65, no SPMI | 11,968.0 | \$18,874,966 | \$1,577.12 | 12,017.3 | \$19,182,452 | \$1,596.24 | 1.01213 |

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Table 2.D.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 4,
by category of beneficiary: Cohort 4

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 74,886.5 | \$130,154,124 | \$1,738.02 | 53,861.9 | \$80,137,715 | \$1,487.84 | 0.85605 |
| Facility, age 65+, with SPMI | 8,799.9 | \$23,177,043 | \$2,633.77 | 5,776.4 | \$10,817,550 | \$1,872.73 | 0.71104 |
| Facility, age 65+, no SPMI | 10,464.5 | \$21,506,946 | \$2,055.23 | 6,740.7 | \$9,327,758 | \$1,383.79 | 0.67330 |
| HCBS, age 65+, with SPMI | 2,013.0 | \$3,798,610 | \$1,887.04 | 1,483.9 | \$2,606,212 | \$1,756.32 | 0.93073 |
| HCBS, age 65+, no SPMI | 4,656.9 | \$6,769,043 | \$1,453.55 | 3,216.2 | \$5,806,264 | \$1,805.32 | 1.24201 |
| Community, age 65+, with SPMI | 3,872.4 | \$6,423,922 | \$1,658.90 | 2,915.4 | \$3,620,115 | \$1,241.72 | 0.74852 |
| Community, age 65+, no SPMI | 13,747.0 | \$17,606,796 | \$1,280.78 | 10,330.8 | \$14,287,571 | \$1,383.00 | 1.07981 |
| Facility, age <65, with SPMI | 2,039.5 | \$7,820,424 | \$3,834.53 | 1,418.5 | \$3,432,258 | \$2,419.68 | 0.63102 |
| Facility, age <65, no SPMI | 1,184.9 | \$4,054,838 | \$3,422.18 | 929.5 | \$1,987,707 | \$2,138.49 | 0.62489 |
| HCBS, age <65, with SPMI | 2,214.7 | \$2,946,358 | \$1,330.34 | 1,711.8 | \$2,282,412 | \$1,333.35 | 1.00226 |
| HCBS, age <65, no SPMI | 2,526.6 | \$3,932,951 | \$1,556.63 | 2,018.1 | \$3,493,824 | \$1,731.27 | 1.11219 |
| Community, age <65, with SPMI | 11,399.1 | \$13,242,226 | \$1,161.69 | 8,585.2 | \$9,027,868 | \$1,051.56 | 0.90520 |
| Community, age <65, no SPMI | 11,968.0 | \$18,874,966 | \$1,577.12 | 8,735.4 | \$13,448,178 | \$1,539.51 | 0.97615 |

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Table 2.E — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 4,
by category of beneficiary: Cohort 5A

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 55,245.6 | \$100,386,597 | \$1,817.10 | 56,700.0 | \$95,477,026 | \$1,683.90 | 0.92670 |
| Facility, age 65+, with SPMI | 9,703.9 | \$22,148,153 | \$2,282.40 | 9,967.8 | \$19,360,963 | \$1,942.35 | 0.85101 |
| Facility, age 65+, no SPMI | 5,789.6 | \$12,097,397 | \$2,089.51 | 6,122.6 | \$10,854,167 | \$1,772.81 | 0.84843 |
| HCBS, age 65+, with SPMI | 1,794.4 | \$3,717,937 | \$2,071.96 | 2,130.5 | \$4,606,960 | \$2,162.41 | 1.04365 |
| HCBS, age 65+, no SPMI | 2,458.4 | \$3,967,559 | \$1,613.91 | 2,727.6 | \$5,343,467 | \$1,959.06 | 1.21386 |
| Community, age 65+, with SPMI | 4,496.5 | \$7,345,713 | \$1,633.66 | 4,655.9 | \$6,483,245 | \$1,392.47 | 0.85237 |
| Community, age 65+, no SPMI | 8,094.0 | \$9,203,556 | \$1,137.09 | 7,962.5 | \$9,585,408 | \$1,203.82 | 1.05869 |
| Facility, age <65, with SPMI | 2,106.1 | \$7,470,590 | \$3,547.09 | 2,175.4 | \$7,206,841 | \$3,312.91 | 0.93398 |
| Facility, age <65, no SPMI | 972.5 | \$3,486,591 | \$3,585.31 | 1,035.1 | \$2,544,917 | \$2,458.57 | 0.68574 |
| HCBS, age <65, with SPMI | 2,203.2 | \$3,920,524 | \$1,779.45 | 2,348.5 | \$5,178,800 | \$2,205.15 | 1.23923 |
| HCBS, age <65, no SPMI | 1,620.6 | \$2,444,637 | \$1,508.51 | 1,658.9 | \$2,578,811 | \$1,554.51 | 1.03049 |
| Community, age <65, with SPMI | 9,311.4 | \$12,553,567 | \$1,348.20 | 9,153.8 | \$10,827,719 | \$1,182.87 | 0.87737 |
| Community, age <65, no SPMI | 6,695.2 | \$12,030,375 | \$1,796.87 | 6,761.4 | \$10,905,728 | \$1,612.93 | 0.89763 |

Table 2.F — MEDICARE
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the Demonstration Year 4,
by category of beneficiary: Cohort 5B

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------|---------------------------|----------------------|-------------------|---------------------------|----------------------|-------------------|----------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Total | 210,107.5 | \$332,154,386 | \$1,580.88 | 167,717.5 | \$276,001,718 | \$1,645.63 | 1.04096 |
| Facility, age 65+, with SPMI | 24,571.5 | \$46,542,358 | \$1,894.16 | 19,101.3 | \$33,626,392 | \$1,760.43 | 0.92940 |
| Facility, age 65+, no SPMI | 10,376.3 | \$17,633,644 | \$1,699.41 | 8,119.7 | \$12,831,219 | \$1,580.25 | 0.92988 |
| HCBS, age 65+, with SPMI | 5,802.8 | \$12,491,351 | \$2,152.65 | 5,197.4 | \$12,011,080 | \$2,311.00 | 1.07356 |
| HCBS, age 65+, no SPMI | 6,660.5 | \$11,356,541 | \$1,705.06 | 6,192.3 | \$12,699,805 | \$2,050.89 | 1.20283 |
| Community, age 65+, with SPMI | 26,044.3 | \$42,330,576 | \$1,625.33 | 20,388.4 | \$34,989,347 | \$1,716.14 | 1.05587 |
| Community, age 65+, no SPMI | 34,773.4 | \$41,557,876 | \$1,195.11 | 27,236.1 | \$39,092,312 | \$1,435.31 | 1.20099 |
| Facility, age <65, with SPMI | 5,908.3 | \$15,364,134 | \$2,600.42 | 4,803.9 | \$10,248,687 | \$2,133.40 | 0.82040 |
| Facility, age <65, no SPMI | 2,785.0 | \$4,054,836 | \$1,455.96 | 2,140.9 | \$3,904,147 | \$1,823.64 | 1.25254 |
| HCBS, age <65, with SPMI | 7,262.9 | \$12,549,958 | \$1,727.95 | 6,076.9 | \$11,385,953 | \$1,873.63 | 1.08431 |
| HCBS, age <65, no SPMI | 4,331.2 | \$7,234,071 | \$1,670.21 | 3,713.5 | \$7,027,168 | \$1,892.33 | 1.13299 |
| Community, age <65, with SPMI | 57,180.0 | \$81,575,744 | \$1,426.65 | 45,360.2 | \$65,356,057 | \$1,440.82 | 1.00993 |
| Community, age <65, no SPMI | 24,411.3 | \$39,463,298 | \$1,616.60 | 19,386.9 | \$32,829,551 | \$1,693.39 | 1.04750 |

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**Table 2.G —
Comparison group summary (all cohorts)**

| Cohort | Baseline period | | | Demonstration Period 3 | | | Cost trend (Demonstration Period 3/ baseline Period) | Demonstration Period 4 | | | Cost trend (Demonstration Period 4/ baseline Period) |
|-----------|------------------------------------|--------------------------------|------------|------------------------------------|--------------------------------|------------|--|------------------------------------|--------------------------------|------------|--|
| | Number of eligible months | Medicaid incurred claims | PMPM | Number of eligible months | Medicaid incurred claims | PMPM | | Number of eligible months | Medicaid incurred claims | PMPM | |
| Cohort 1 | 495,181.0 | \$792,439,622 | \$1,600.30 | 125,982.4 | \$217,509,711 | \$1,726.51 | 1.07886 | 97,449.8 | \$172,819,600 | \$1,773.42 | 1.10818 |
| Cohort 2 | 42,008.3 | \$67,515,192 | \$1,607.19 | 25,382.6 | \$34,342,597 | \$1,353.00 | 0.84184 | 35,741.0 | \$48,752,067 | \$1,364.04 | 0.81500 |
| Cohort 3 | 65,614.5 | \$109,816,298 | \$1,673.66 | 48,033.3 | \$63,024,948 | \$1,312.11 | 0.78398 | 13,384.4 | \$22,137,586 | \$1,653.99 | 0.95565 |
| Cohort 4 | 74,886.5 | \$130,154,124 | \$1,738.02 | 76,497.7 | \$121,404,786 | \$1,587.04 | 0.91313 | 53,861.9 | \$80,137,715 | \$1,487.84 | 0.85605 |
| Cohort 5A | 55,245.6 | \$100,386,597 | \$1,817.10 | 0.0 | \$0 | \$0.00 | 0.00000 | 56,700.0 | \$95,477,026 | \$1,683.90 | 0.92670 |
| Cohort 5B | 210,107.5 | \$332,154,386 | \$1,580.88 | 0.0 | \$0 | \$0.00 | 0.00000 | 167,717.5 | \$276,001,718 | \$1,645.63 | 1.04096 |

Tables 3.A–3.L show the development of the trend rates from the baseline period to the Demonstration Year for the re-weighted comparison group and the intervention group by category of beneficiary. The re-weighting was done by category of beneficiary month by month. Thus, the comparison group PMPMs in **Tables 3.A–3.L** do not match exactly the PMPMs in **Table 2** by category, because the PMPMs in **Table 2** are weighted by the member months in the comparison group while the PMPMs in **Table 3** are weighted by the member months in the intervention group. For example, in **Table 2**, the Cohort 1 baseline PMPM for the category “Facility, Age 65+, with SPMI” is \$2,064.80. But in **Table 3.G** it is \$2,057.93. This is because in **Tables 3.A–3.L**, the weighted average PMPM across all months in the baseline period is based on the eligible months of the particular cohort of the intervention group beneficiaries and not that of the comparison group beneficiaries, even though the PMPM in any specific month is the same.

Tables 3.G show the results for the entire Cohort 1 for Demonstration Years 3 and 4 separately. **Table 3.G.1** shows that, for Demonstration Year 3, the PMPM for the comparison group increased by 16.4 percent from the baseline period, whereas that of the intervention group increased by only 2.7 percent, a difference of 13.7 percentage points. Similarly, **Table 3.G.2** shows that, for Demonstration Year 4, the PMPM for the comparison group increased by 19 percent from the baseline period, whereas that of the intervention group increased by only 11 percent, a difference of 8.0 percentage points.

Tables 3.H show the results for Cohort 2. From the baseline period to Demonstration Year 3, the PMPM for the comparison group decreased by 20.2 percent whereas the PMPM for the intervention group decreased by 20.1 percent, a difference of 0.1 percentage points. From the baseline period to Demonstration Year 4, the PMPM for the comparison group decreased by 14.3 percent whereas the PMPM for the intervention group decreased by 14.8 percent, a difference of 0.5 percent.

Tables 3.I show the results for Cohort 3. From the baseline period to Demonstration Year 3, the PMPM for the comparison group decreased by 14.1 percent, and the PMPM for the intervention group also decreased by 14.1 percent. From the baseline period to Demonstration Year 4, the PMPM for the comparison group decreased by 7.3 percent and the PMPM for the intervention group decreased by 13.8 percent, a difference of 6.5 percentage points.

Table 3.J shows the results for Cohort 4. From the baseline period to Demonstration Year 3, the PMPM for the comparison group increased by 0.6 percent, while the PMPM for the intervention group decreased by 13.5 percent, a difference of 14.1 percentage points. From the baseline period to Demonstration Year 4, the PMPM for the comparison group decreased by 2.8 percent, while the intervention group decreased by 14.4 percent, a difference of 11.6 percentage points.

Table 3.K shows the results for Cohort 5A. From the baseline period to Demonstration Year 4, the PMPM for the comparison group increased by 0.8 percent, while the PMPM for the intervention group decreased by 10.6 percent, a difference of 11.4 percentage points. **Table 3.L** shows the results for Cohort 5B. From the baseline period to Demonstration Year 4, the PMPM for the comparison group increased by 8.6 percent, while the PMPM for the intervention group decreased by 3.1 percent, a difference of 11.7 percentage points.

Tables 4.A and *4.B* summarize the results of *Tables 3.A–3.L* by cohort and demonstration year. For Cohort 1, sub-cohorts 1A (the first cohort) and 1D (the largest cohort) show the greatest difference in trends in the direction of Medicare savings. Cohorts 1C, 1E, and 1F all show negative Medicare savings. Cohort 2 shows slight Medicare savings, but the small size of the cohort means the savings is less significant. Cohort 3 shows moderate Medicare savings, in between the savings rates of Cohorts 1 and 2, and Cohorts 4, 5A and 5B all show more significant Medicare savings. The wide variation in the trends by cohort highlights the variability of health care costs. The aggregate experience of all cohorts combined should be considered more reliable than that of the individual cohorts or sub-cohorts.

Table 3.A.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1A

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 48,488.0 | \$78,754,198 | \$1,624.20 | 14,540.4 | \$27,919,868 | \$1,920.16 | 1.182 |
| Facility, age 65+, with SPMI | 1,352.5 | \$2,783,905 | \$2,058.35 | 231.9 | \$394,587 | \$1,701.52 | 0.827 |
| Facility, age 65+, no SPMI | 2,903.2 | \$4,986,268 | \$1,717.53 | 356.4 | \$589,399 | \$1,653.76 | 0.963 |
| HCBS, age 65+, with SPMI | 2,269.5 | \$4,300,359 | \$1,894.85 | 613.5 | \$1,404,651 | \$2,289.39 | 1.208 |
| HCBS, age 65+, no SPMI | 10,415.6 | \$16,922,467 | \$1,624.72 | 2,687.8 | \$6,018,304 | \$2,239.14 | 1.378 |
| Community, age 65+, with SPMI | 1,044.6 | \$1,366,976 | \$1,308.56 | 329.9 | \$573,066 | \$1,736.95 | 1.327 |
| Community, age 65+, no SPMI | 8,618.5 | \$10,152,870 | \$1,178.03 | 2,577.6 | \$4,114,509 | \$1,596.25 | 1.355 |
| Facility, age <65, with SPMI | 479.0 | \$1,208,097 | \$2,521.97 | 84.1 | \$167,796 | \$1,994.03 | 0.791 |
| Facility, age <65, no SPMI | 596.9 | \$1,420,117 | \$2,379.14 | 215.0 | \$380,923 | \$1,771.73 | 0.745 |
| HCBS, age <65, with SPMI | 3,601.9 | \$6,081,141 | \$1,688.33 | 1,254.4 | \$2,036,226 | \$1,623.25 | 0.961 |
| HCBS, age <65, no SPMI | 8,245.1 | \$16,023,110 | \$1,943.35 | 3,118.2 | \$7,427,549 | \$2,382.00 | 1.226 |
| Community, age <65, with SPMI | 2,682.4 | \$3,530,797 | \$1,316.26 | 951.2 | \$1,233,464 | \$1,296.72 | 0.985 |
| Community, age <65, no SPMI | 6,278.7 | \$9,978,092 | \$1,589.20 | 2,120.2 | \$3,579,393 | \$1,688.21 | 1.062 |
| Intervention group | 48,488.0 | \$128,622,626 | \$2,652.67 | 14,540.4 | \$36,051,308 | \$2,479.39 | 0.935 |
| Facility, age 65+, with SPMI | 1,352.5 | \$4,491,706 | \$3,321.06 | 231.9 | \$386,747 | \$1,667.71 | 0.502 |
| Facility, age 65+, no SPMI | 2,903.2 | \$7,189,174 | \$2,476.33 | 356.4 | \$672,103 | \$1,885.82 | 0.762 |
| HCBS, age 65+, with SPMI | 2,269.5 | \$6,589,879 | \$2,903.67 | 613.5 | \$1,654,554 | \$2,696.69 | 0.929 |
| HCBS, age 65+, no SPMI | 10,415.6 | \$24,885,794 | \$2,389.27 | 2,687.8 | \$6,985,561 | \$2,599.01 | 1.088 |
| Community, age 65+, with SPMI | 1,044.6 | \$2,160,270 | \$2,067.95 | 329.9 | \$464,168 | \$1,406.88 | 0.680 |
| Community, age 65+, no SPMI | 8,618.5 | \$18,306,257 | \$2,124.06 | 2,577.6 | \$5,594,642 | \$2,170.47 | 1.022 |
| Facility, age <65, with SPMI | 479.0 | \$2,542,110 | \$5,306.80 | 84.1 | \$150,780 | \$1,791.81 | 0.338 |
| Facility, age <65, no SPMI | 596.9 | \$2,844,227 | \$4,764.97 | 215.0 | \$649,654 | \$3,021.65 | 0.634 |
| HCBS, age <65, with SPMI | 3,601.9 | \$10,014,768 | \$2,780.44 | 1,254.4 | \$2,787,476 | \$2,222.14 | 0.799 |
| HCBS, age <65, no SPMI | 8,245.1 | \$22,193,360 | \$2,691.70 | 3,118.2 | \$8,660,343 | \$2,777.36 | 1.032 |
| Community, age <65, with SPMI | 2,682.4 | \$6,561,637 | \$2,446.14 | 951.2 | \$2,541,466 | \$2,671.80 | 1.092 |
| Community, age <65, no SPMI | 6,278.7 | \$20,843,442 | \$3,319.71 | 2,120.2 | \$5,503,814 | \$2,595.86 | 0.782 |

Table 3.A.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1A

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 48,488.0 | \$78,754,198 | \$1,624.20 | 12,196.5 | \$23,833,789 | \$1,954.14 | 1.203 |
| Facility, age 65+, with SPMI | 1,352.5 | \$2,783,905 | \$2,058.35 | 174.0 | \$295,541 | \$1,698.86 | 0.825 |
| Facility, age 65+, no SPMI | 2,903.2 | \$4,986,268 | \$1,717.53 | 246.6 | \$393,078 | \$1,594.12 | 0.928 |
| HCBS, age 65+, with SPMI | 2,269.5 | \$4,300,359 | \$1,894.85 | 442.2 | \$1,062,177 | \$2,402.06 | 1.268 |
| HCBS, age 65+, no SPMI | 10,415.6 | \$16,922,467 | \$1,624.72 | 2,174.8 | \$5,208,049 | \$2,394.69 | 1.474 |
| Community, age 65+, with SPMI | 1,044.6 | \$1,366,976 | \$1,308.56 | 278.3 | \$506,905 | \$1,821.21 | 1.392 |
| Community, age 65+, no SPMI | 8,618.5 | \$10,152,870 | \$1,178.03 | 2,015.5 | \$3,545,324 | \$1,759.04 | 1.493 |
| Facility, age <65, with SPMI | 479.0 | \$1,208,097 | \$2,521.97 | 69.0 | \$136,978 | \$1,985.19 | 0.787 |
| Facility, age <65, no SPMI | 596.9 | \$1,420,117 | \$2,379.14 | 174.8 | \$329,168 | \$1,883.64 | 0.792 |
| HCBS, age <65, with SPMI | 3,601.9 | \$6,081,141 | \$1,688.33 | 1,144.6 | \$1,701,982 | \$1,486.98 | 0.881 |
| HCBS, age <65, no SPMI | 8,245.1 | \$16,023,110 | \$1,943.35 | 2,726.6 | \$6,153,270 | \$2,256.75 | 1.161 |
| Community, age <65, with SPMI | 2,682.4 | \$3,530,797 | \$1,316.26 | 835.2 | \$1,060,227 | \$1,269.36 | 0.964 |
| Community, age <65, no SPMI | 6,278.7 | \$9,978,092 | \$1,589.20 | 1,915.0 | \$3,441,091 | \$1,796.95 | 1.131 |
| Intervention group | 48,488.0 | \$128,622,626 | \$2,652.67 | 12,196.5 | \$31,144,889 | \$2,553.58 | 0.963 |
| Facility, age 65+, with SPMI | 1,352.5 | \$4,491,706 | \$3,321.06 | 174.0 | \$401,859 | \$2,310.01 | 0.696 |
| Facility, age 65+, no SPMI | 2,903.2 | \$7,189,174 | \$2,476.33 | 246.6 | \$348,234 | \$1,412.25 | 0.570 |
| HCBS, age 65+, with SPMI | 2,269.5 | \$6,589,879 | \$2,903.67 | 442.2 | \$1,164,770 | \$2,634.07 | 0.907 |
| HCBS, age 65+, no SPMI | 10,415.6 | \$24,885,794 | \$2,389.27 | 2,174.8 | \$5,637,970 | \$2,592.37 | 1.085 |
| Community, age 65+, with SPMI | 1,044.6 | \$2,160,270 | \$2,067.95 | 278.3 | \$455,002 | \$1,634.74 | 0.791 |
| Community, age 65+, no SPMI | 8,618.5 | \$18,306,257 | \$2,124.06 | 2,015.5 | \$5,377,365 | \$2,668.02 | 1.256 |
| Facility, age <65, with SPMI | 479.0 | \$2,542,110 | \$5,306.80 | 69.0 | \$49,920 | \$723.48 | 0.136 |
| Facility, age <65, no SPMI | 596.9 | \$2,844,227 | \$4,764.97 | 174.8 | \$464,823 | \$2,659.92 | 0.558 |
| HCBS, age <65, with SPMI | 3,601.9 | \$10,014,768 | \$2,780.44 | 1,144.6 | \$2,107,406 | \$1,841.19 | 0.662 |
| HCBS, age <65, no SPMI | 8,245.1 | \$22,193,360 | \$2,691.70 | 2,726.6 | \$7,021,681 | \$2,575.24 | 0.957 |
| Community, age <65, with SPMI | 2,682.4 | \$6,561,637 | \$2,446.14 | 835.2 | \$2,806,137 | \$3,359.66 | 1.373 |
| Community, age <65, no SPMI | 6,278.7 | \$20,843,442 | \$3,319.71 | 1,915.0 | \$5,309,721 | \$2,772.75 | 0.835 |

Table 3.B.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1B

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 83,567.1 | \$131,605,106 | \$1,574.84 | 28,211.3 | \$51,776,952 | \$1,835.33 | 1.165 |
| Facility, age 65+, with SPMI | 2,625.5 | \$5,399,392 | \$2,056.49 | 595.9 | \$1,011,453 | \$1,697.44 | 0.825 |
| Facility, age 65+, no SPMI | 5,728.2 | \$9,863,362 | \$1,721.89 | 963.4 | \$1,593,590 | \$1,654.07 | 0.961 |
| HCBS, age 65+, with SPMI | 3,563.5 | \$6,749,830 | \$1,894.18 | 1,180.7 | \$2,699,523 | \$2,286.45 | 1.207 |
| HCBS, age 65+, no SPMI | 15,666.1 | \$25,409,746 | \$1,621.96 | 4,851.2 | \$10,861,075 | \$2,238.83 | 1.380 |
| Community, age 65+, with SPMI | 2,079.3 | \$2,725,280 | \$1,310.68 | 722.6 | \$1,256,876 | \$1,739.27 | 1.327 |
| Community, age 65+, no SPMI | 16,756.0 | \$19,691,126 | \$1,175.17 | 5,795.9 | \$9,245,783 | \$1,595.23 | 1.357 |
| Facility, age <65, with SPMI | 707.2 | \$1,783,893 | \$2,522.57 | 278.0 | \$543,094 | \$1,953.58 | 0.774 |
| Facility, age <65, no SPMI | 436.0 | \$1,056,112 | \$2,422.27 | 152.7 | \$270,938 | \$1,773.83 | 0.732 |
| HCBS, age <65, with SPMI | 6,710.7 | \$11,329,713 | \$1,688.31 | 2,672.0 | \$4,337,987 | \$1,623.48 | 0.962 |
| HCBS, age <65, no SPMI | 9,528.3 | \$18,510,143 | \$1,942.64 | 3,788.8 | \$9,028,288 | \$2,382.87 | 1.227 |
| Community, age <65, with SPMI | 8,555.1 | \$11,262,998 | \$1,316.53 | 3,177.1 | \$4,118,319 | \$1,296.24 | 0.985 |
| Community, age <65, no SPMI | 11,211.2 | \$17,823,513 | \$1,589.79 | 4,032.8 | \$6,810,026 | \$1,688.65 | 1.062 |
| Intervention group | 83,567.1 | \$108,476,913 | \$1,298.08 | 28,211.3 | \$40,016,796 | \$1,418.47 | 1.093 |
| Facility, age 65+, with SPMI | 2,625.5 | \$4,153,377 | \$1,581.91 | 595.9 | \$768,793 | \$1,290.20 | 0.816 |
| Facility, age 65+, no SPMI | 5,728.2 | \$9,679,939 | \$1,689.87 | 963.4 | \$1,019,788 | \$1,058.49 | 0.626 |
| HCBS, age 65+, with SPMI | 3,563.5 | \$5,032,372 | \$1,412.22 | 1,180.7 | \$2,092,736 | \$1,772.51 | 1.255 |
| HCBS, age 65+, no SPMI | 15,666.1 | \$18,456,030 | \$1,178.09 | 4,851.2 | \$7,648,845 | \$1,576.68 | 1.338 |
| Community, age 65+, with SPMI | 2,079.3 | \$2,370,627 | \$1,140.11 | 722.6 | \$889,628 | \$1,231.07 | 1.080 |
| Community, age 65+, no SPMI | 16,756.0 | \$16,271,631 | \$971.09 | 5,795.9 | \$7,529,655 | \$1,299.14 | 1.338 |
| Facility, age <65, with SPMI | 707.2 | \$2,294,483 | \$3,244.58 | 278.0 | \$383,941 | \$1,381.08 | 0.426 |
| Facility, age <65, no SPMI | 436.0 | \$1,627,921 | \$3,733.76 | 152.7 | \$117,265 | \$767.74 | 0.206 |
| HCBS, age <65, with SPMI | 6,710.7 | \$9,300,631 | \$1,385.95 | 2,672.0 | \$3,546,625 | \$1,327.32 | 0.958 |
| HCBS, age <65, no SPMI | 9,528.3 | \$14,182,694 | \$1,488.47 | 3,788.8 | \$5,539,712 | \$1,462.12 | 0.982 |
| Community, age <65, with SPMI | 8,555.1 | \$9,515,214 | \$1,112.23 | 3,177.1 | \$3,921,940 | \$1,234.43 | 1.110 |
| Community, age <65, no SPMI | 11,211.2 | \$15,591,994 | \$1,390.75 | 4,032.8 | \$6,557,867 | \$1,626.13 | 1.169 |

Table 3.B.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1B

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 83,567.1 | \$131,605,106 | \$1,574.84 | 23,641.9 | \$44,485,413 | \$1,881.63 | 1.195 |
| Facility, age 65+, with SPMI | 2,625.5 | \$5,399,392 | \$2,056.49 | 424.0 | \$718,375 | \$1,694.45 | 0.824 |
| Facility, age 65+, no SPMI | 5,728.2 | \$9,863,362 | \$1,721.89 | 651.8 | \$1,039,508 | \$1,594.88 | 0.926 |
| HCBS, age 65+, with SPMI | 3,563.5 | \$6,749,830 | \$1,894.18 | 963.6 | \$2,310,835 | \$2,398.18 | 1.266 |
| HCBS, age 65+, no SPMI | 15,666.1 | \$25,409,746 | \$1,621.96 | 3,912.7 | \$9,367,960 | \$2,394.24 | 1.476 |
| Community, age 65+, with SPMI | 2,079.3 | \$2,725,280 | \$1,310.68 | 595.9 | \$1,086,085 | \$1,822.59 | 1.391 |
| Community, age 65+, no SPMI | 16,756.0 | \$19,691,126 | \$1,175.17 | 4,628.2 | \$8,138,129 | \$1,758.36 | 1.496 |
| Facility, age <65, with SPMI | 707.2 | \$1,783,893 | \$2,522.57 | 241.6 | \$478,461 | \$1,980.62 | 0.785 |
| Facility, age <65, no SPMI | 436.0 | \$1,056,112 | \$2,422.27 | 130.4 | \$246,361 | \$1,888.79 | 0.780 |
| HCBS, age <65, with SPMI | 6,710.7 | \$11,329,713 | \$1,688.31 | 2,473.5 | \$3,676,702 | \$1,486.41 | 0.880 |
| HCBS, age <65, no SPMI | 9,528.3 | \$18,510,143 | \$1,942.64 | 3,391.1 | \$7,649,443 | \$2,255.73 | 1.161 |
| Community, age <65, with SPMI | 8,555.1 | \$11,262,998 | \$1,316.53 | 2,709.9 | \$3,447,777 | \$1,272.30 | 0.966 |
| Community, age <65, no SPMI | 11,211.2 | \$17,823,513 | \$1,589.79 | 3,519.2 | \$6,325,777 | \$1,797.49 | 1.131 |
| Intervention group | 83,567.1 | \$108,476,913 | \$1,298.08 | 23,641.9 | \$37,666,761 | \$1,593.22 | 1.227 |
| Facility, age 65+, with SPMI | 2,625.5 | \$4,153,377 | \$1,581.91 | 424.0 | \$574,946 | \$1,356.14 | 0.857 |
| Facility, age 65+, no SPMI | 5,728.2 | \$9,679,939 | \$1,689.87 | 651.8 | \$866,896 | \$1,330.05 | 0.787 |
| HCBS, age 65+, with SPMI | 3,563.5 | \$5,032,372 | \$1,412.22 | 963.6 | \$1,295,456 | \$1,344.42 | 0.952 |
| HCBS, age 65+, no SPMI | 15,666.1 | \$18,456,030 | \$1,178.09 | 3,912.7 | \$6,711,145 | \$1,715.22 | 1.456 |
| Community, age 65+, with SPMI | 2,079.3 | \$2,370,627 | \$1,140.11 | 595.9 | \$1,024,962 | \$1,720.01 | 1.509 |
| Community, age 65+, no SPMI | 16,756.0 | \$16,271,631 | \$971.09 | 4,628.2 | \$7,429,699 | \$1,605.29 | 1.653 |
| Facility, age <65, with SPMI | 707.2 | \$2,294,483 | \$3,244.58 | 241.6 | \$314,022 | \$1,299.91 | 0.401 |
| Facility, age <65, no SPMI | 436.0 | \$1,627,921 | \$3,733.76 | 130.4 | \$165,595 | \$1,269.57 | 0.340 |
| HCBS, age <65, with SPMI | 6,710.7 | \$9,300,631 | \$1,385.95 | 2,473.5 | \$3,054,622 | \$1,234.91 | 0.891 |
| HCBS, age <65, no SPMI | 9,528.3 | \$14,182,694 | \$1,488.47 | 3,391.1 | \$5,743,890 | \$1,693.80 | 1.138 |
| Community, age <65, with SPMI | 8,555.1 | \$9,515,214 | \$1,112.23 | 2,709.9 | \$3,977,081 | \$1,467.63 | 1.320 |
| Community, age <65, no SPMI | 11,211.2 | \$15,591,994 | \$1,390.75 | 3,519.2 | \$6,508,446 | \$1,849.40 | 1.330 |

Table 3.C.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1C

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|---------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 7,946.8 | \$12,115,020 | \$1,524.51 | 2,723.6 | \$4,987,358 | \$1,831.17 | 1.201 |
| Facility, age 65+, with SPMI | 78.0 | \$162,290 | \$2,080.64 | 24.0 | \$41,078 | \$1,711.59 | 0.823 |
| Facility, age 65+, no SPMI | 509.6 | \$883,213 | \$1,733.25 | 96.4 | \$159,860 | \$1,658.08 | 0.957 |
| HCBS, age 65+, with SPMI | 415.4 | \$787,714 | \$1,896.19 | 165.1 | \$377,180 | \$2,284.09 | 1.205 |
| HCBS, age 65+, no SPMI | 1,567.7 | \$2,541,768 | \$1,621.34 | 469.8 | \$1,053,779 | \$2,242.95 | 1.383 |
| Community, age 65+, with SPMI | 286.6 | \$380,569 | \$1,327.67 | 145.0 | \$252,196 | \$1,739.28 | 1.310 |
| Community, age 65+, no SPMI | 2,225.3 | \$2,627,533 | \$1,180.74 | 677.4 | \$1,081,768 | \$1,596.90 | 1.352 |
| Facility, age <65, with SPMI | 55.0 | \$139,181 | \$2,530.57 | 6.0 | \$12,813 | \$2,147.09 | 0.848 |
| Facility, age <65, no SPMI | 21.0 | \$55,877 | \$2,660.81 | 24.0 | \$42,509 | \$1,771.22 | 0.666 |
| HCBS, age <65, with SPMI | 422.7 | \$715,949 | \$1,693.58 | 227.0 | \$368,196 | \$1,622.01 | 0.958 |
| HCBS, age <65, no SPMI | 710.1 | \$1,381,750 | \$1,945.94 | 295.0 | \$702,100 | \$2,379.74 | 1.223 |
| Community, age <65, with SPMI | 731.4 | \$963,007 | \$1,316.70 | 271.8 | \$352,204 | \$1,295.78 | 0.984 |
| Community, age <65, no SPMI | 924.0 | \$1,476,169 | \$1,597.59 | 322.0 | \$543,675 | \$1,688.43 | 1.057 |
| Intervention group | 7,946.8 | \$7,898,710 | \$993.94 | 2,723.6 | \$3,410,228 | \$1,252.11 | 1.260 |
| Facility, age 65+, with SPMI | 78.0 | \$190,149 | \$2,437.80 | 24.0 | \$1,576 | \$65.66 | 0.027 |
| Facility, age 65+, no SPMI | 509.6 | \$823,008 | \$1,615.10 | 96.4 | \$98,916 | \$1,025.97 | 0.635 |
| HCBS, age 65+, with SPMI | 415.4 | \$406,330 | \$978.12 | 165.1 | \$195,951 | \$1,186.63 | 1.213 |
| HCBS, age 65+, no SPMI | 1,567.7 | \$1,419,597 | \$905.53 | 469.8 | \$693,435 | \$1,475.96 | 1.630 |
| Community, age 65+, with SPMI | 286.6 | \$432,595 | \$1,509.16 | 145.0 | \$265,949 | \$1,834.13 | 1.215 |
| Community, age 65+, no SPMI | 2,225.3 | \$1,691,547 | \$760.14 | 677.4 | \$691,060 | \$1,020.14 | 1.342 |
| Facility, age <65, with SPMI | 55.0 | \$241,153 | \$4,384.61 | 6.0 | \$46,930 | \$7,863.92 | 1.794 |
| Facility, age <65, no SPMI | 21.0 | \$210,854 | \$10,040.68 | 24.0 | \$132,484 | \$5,520.18 | 0.550 |
| HCBS, age <65, with SPMI | 422.7 | \$312,759 | \$739.84 | 227.0 | \$142,682 | \$628.56 | 0.850 |
| HCBS, age <65, no SPMI | 710.1 | \$625,225 | \$880.51 | 295.0 | \$288,382 | \$977.46 | 1.110 |
| Community, age <65, with SPMI | 731.4 | \$608,832 | \$832.44 | 271.8 | \$361,224 | \$1,328.97 | 1.596 |
| Community, age <65, no SPMI | 924.0 | \$936,659 | \$1,013.70 | 322.0 | \$491,638 | \$1,526.83 | 1.506 |

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Table 3.C.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1C

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|---------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 7,946.8 | \$12,115,020 | \$1,524.51 | 2,117.5 | \$4,000,204 | \$1,889.13 | 1.239 |
| Facility, age 65+, with SPMI | 78.0 | \$162,290 | \$2,080.64 | 17.0 | \$29,351 | \$1,726.54 | 0.830 |
| Facility, age 65+, no SPMI | 509.6 | \$883,213 | \$1,733.25 | 41.8 | \$66,768 | \$1,596.29 | 0.921 |
| HCBS, age 65+, with SPMI | 415.4 | \$787,714 | \$1,896.19 | 125.3 | \$300,586 | \$2,398.17 | 1.265 |
| HCBS, age 65+, no SPMI | 1,567.7 | \$2,541,768 | \$1,621.34 | 356.9 | \$854,504 | \$2,394.04 | 1.477 |
| Community, age 65+, with SPMI | 286.6 | \$380,569 | \$1,327.67 | 121.5 | \$222,173 | \$1,827.86 | 1.377 |
| Community, age 65+, no SPMI | 2,225.3 | \$2,627,533 | \$1,180.74 | 467.6 | \$823,142 | \$1,760.34 | 1.491 |
| Facility, age <65, with SPMI | 55.0 | \$139,181 | \$2,530.57 | 12.0 | \$23,780 | \$1,981.66 | 0.783 |
| Facility, age <65, no SPMI | 21.0 | \$55,877 | \$2,660.81 | 24.0 | \$45,255 | \$1,885.63 | 0.709 |
| HCBS, age <65, with SPMI | 422.7 | \$715,949 | \$1,693.58 | 207.4 | \$307,842 | \$1,484.05 | 0.876 |
| HCBS, age <65, no SPMI | 710.1 | \$1,381,750 | \$1,945.94 | 249.2 | \$562,600 | \$2,258.01 | 1.160 |
| Community, age <65, with SPMI | 731.4 | \$963,007 | \$1,316.70 | 239.3 | \$304,322 | \$1,271.60 | 0.966 |
| Community, age <65, no SPMI | 924.0 | \$1,476,169 | \$1,597.59 | 255.3 | \$459,879 | \$1,801.17 | 1.127 |
| Intervention group | 7,946.8 | \$7,898,710 | \$993.94 | 2,117.5 | \$2,702,837 | \$1,276.44 | 1.284 |
| Facility, age 65+, with SPMI | 78.0 | \$190,149 | \$2,437.80 | 17.0 | \$15,141 | \$890.67 | 0.365 |
| Facility, age 65+, no SPMI | 509.6 | \$823,008 | \$1,615.10 | 41.8 | \$26,212 | \$626.66 | 0.388 |
| HCBS, age 65+, with SPMI | 415.4 | \$406,330 | \$978.12 | 125.3 | \$268,703 | \$2,143.80 | 2.192 |
| HCBS, age 65+, no SPMI | 1,567.7 | \$1,419,597 | \$905.53 | 356.9 | \$440,578 | \$1,234.36 | 1.363 |
| Community, age 65+, with SPMI | 286.6 | \$432,595 | \$1,509.16 | 121.5 | \$97,274 | \$800.29 | 0.530 |
| Community, age 65+, no SPMI | 2,225.3 | \$1,691,547 | \$760.14 | 467.6 | \$755,196 | \$1,615.03 | 2.125 |
| Facility, age <65, with SPMI | 55.0 | \$241,153 | \$4,384.61 | 12.0 | \$86,666 | \$7,222.17 | 1.647 |
| Facility, age <65, no SPMI | 21.0 | \$210,854 | \$10,040.68 | 24.0 | \$6,502 | \$270.92 | 0.027 |
| HCBS, age <65, with SPMI | 422.7 | \$312,759 | \$739.84 | 207.4 | \$130,593 | \$629.56 | 0.851 |
| HCBS, age <65, no SPMI | 710.1 | \$625,225 | \$880.51 | 249.2 | \$321,271 | \$1,289.43 | 1.464 |
| Community, age <65, with SPMI | 731.4 | \$608,832 | \$832.44 | 239.3 | \$265,243 | \$1,108.31 | 1.331 |
| Community, age <65, no SPMI | 924.0 | \$936,659 | \$1,013.70 | 255.3 | \$289,457 | \$1,133.69 | 1.118 |

Table 3.D.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1D

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 129,399.2 | \$207,882,769 | \$1,606.52 | 42,529.9 | \$78,947,138 | \$1,856.28 | 1.155 |
| Facility, age 65+, with SPMI | 3,449.1 | \$7,099,156 | \$2,058.27 | 700.2 | \$1,192,696 | \$1,703.31 | 0.828 |
| Facility, age 65+, no SPMI | 9,573.0 | \$16,530,797 | \$1,726.81 | 1,809.9 | \$2,994,053 | \$1,654.25 | 0.958 |
| HCBS, age 65+, with SPMI | 5,666.9 | \$10,738,746 | \$1,895.01 | 1,682.5 | \$3,847,227 | \$2,286.60 | 1.207 |
| HCBS, age 65+, no SPMI | 24,215.1 | \$39,358,354 | \$1,625.36 | 7,170.9 | \$16,052,261 | \$2,238.54 | 1.377 |
| Community, age 65+, with SPMI | 2,995.7 | \$3,929,249 | \$1,311.61 | 989.1 | \$1,720,446 | \$1,739.48 | 1.326 |
| Community, age 65+, no SPMI | 19,735.0 | \$23,217,237 | \$1,176.45 | 6,412.1 | \$10,227,759 | \$1,595.08 | 1.356 |
| Facility, age <65, with SPMI | 850.9 | \$2,145,788 | \$2,521.68 | 233.8 | \$460,148 | \$1,968.12 | 0.780 |
| Facility, age <65, no SPMI | 1,455.9 | \$3,482,455 | \$2,391.90 | 487.0 | \$864,505 | \$1,775.16 | 0.742 |
| HCBS, age <65, with SPMI | 8,850.4 | \$14,942,652 | \$1,688.37 | 3,394.5 | \$5,508,616 | \$1,622.80 | 0.961 |
| HCBS, age <65, no SPMI | 18,671.7 | \$36,297,579 | \$1,943.99 | 7,052.0 | \$16,797,056 | \$2,381.89 | 1.225 |
| Community, age <65, with SPMI | 13,939.8 | \$18,378,011 | \$1,318.39 | 5,070.6 | \$6,570,995 | \$1,295.91 | 0.983 |
| Community, age <65, no SPMI | 19,995.6 | \$31,762,746 | \$1,588.48 | 7,527.4 | \$12,711,375 | \$1,688.69 | 1.063 |
| Intervention group | 129,399.2 | \$219,493,469 | \$1,696.25 | 42,529.9 | \$73,252,412 | \$1,722.38 | 1.015 |
| Facility, age 65+, with SPMI | 3,449.1 | \$8,089,951 | \$2,345.53 | 700.2 | \$951,290 | \$1,358.55 | 0.579 |
| Facility, age 65+, no SPMI | 9,573.0 | \$19,529,844 | \$2,040.09 | 1,809.9 | \$2,487,997 | \$1,374.65 | 0.674 |
| HCBS, age 65+, with SPMI | 5,666.9 | \$11,401,735 | \$2,012.00 | 1,682.5 | \$3,238,058 | \$1,924.54 | 0.957 |
| HCBS, age 65+, no SPMI | 24,215.1 | \$41,155,717 | \$1,699.59 | 7,170.9 | \$14,153,705 | \$1,973.78 | 1.161 |
| Community, age 65+, with SPMI | 2,995.7 | \$4,345,812 | \$1,450.66 | 989.1 | \$1,590,082 | \$1,607.67 | 1.108 |
| Community, age 65+, no SPMI | 19,735.0 | \$26,698,339 | \$1,352.84 | 6,412.1 | \$9,803,955 | \$1,528.99 | 1.130 |
| Facility, age <65, with SPMI | 850.9 | \$2,783,711 | \$3,271.35 | 233.8 | \$497,014 | \$2,125.80 | 0.650 |
| Facility, age <65, no SPMI | 1,455.9 | \$6,939,015 | \$4,766.02 | 487.0 | \$1,349,282 | \$2,770.60 | 0.581 |
| HCBS, age <65, with SPMI | 8,850.4 | \$14,556,363 | \$1,644.72 | 3,394.5 | \$5,789,510 | \$1,705.55 | 1.037 |
| HCBS, age <65, no SPMI | 18,671.7 | \$33,932,964 | \$1,817.35 | 7,052.0 | \$13,414,345 | \$1,902.21 | 1.047 |
| Community, age <65, with SPMI | 13,939.8 | \$18,504,005 | \$1,327.43 | 5,070.6 | \$6,200,227 | \$1,222.79 | 0.921 |
| Community, age <65, no SPMI | 19,995.6 | \$31,556,013 | \$1,578.14 | 7,527.4 | \$13,776,947 | \$1,830.24 | 1.160 |

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Table 3.D.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1D

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 129,399.2 | \$207,882,769 | \$1,606.52 | 35,278.5 | \$66,759,737 | \$1,892.37 | 1.178 |
| Facility, age 65+, with SPMI | 3,449.1 | \$7,099,156 | \$2,058.27 | 479.9 | \$814,970 | \$1,698.15 | 0.825 |
| Facility, age 65+, no SPMI | 9,573.0 | \$16,530,797 | \$1,726.81 | 1,197.6 | \$1,904,059 | \$1,589.89 | 0.921 |
| HCBS, age 65+, with SPMI | 5,666.9 | \$10,738,746 | \$1,895.01 | 1,341.4 | \$3,220,033 | \$2,400.49 | 1.267 |
| HCBS, age 65+, no SPMI | 24,215.1 | \$39,358,354 | \$1,625.36 | 5,705.5 | \$13,663,871 | \$2,394.85 | 1.473 |
| Community, age 65+, with SPMI | 2,995.7 | \$3,929,249 | \$1,311.61 | 772.4 | \$1,406,829 | \$1,821.35 | 1.389 |
| Community, age 65+, no SPMI | 19,735.0 | \$23,217,237 | \$1,176.45 | 5,229.4 | \$9,194,252 | \$1,758.19 | 1.494 |
| Facility, age <65, with SPMI | 850.9 | \$2,145,788 | \$2,521.68 | 179.3 | \$353,428 | \$1,971.61 | 0.782 |
| Facility, age <65, no SPMI | 1,455.9 | \$3,482,455 | \$2,391.90 | 330.1 | \$627,524 | \$1,901.00 | 0.795 |
| HCBS, age <65, with SPMI | 8,850.4 | \$14,942,652 | \$1,688.37 | 3,123.1 | \$4,641,245 | \$1,486.11 | 0.880 |
| HCBS, age <65, no SPMI | 18,671.7 | \$36,297,579 | \$1,943.99 | 6,132.5 | \$13,842,139 | \$2,257.19 | 1.161 |
| Community, age <65, with SPMI | 13,939.8 | \$18,378,011 | \$1,318.39 | 4,374.3 | \$5,558,659 | \$1,270.75 | 0.964 |
| Community, age <65, no SPMI | 19,995.6 | \$31,762,746 | \$1,588.48 | 6,413.0 | \$11,532,727 | \$1,798.33 | 1.132 |
| Intervention group | 129,399.2 | \$219,493,469 | \$1,696.25 | 35,278.5 | \$65,128,621 | \$1,846.13 | 1.088 |
| Facility, age 65+, with SPMI | 3,449.1 | \$8,089,951 | \$2,345.53 | 479.9 | \$852,375 | \$1,776.09 | 0.757 |
| Facility, age 65+, no SPMI | 9,573.0 | \$19,529,844 | \$2,040.09 | 1,197.6 | \$1,606,716 | \$1,341.61 | 0.658 |
| HCBS, age 65+, with SPMI | 5,666.9 | \$11,401,735 | \$2,012.00 | 1,341.4 | \$2,894,483 | \$2,157.80 | 1.072 |
| HCBS, age 65+, no SPMI | 24,215.1 | \$41,155,717 | \$1,699.59 | 5,705.5 | \$12,211,127 | \$2,140.23 | 1.259 |
| Community, age 65+, with SPMI | 2,995.7 | \$4,345,812 | \$1,450.66 | 772.4 | \$1,064,695 | \$1,378.41 | 0.950 |
| Community, age 65+, no SPMI | 19,735.0 | \$26,698,339 | \$1,352.84 | 5,229.4 | \$9,490,402 | \$1,814.82 | 1.341 |
| Facility, age <65, with SPMI | 850.9 | \$2,783,711 | \$3,271.35 | 179.3 | \$260,914 | \$1,455.52 | 0.445 |
| Facility, age <65, no SPMI | 1,455.9 | \$6,939,015 | \$4,766.02 | 330.1 | \$798,040 | \$2,417.55 | 0.507 |
| HCBS, age <65, with SPMI | 8,850.4 | \$14,556,363 | \$1,644.72 | 3,123.1 | \$4,964,974 | \$1,589.77 | 0.967 |
| HCBS, age <65, no SPMI | 18,671.7 | \$33,932,964 | \$1,817.35 | 6,132.5 | \$12,197,441 | \$1,989.00 | 1.094 |
| Community, age <65, with SPMI | 13,939.8 | \$18,504,005 | \$1,327.43 | 4,374.3 | \$6,431,194 | \$1,470.22 | 1.108 |
| Community, age <65, no SPMI | 19,995.6 | \$31,556,013 | \$1,578.14 | 6,413.0 | \$12,356,259 | \$1,926.75 | 1.221 |

Table 3.E.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1E

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|---------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 15,153.3 | \$23,465,894 | \$1,548.56 | 5,500.6 | \$9,906,663 | \$1,801.01 | 1.163 |
| Facility, age 65+, with SPMI | 279.0 | \$573,525 | \$2,055.64 | 48.0 | \$82,156 | \$1,711.59 | 0.833 |
| Facility, age 65+, no SPMI | 1,143.7 | \$1,980,257 | \$1,731.43 | 283.9 | \$470,558 | \$1,657.27 | 0.957 |
| HCBS, age 65+, with SPMI | 297.0 | \$563,184 | \$1,896.24 | 69.4 | \$157,655 | \$2,272.66 | 1.199 |
| HCBS, age 65+, no SPMI | 3,090.8 | \$5,031,005 | \$1,627.75 | 923.0 | \$2,069,085 | \$2,241.61 | 1.377 |
| Community, age 65+, with SPMI | 352.0 | \$462,917 | \$1,315.11 | 109.1 | \$189,287 | \$1,735.50 | 1.320 |
| Community, age 65+, no SPMI | 3,588.7 | \$4,220,750 | \$1,176.13 | 1,318.2 | \$2,102,015 | \$1,594.59 | 1.356 |
| Facility, age <65, with SPMI | 137.2 | \$347,384 | \$2,531.06 | 53.0 | \$104,356 | \$1,968.98 | 0.778 |
| Facility, age <65, no SPMI | 211.0 | \$502,282 | \$2,380.48 | 79.6 | \$141,194 | \$1,774.23 | 0.745 |
| HCBS, age <65, with SPMI | 755.0 | \$1,273,188 | \$1,686.34 | 324.4 | \$526,317 | \$1,622.26 | 0.962 |
| HCBS, age <65, no SPMI | 1,481.9 | \$2,878,416 | \$1,942.35 | 685.5 | \$1,632,446 | \$2,381.49 | 1.226 |
| Community, age <65, with SPMI | 1,654.5 | \$2,183,008 | \$1,319.43 | 714.9 | \$926,153 | \$1,295.44 | 0.982 |
| Community, age <65, no SPMI | 2,162.5 | \$3,449,978 | \$1,595.37 | 891.6 | \$1,505,438 | \$1,688.53 | 1.058 |
| Intervention group | 15,153.3 | \$10,288,068 | \$678.93 | 5,500.6 | \$5,855,780 | \$1,064.57 | 1.568 |
| Facility, age 65+, with SPMI | 279.0 | \$340,940 | \$1,222.01 | 48.0 | \$4,530 | \$94.38 | 0.077 |
| Facility, age 65+, no SPMI | 1,143.7 | \$983,611 | \$860.02 | 283.9 | \$164,415 | \$579.06 | 0.673 |
| HCBS, age 65+, with SPMI | 297.0 | \$202,815 | \$682.88 | 69.4 | \$208,980 | \$3,012.54 | 4.412 |
| HCBS, age 65+, no SPMI | 3,090.8 | \$2,497,709 | \$808.12 | 923.0 | \$1,243,563 | \$1,347.25 | 1.667 |
| Community, age 65+, with SPMI | 352.0 | \$271,496 | \$771.30 | 109.1 | \$119,496 | \$1,095.62 | 1.420 |
| Community, age 65+, no SPMI | 3,588.7 | \$1,918,612 | \$534.63 | 1,318.2 | \$1,092,192 | \$828.54 | 1.550 |
| Facility, age <65, with SPMI | 137.2 | \$57,996 | \$422.56 | 53.0 | \$139,659 | \$2,635.08 | 6.236 |
| Facility, age <65, no SPMI | 211.0 | \$260,623 | \$1,235.18 | 79.6 | \$126,247 | \$1,586.41 | 1.284 |
| HCBS, age <65, with SPMI | 755.0 | \$439,693 | \$582.37 | 324.4 | \$375,166 | \$1,156.36 | 1.986 |
| HCBS, age <65, no SPMI | 1,481.9 | \$849,446 | \$573.21 | 685.5 | \$916,786 | \$1,337.45 | 2.333 |
| Community, age <65, with SPMI | 1,654.5 | \$1,149,973 | \$695.05 | 714.9 | \$593,871 | \$830.67 | 1.195 |
| Community, age <65, no SPMI | 2,162.5 | \$1,315,153 | \$608.17 | 891.6 | \$870,873 | \$976.79 | 1.606 |

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Table 3.E.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1E

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|---------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 15,153.3 | \$23,465,894 | \$1,548.56 | 4,418.6 | \$8,164,561 | \$1,847.76 | 1.193 |
| Facility, age 65+, with SPMI | 279.0 | \$573,525 | \$2,055.64 | 39.4 | \$66,691 | \$1,692.67 | 0.823 |
| Facility, age 65+, no SPMI | 1,143.7 | \$1,980,257 | \$1,731.43 | 156.4 | \$248,501 | \$1,588.79 | 0.918 |
| HCBS, age 65+, with SPMI | 297.0 | \$563,184 | \$1,896.24 | 50.6 | \$120,769 | \$2,387.65 | 1.259 |
| HCBS, age 65+, no SPMI | 3,090.8 | \$5,031,005 | \$1,627.75 | 678.9 | \$1,625,623 | \$2,394.58 | 1.471 |
| Community, age 65+, with SPMI | 352.0 | \$462,917 | \$1,315.11 | 83.2 | \$151,574 | \$1,822.53 | 1.386 |
| Community, age 65+, no SPMI | 3,588.7 | \$4,220,750 | \$1,176.13 | 999.1 | \$1,755,955 | \$1,757.58 | 1.494 |
| Facility, age <65, with SPMI | 137.2 | \$347,384 | \$2,531.06 | 48.0 | \$95,120 | \$1,981.66 | 0.783 |
| Facility, age <65, no SPMI | 211.0 | \$502,282 | \$2,380.48 | 63.0 | \$117,995 | \$1,872.94 | 0.787 |
| HCBS, age <65, with SPMI | 755.0 | \$1,273,188 | \$1,686.34 | 317.8 | \$472,227 | \$1,485.75 | 0.881 |
| HCBS, age <65, no SPMI | 1,481.9 | \$2,878,416 | \$1,942.35 | 589.8 | \$1,332,212 | \$2,258.85 | 1.163 |
| Community, age <65, with SPMI | 1,654.5 | \$2,183,008 | \$1,319.43 | 626.1 | \$798,270 | \$1,274.93 | 0.966 |
| Community, age <65, no SPMI | 2,162.5 | \$3,449,978 | \$1,595.37 | 766.4 | \$1,379,624 | \$1,800.19 | 1.128 |
| Intervention group | 15,153.3 | \$10,288,068 | \$678.93 | 4,418.6 | \$5,380,302 | \$1,217.64 | 1.793 |
| Facility, age 65+, with SPMI | 279.0 | \$340,940 | \$1,222.01 | 39.4 | \$24,732 | \$627.72 | 0.514 |
| Facility, age 65+, no SPMI | 1,143.7 | \$983,611 | \$860.02 | 156.4 | \$294,146 | \$1,880.63 | 2.187 |
| HCBS, age 65+, with SPMI | 297.0 | \$202,815 | \$682.88 | 50.6 | \$67,024 | \$1,325.09 | 1.940 |
| HCBS, age 65+, no SPMI | 3,090.8 | \$2,497,709 | \$808.12 | 678.9 | \$1,136,933 | \$1,674.73 | 2.072 |
| Community, age 65+, with SPMI | 352.0 | \$271,496 | \$771.30 | 83.2 | \$111,057 | \$1,335.36 | 1.731 |
| Community, age 65+, no SPMI | 3,588.7 | \$1,918,612 | \$534.63 | 999.1 | \$1,050,107 | \$1,051.08 | 1.966 |
| Facility, age <65, with SPMI | 137.2 | \$57,996 | \$422.56 | 48.0 | \$93,879 | \$1,955.82 | 4.628 |
| Facility, age <65, no SPMI | 211.0 | \$260,623 | \$1,235.18 | 63.0 | \$62,204 | \$987.36 | 0.799 |
| HCBS, age <65, with SPMI | 755.0 | \$439,693 | \$582.37 | 317.8 | \$328,096 | \$1,032.27 | 1.773 |
| HCBS, age <65, no SPMI | 1,481.9 | \$849,446 | \$573.21 | 589.8 | \$712,030 | \$1,207.29 | 2.106 |
| Community, age <65, with SPMI | 1,654.5 | \$1,149,973 | \$695.05 | 626.1 | \$553,915 | \$884.67 | 1.273 |
| Community, age <65, no SPMI | 2,162.5 | \$1,315,153 | \$608.17 | 766.4 | \$946,180 | \$1,234.61 | 2.030 |

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Table 3.F.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1F

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|---------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 15,986.6 | \$24,688,247 | \$1,544.31 | 5,968.2 | \$10,882,090 | \$1,823.35 | 1.181 |
| Facility, age 65+, with SPMI | 250.4 | \$516,275 | \$2,061.64 | 53.5 | \$90,101 | \$1,684.49 | 0.817 |
| Facility, age 65+, no SPMI | 838.0 | \$1,446,285 | \$1,725.88 | 199.2 | \$329,290 | \$1,652.70 | 0.958 |
| HCBS, age 65+, with SPMI | 480.2 | \$915,481 | \$1,906.48 | 218.0 | \$497,419 | \$2,281.74 | 1.197 |
| HCBS, age 65+, no SPMI | 2,635.0 | \$4,300,912 | \$1,632.22 | 750.3 | \$1,680,247 | \$2,239.29 | 1.372 |
| Community, age 65+, with SPMI | 438.1 | \$577,833 | \$1,318.94 | 141.0 | \$245,381 | \$1,740.29 | 1.319 |
| Community, age 65+, no SPMI | 3,854.1 | \$4,551,826 | \$1,181.02 | 1,474.7 | \$2,352,326 | \$1,595.08 | 1.351 |
| Facility, age <65, with SPMI | 99.2 | \$249,940 | \$2,519.72 | 60.0 | \$116,296 | \$1,938.26 | 0.769 |
| Facility, age <65, no SPMI | 99.0 | \$234,480 | \$2,368.48 | 47.7 | \$84,563 | \$1,771.25 | 0.748 |
| HCBS, age <65, with SPMI | 682.0 | \$1,153,956 | \$1,691.97 | 306.5 | \$498,306 | \$1,625.88 | 0.961 |
| HCBS, age <65, no SPMI | 1,969.2 | \$3,824,528 | \$1,942.14 | 883.4 | \$2,107,151 | \$2,385.38 | 1.228 |
| Community, age <65, with SPMI | 1,722.2 | \$2,271,910 | \$1,319.22 | 550.0 | \$713,744 | \$1,297.67 | 0.984 |
| Community, age <65, no SPMI | 2,919.1 | \$4,644,822 | \$1,591.19 | 1,283.8 | \$2,167,266 | \$1,688.22 | 1.061 |
| Intervention group | 15,986.6 | \$9,731,043 | \$608.70 | 5,968.2 | \$6,178,596 | \$1,035.26 | 1.701 |
| Facility, age 65+, with SPMI | 250.4 | \$310,844 | \$1,241.30 | 53.5 | \$18,934 | \$353.98 | 0.285 |
| Facility, age 65+, no SPMI | 838.0 | \$940,063 | \$1,121.79 | 199.2 | \$183,947 | \$923.23 | 0.823 |
| HCBS, age 65+, with SPMI | 480.2 | \$385,684 | \$803.19 | 218.0 | \$412,801 | \$1,893.58 | 2.358 |
| HCBS, age 65+, no SPMI | 2,635.0 | \$1,820,644 | \$690.94 | 750.3 | \$852,278 | \$1,135.84 | 1.644 |
| Community, age 65+, with SPMI | 438.1 | \$315,186 | \$719.43 | 141.0 | \$130,506 | \$925.57 | 1.287 |
| Community, age 65+, no SPMI | 3,854.1 | \$1,841,018 | \$477.67 | 1,474.7 | \$2,073,991 | \$1,406.35 | 2.944 |
| Facility, age <65, with SPMI | 99.2 | \$54,697 | \$551.42 | 60.0 | \$104,748 | \$1,745.80 | 3.166 |
| Facility, age <65, no SPMI | 99.0 | \$43,706 | \$441.48 | 47.7 | \$75,107 | \$1,573.18 | 3.563 |
| HCBS, age <65, with SPMI | 682.0 | \$494,966 | \$725.74 | 306.5 | \$245,771 | \$801.90 | 1.105 |
| HCBS, age <65, no SPMI | 1,969.2 | \$751,558 | \$381.65 | 883.4 | \$618,455 | \$700.12 | 1.834 |
| Community, age <65, with SPMI | 1,722.2 | \$1,343,004 | \$779.84 | 550.0 | \$422,700 | \$768.52 | 0.985 |
| Community, age <65, no SPMI | 2,919.1 | \$1,429,671 | \$489.77 | 1,283.8 | \$1,039,358 | \$809.62 | 1.653 |

Table 3.F.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1F

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|---------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 15,986.6 | \$24,688,247 | \$1,544.31 | 4,911.2 | \$9,222,691 | \$1,877.89 | 1.216 |
| Facility, age 65+, with SPMI | 250.4 | \$516,275 | \$2,061.64 | 36.0 | \$60,860 | \$1,690.56 | 0.820 |
| Facility, age 65+, no SPMI | 838.0 | \$1,446,285 | \$1,725.88 | 148.4 | \$235,420 | \$1,586.18 | 0.919 |
| HCBS, age 65+, with SPMI | 480.2 | \$915,481 | \$1,906.48 | 182.6 | \$437,804 | \$2,397.02 | 1.257 |
| HCBS, age 65+, no SPMI | 2,635.0 | \$4,300,912 | \$1,632.22 | 561.6 | \$1,343,886 | \$2,392.98 | 1.466 |
| Community, age 65+, with SPMI | 438.1 | \$577,833 | \$1,318.94 | 130.0 | \$236,952 | \$1,822.71 | 1.382 |
| Community, age 65+, no SPMI | 3,854.1 | \$4,551,826 | \$1,181.02 | 1,151.3 | \$2,024,305 | \$1,758.35 | 1.489 |
| Facility, age <65, with SPMI | 99.2 | \$249,940 | \$2,519.72 | 47.0 | \$91,829 | \$1,953.80 | 0.775 |
| Facility, age <65, no SPMI | 99.0 | \$234,480 | \$2,368.48 | 36.0 | \$67,883 | \$1,885.63 | 0.796 |
| HCBS, age <65, with SPMI | 682.0 | \$1,153,956 | \$1,691.97 | 263.2 | \$391,146 | \$1,485.97 | 0.878 |
| HCBS, age <65, no SPMI | 1,969.2 | \$3,824,528 | \$1,942.14 | 770.6 | \$1,738,815 | \$2,256.45 | 1.162 |
| Community, age <65, with SPMI | 1,722.2 | \$2,271,910 | \$1,319.22 | 483.0 | \$613,674 | \$1,270.55 | 0.963 |
| Community, age <65, no SPMI | 2,919.1 | \$4,644,822 | \$1,591.19 | 1,101.5 | \$1,980,118 | \$1,797.72 | 1.130 |
| Intervention group | 15,986.6 | \$9,731,043 | \$608.70 | 4,911.2 | \$5,766,735 | \$1,174.20 | 1.929 |
| Facility, age 65+, with SPMI | 250.4 | \$310,844 | \$1,241.30 | 36.0 | \$15,418 | \$428.27 | 0.345 |
| Facility, age 65+, no SPMI | 838.0 | \$940,063 | \$1,121.79 | 148.4 | \$173,292 | \$1,167.58 | 1.041 |
| HCBS, age 65+, with SPMI | 480.2 | \$385,684 | \$803.19 | 182.6 | \$436,772 | \$2,391.37 | 2.977 |
| HCBS, age 65+, no SPMI | 2,635.0 | \$1,820,644 | \$690.94 | 561.6 | \$657,899 | \$1,171.48 | 1.695 |
| Community, age 65+, with SPMI | 438.1 | \$315,186 | \$719.43 | 130.0 | \$88,348 | \$679.60 | 0.945 |
| Community, age 65+, no SPMI | 3,854.1 | \$1,841,018 | \$477.67 | 1,151.3 | \$1,664,875 | \$1,446.14 | 3.027 |
| Facility, age <65, with SPMI | 99.2 | \$54,697 | \$551.42 | 47.0 | \$80,939 | \$1,722.11 | 3.123 |
| Facility, age <65, no SPMI | 99.0 | \$43,706 | \$441.48 | 36.0 | \$8,142 | \$226.17 | 0.512 |
| HCBS, age <65, with SPMI | 682.0 | \$494,966 | \$725.74 | 263.2 | \$113,847 | \$432.51 | 0.596 |
| HCBS, age <65, no SPMI | 1,969.2 | \$751,558 | \$381.65 | 770.6 | \$643,342 | \$834.86 | 2.188 |
| Community, age <65, with SPMI | 1,722.2 | \$1,343,004 | \$779.84 | 483.0 | \$632,515 | \$1,309.56 | 1.679 |
| Community, age <65, no SPMI | 2,919.1 | \$1,429,671 | \$489.77 | 1,101.5 | \$1,251,348 | \$1,136.08 | 2.320 |

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Table 3.G.1 —MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 1 Total

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend (D/B) |
|-------------------------------------|---------------------------|-----------------|------------|---------------------------|-----------------|------------|-------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | |
| Re-weighted comparison group | 300,541.1 | \$478,511,235 | \$1,592.17 | 99,473.9 | \$184,420,069 | \$1,853.95 | 1.164 |
| Facility, age 65+, with SPMI | 8,034.5 | \$16,534,542 | \$2,057.93 | 1,653.5 | \$2,812,071 | \$1,700.69 | 0.826 |
| Facility, age 65+, no SPMI | 20,695.7 | \$35,690,181 | \$1,724.52 | 3,709.3 | \$6,136,750 | \$1,654.40 | 0.959 |
| HCBS, age 65+, with SPMI | 12,692.4 | \$24,055,314 | \$1,895.25 | 3,929.2 | \$8,983,655 | \$2,286.37 | 1.206 |
| HCBS, age 65+, no SPMI | 57,590.4 | \$93,564,252 | \$1,624.65 | 16,853.1 | \$37,734,751 | \$2,239.04 | 1.378 |
| Community, age 65+, with SPMI | 7,196.4 | \$9,442,825 | \$1,312.15 | 2,436.7 | \$4,237,253 | \$1,738.93 | 1.325 |
| Community, age 65+, no SPMI | 54,777.7 | \$64,461,342 | \$1,176.78 | 18,255.9 | \$29,124,160 | \$1,595.33 | 1.356 |
| Facility, age <65, with SPMI | 2,328.6 | \$5,874,283 | \$2,522.69 | 714.9 | \$1,404,504 | \$1,964.57 | 0.779 |
| Facility, age <65, no SPMI | 2,819.8 | \$6,751,321 | \$2,394.22 | 1,006.1 | \$1,784,632 | \$1,773.87 | 0.741 |
| HCBS, age <65, with SPMI | 21,022.7 | \$35,496,599 | \$1,688.49 | 8,178.9 | \$13,275,649 | \$1,623.17 | 0.961 |
| HCBS, age <65, no SPMI | 40,606.4 | \$78,915,525 | \$1,943.43 | 15,822.9 | \$37,694,591 | \$2,382.29 | 1.226 |
| Community, age <65, with SPMI | 29,285.3 | \$38,589,730 | \$1,317.72 | 10,735.7 | \$13,914,879 | \$1,296.14 | 0.984 |
| Community, age <65, no SPMI | 43,491.1 | \$69,135,320 | \$1,589.64 | 16,177.8 | \$27,317,174 | \$1,688.56 | 1.062 |
| Intervention group | 300,541.1 | \$484,510,829 | \$1,612.13 | 99,473.9 | \$164,765,120 | \$1,656.37 | 1.027 |
| Facility, age 65+, with SPMI | 8,034.5 | \$17,576,967 | \$2,187.68 | 1,653.5 | \$2,131,869 | \$1,289.32 | 0.589 |
| Facility, age 65+, no SPMI | 20,695.7 | \$39,145,639 | \$1,891.49 | 3,709.3 | \$4,627,167 | \$1,247.43 | 0.659 |
| HCBS, age 65+, with SPMI | 12,692.4 | \$24,018,817 | \$1,892.37 | 3,929.2 | \$7,803,081 | \$1,985.91 | 1.049 |
| HCBS, age 65+, no SPMI | 57,590.4 | \$90,235,491 | \$1,566.85 | 16,853.1 | \$31,577,387 | \$1,873.69 | 1.196 |
| Community, age 65+, with SPMI | 7,196.4 | \$9,895,987 | \$1,375.13 | 2,436.7 | \$3,459,830 | \$1,419.89 | 1.033 |
| Community, age 65+, no SPMI | 54,777.7 | \$66,727,404 | \$1,218.15 | 18,255.9 | \$26,785,494 | \$1,467.22 | 1.204 |
| Facility, age <65, with SPMI | 2,328.6 | \$7,974,151 | \$3,424.47 | 714.9 | \$1,323,071 | \$1,850.66 | 0.540 |
| Facility, age <65, no SPMI | 2,819.8 | \$11,926,346 | \$4,229.44 | 1,006.1 | \$2,450,040 | \$2,435.27 | 0.576 |
| HCBS, age <65, with SPMI | 21,022.7 | \$35,119,181 | \$1,670.54 | 8,178.9 | \$12,887,230 | \$1,575.67 | 0.943 |
| HCBS, age <65, no SPMI | 40,606.4 | \$72,535,248 | \$1,786.30 | 15,822.9 | \$29,438,022 | \$1,860.47 | 1.042 |
| Community, age <65, with SPMI | 29,285.3 | \$37,682,667 | \$1,286.74 | 10,735.7 | \$14,041,429 | \$1,307.92 | 1.016 |
| Community, age <65, no SPMI | 43,491.1 | \$71,672,932 | \$1,647.99 | 16,177.8 | \$28,240,498 | \$1,745.64 | 1.059 |

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Table 3.G.2 —MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 1 Total

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend (D/B) |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|----------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | |
| Re-weighted comparison group | 300,541.1 | \$478,511,235 | \$1,592.17 | 82,564.3 | \$156,466,395 | \$1,895.09 | 1.190 |
| Facility, age 65+, with SPMI | 8,034.5 | \$16,534,542 | \$2,057.93 | 1,170.2 | \$1,985,788 | \$1,696.91 | 0.825 |
| Facility, age 65+, no SPMI | 20,695.7 | \$35,690,181 | \$1,724.52 | 2,442.6 | \$3,887,333 | \$1,591.46 | 0.923 |
| HCBS, age 65+, with SPMI | 12,692.4 | \$24,055,314 | \$1,895.25 | 3,105.7 | \$7,452,204 | \$2,399.49 | 1.266 |
| HCBS, age 65+, no SPMI | 57,590.4 | \$93,564,252 | \$1,624.65 | 13,390.5 | \$32,063,893 | \$2,394.53 | 1.474 |
| Community, age 65+, with SPMI | 7,196.4 | \$9,442,825 | \$1,312.15 | 1,981.4 | \$3,610,517 | \$1,822.24 | 1.389 |
| Community, age 65+, no SPMI | 54,777.7 | \$64,461,342 | \$1,176.78 | 14,491.1 | \$25,481,108 | \$1,758.40 | 1.494 |
| Facility, age <65, with SPMI | 2,328.6 | \$5,874,283 | \$2,522.69 | 596.8 | \$1,179,595 | \$1,976.44 | 0.783 |
| Facility, age <65, no SPMI | 2,819.8 | \$6,751,321 | \$2,394.22 | 758.3 | \$1,434,186 | \$1,891.35 | 0.790 |
| HCBS, age <65, with SPMI | 21,022.7 | \$35,496,599 | \$1,688.49 | 7,529.7 | \$11,191,145 | \$1,486.26 | 0.880 |
| HCBS, age <65, no SPMI | 40,606.4 | \$78,915,525 | \$1,943.43 | 13,859.7 | \$31,278,480 | \$2,256.79 | 1.161 |
| Community, age <65, with SPMI | 29,285.3 | \$38,589,730 | \$1,317.72 | 9,267.9 | \$11,782,929 | \$1,271.37 | 0.965 |
| Community, age <65, no SPMI | 43,491.1 | \$69,135,320 | \$1,589.64 | 13,970.4 | \$25,119,216 | \$1,798.04 | 1.131 |
| Intervention group | 300,541.1 | \$484,510,829 | \$1,612.13 | 82,564.3 | \$147,790,144 | \$1,790.00 | 1.110 |
| Facility, age 65+, with SPMI | 8,034.5 | \$17,576,967 | \$2,187.68 | 1,170.2 | \$1,884,472 | \$1,610.33 | 0.736 |
| Facility, age 65+, no SPMI | 20,695.7 | \$39,145,639 | \$1,891.49 | 2,442.6 | \$3,315,496 | \$1,357.35 | 0.718 |
| HCBS, age 65+, with SPMI | 12,692.4 | \$24,018,817 | \$1,892.37 | 3,105.7 | \$6,127,209 | \$1,972.86 | 1.043 |
| HCBS, age 65+, no SPMI | 57,590.4 | \$90,235,491 | \$1,566.85 | 13,390.5 | \$26,795,651 | \$2,001.10 | 1.277 |
| Community, age 65+, with SPMI | 7,196.4 | \$9,895,987 | \$1,375.13 | 1,981.4 | \$2,841,339 | \$1,434.03 | 1.043 |
| Community, age 65+, no SPMI | 54,777.7 | \$66,727,404 | \$1,218.15 | 14,491.1 | \$25,767,643 | \$1,778.18 | 1.460 |
| Facility, age <65, with SPMI | 2,328.6 | \$7,974,151 | \$3,424.47 | 596.8 | \$886,341 | \$1,485.08 | 0.434 |
| Facility, age <65, no SPMI | 2,819.8 | \$11,926,346 | \$4,229.44 | 758.3 | \$1,505,305 | \$1,985.14 | 0.469 |
| HCBS, age <65, with SPMI | 21,022.7 | \$35,119,181 | \$1,670.54 | 7,529.7 | \$10,699,538 | \$1,420.98 | 0.851 |
| HCBS, age <65, no SPMI | 40,606.4 | \$72,535,248 | \$1,786.30 | 13,859.7 | \$26,639,656 | \$1,922.09 | 1.076 |
| Community, age <65, with SPMI | 29,285.3 | \$37,682,667 | \$1,286.74 | 9,267.9 | \$14,666,085 | \$1,582.46 | 1.230 |
| Community, age <65, no SPMI | 43,491.1 | \$71,672,932 | \$1,647.99 | 13,970.4 | \$26,661,411 | \$1,908.43 | 1.158 |

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Table 3.H.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 2

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|--------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 4,220.4 | \$7,342,975 | \$1,739.88 | 4,312.1 | \$5,986,553 | \$1,388.33 | 0.798 |
| Facility, age 65+, with SPMI | 69.3 | \$194,922 | \$2,811.37 | 32.0 | \$66,093 | \$2,065.40 | 0.735 |
| Facility, age 65+, no SPMI | 224.1 | \$559,070 | \$2,494.36 | 139.5 | \$175,187 | \$1,255.67 | 0.503 |
| HCBS, age 65+, with SPMI | 143.3 | \$268,777 | \$1,875.10 | 143.4 | \$254,238 | \$1,773.09 | 0.946 |
| HCBS, age 65+, no SPMI | 667.3 | \$1,128,010 | \$1,690.47 | 633.3 | \$1,151,931 | \$1,818.96 | 1.076 |
| Community, age 65+, with SPMI | 112.9 | \$181,213 | \$1,605.69 | 137.9 | \$231,638 | \$1,680.10 | 1.046 |
| Community, age 65+, no SPMI | 715.1 | \$1,136,725 | \$1,589.61 | 781.1 | \$1,058,696 | \$1,355.41 | 0.853 |
| Facility, age <65, with SPMI | 48.6 | \$188,821 | \$3,883.32 | 53.0 | \$112,836 | \$2,128.98 | 0.548 |
| Facility, age <65, no SPMI | 49.0 | \$186,028 | \$3,796.49 | 30.0 | \$61,270 | \$2,042.34 | 0.538 |
| HCBS, age <65, with SPMI | 258.8 | \$412,435 | \$1,593.54 | 276.8 | \$255,895 | \$924.45 | 0.580 |
| HCBS, age <65, no SPMI | 572.9 | \$962,097 | \$1,679.28 | 718.1 | \$1,061,562 | \$1,478.32 | 0.880 |
| Community, age <65, with SPMI | 329.2 | \$441,888 | \$1,342.48 | 315.5 | \$277,659 | \$880.02 | 0.656 |
| Community, age <65, no SPMI | 1,029.8 | \$1,682,991 | \$1,634.24 | 1,051.5 | \$1,279,550 | \$1,216.87 | 0.745 |
| Intervention group | 4,220.4 | \$9,945,769 | \$2,356.60 | 4,312.1 | \$8,119,493 | \$1,882.97 | 0.799 |
| Facility, age 65+, with SPMI | 69.3 | \$438,707 | \$6,327.51 | 32.0 | \$24,903 | \$778.23 | 0.123 |
| Facility, age 65+, no SPMI | 224.1 | \$1,196,636 | \$5,338.95 | 139.5 | \$72,639 | \$520.65 | 0.098 |
| HCBS, age 65+, with SPMI | 143.3 | \$256,776 | \$1,791.38 | 143.4 | \$299,487 | \$2,088.66 | 1.166 |
| HCBS, age 65+, no SPMI | 667.3 | \$1,545,012 | \$2,315.40 | 633.3 | \$1,203,715 | \$1,900.73 | 0.821 |
| Community, age 65+, with SPMI | 112.9 | \$289,402 | \$2,564.32 | 137.9 | \$316,294 | \$2,294.13 | 0.895 |
| Community, age 65+, no SPMI | 715.1 | \$1,450,968 | \$2,029.05 | 781.1 | \$877,701 | \$1,123.69 | 0.554 |
| Facility, age <65, with SPMI | 48.6 | \$110,141 | \$2,265.17 | 53.0 | \$49,055 | \$925.56 | 0.409 |
| Facility, age <65, no SPMI | 49.0 | \$450,522 | \$9,194.32 | 30.0 | \$77,679 | \$2,589.28 | 0.282 |
| HCBS, age <65, with SPMI | 258.8 | \$748,549 | \$2,892.19 | 276.8 | \$579,929 | \$2,095.07 | 0.724 |
| HCBS, age <65, no SPMI | 572.9 | \$1,300,020 | \$2,269.10 | 718.1 | \$1,504,022 | \$2,094.48 | 0.923 |
| Community, age <65, with SPMI | 329.2 | \$674,242 | \$2,048.38 | 315.5 | \$315,386 | \$999.59 | 0.488 |
| Community, age <65, no SPMI | 1,029.8 | \$1,484,795 | \$1,441.79 | 1,051.5 | \$2,798,684 | \$2,661.59 | 1.846 |

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Table 3.H.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 2

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|--------------------|-------------------|---------------------------|--------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 4,220.4 | \$7,342,975 | \$1,739.88 | 3,476.8 | \$5,184,236 | \$1,491.08 | 0.857 |
| Facility, age 65+, with SPMI | 69.3 | \$194,922 | \$2,811.37 | 36.0 | \$49,073 | \$1,363.14 | 0.485 |
| Facility, age 65+, no SPMI | 224.1 | \$559,070 | \$2,494.36 | 125.4 | \$191,397 | \$1,526.84 | 0.612 |
| HCBS, age 65+, with SPMI | 143.3 | \$268,777 | \$1,875.10 | 105.0 | \$228,606 | \$2,177.20 | 1.161 |
| HCBS, age 65+, no SPMI | 667.3 | \$1,128,010 | \$1,690.47 | 492.2 | \$860,941 | \$1,749.01 | 1.035 |
| Community, age 65+, with SPMI | 112.9 | \$181,213 | \$1,605.69 | 98.5 | \$170,652 | \$1,732.51 | 1.079 |
| Community, age 65+, no SPMI | 715.1 | \$1,136,725 | \$1,589.61 | 620.5 | \$1,032,481 | \$1,664.08 | 1.047 |
| Facility, age <65, with SPMI | 48.6 | \$188,821 | \$3,883.32 | 50.0 | \$63,100 | \$1,262.89 | 0.325 |
| Facility, age <65, no SPMI | 49.0 | \$186,028 | \$3,796.49 | 23.9 | \$38,146 | \$1,593.71 | 0.420 |
| HCBS, age <65, with SPMI | 258.8 | \$412,435 | \$1,593.54 | 261.0 | \$302,468 | \$1,158.88 | 0.727 |
| HCBS, age <65, no SPMI | 572.9 | \$962,097 | \$1,679.28 | 571.3 | \$889,667 | \$1,557.13 | 0.927 |
| Community, age <65, with SPMI | 329.2 | \$441,888 | \$1,342.48 | 268.3 | \$311,823 | \$1,162.35 | 0.866 |
| Community, age <65, no SPMI | 1,029.8 | \$1,682,991 | \$1,634.24 | 824.8 | \$1,045,882 | \$1,268.11 | 0.776 |
| Intervention group | 4,220.4 | \$9,945,769 | \$2,356.60 | 3,476.8 | \$6,979,455 | \$2,007.42 | 0.852 |
| Facility, age 65+, with SPMI | 69.3 | \$438,707 | \$6,327.51 | 36.0 | \$42,134 | \$1,170.39 | 0.185 |
| Facility, age 65+, no SPMI | 224.1 | \$1,196,636 | \$5,338.95 | 125.4 | \$83,847 | \$668.88 | 0.125 |
| HCBS, age 65+, with SPMI | 143.3 | \$256,776 | \$1,791.38 | 105.0 | \$139,091 | \$1,324.68 | 0.739 |
| HCBS, age 65+, no SPMI | 667.3 | \$1,545,012 | \$2,315.40 | 492.2 | \$1,442,298 | \$2,930.04 | 1.265 |
| Community, age 65+, with SPMI | 112.9 | \$289,402 | \$2,564.32 | 98.5 | \$255,473 | \$2,593.63 | 1.011 |
| Community, age 65+, no SPMI | 715.1 | \$1,450,968 | \$2,029.05 | 620.5 | \$897,635 | \$1,446.74 | 0.713 |
| Facility, age <65, with SPMI | 48.6 | \$110,141 | \$2,265.17 | 50.0 | \$30,282 | \$606.08 | 0.268 |
| Facility, age <65, no SPMI | 49.0 | \$450,522 | \$9,194.32 | 23.9 | \$179,740 | \$7,509.35 | 0.817 |
| HCBS, age <65, with SPMI | 258.8 | \$748,549 | \$2,892.19 | 261.0 | \$541,586 | \$2,075.04 | 0.717 |
| HCBS, age <65, no SPMI | 572.9 | \$1,300,020 | \$2,269.10 | 571.3 | \$941,808 | \$1,648.39 | 0.726 |
| Community, age <65, with SPMI | 329.2 | \$674,242 | \$2,048.38 | 268.3 | \$257,075 | \$958.27 | 0.468 |
| Community, age <65, no SPMI | 1,029.8 | \$1,484,795 | \$1,441.79 | 824.8 | \$2,168,486 | \$2,629.25 | 1.824 |

Table 3.I.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 3

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 61,200.6 | \$93,045,998 | \$1,520.35 | 47,319.8 | \$61,824,588 | \$1,306.53 | 0.859 |
| Facility, age 65+, with SPMI | 1,249.3 | \$2,839,727 | \$2,273.12 | 769.1 | \$1,237,882 | \$1,609.54 | 0.708 |
| Facility, age 65+, no SPMI | 4,252.8 | \$9,447,994 | \$2,221.61 | 2,098.4 | \$3,108,400 | \$1,481.33 | 0.667 |
| HCBS, age 65+, with SPMI | 2,628.5 | \$3,772,984 | \$1,435.39 | 2,019.5 | \$3,404,997 | \$1,686.04 | 1.175 |
| HCBS, age 65+, no SPMI | 11,866.5 | \$18,638,532 | \$1,570.68 | 8,656.1 | \$13,711,736 | \$1,584.05 | 1.009 |
| Community, age 65+, with SPMI | 1,951.3 | \$2,888,862 | \$1,480.46 | 1,654.6 | \$1,906,147 | \$1,152.05 | 0.778 |
| Community, age 65+, no SPMI | 11,506.7 | \$15,358,114 | \$1,334.72 | 9,526.2 | \$12,826,002 | \$1,346.40 | 1.009 |
| Facility, age <65, with SPMI | 423.5 | \$1,488,014 | \$3,513.99 | 334.5 | \$687,071 | \$2,054.29 | 0.585 |
| Facility, age <65, no SPMI | 696.3 | \$2,415,969 | \$3,469.81 | 555.5 | \$1,068,686 | \$1,923.66 | 0.554 |
| HCBS, age <65, with SPMI | 3,460.0 | \$4,039,095 | \$1,167.38 | 3,041.2 | \$2,522,556 | \$829.47 | 0.711 |
| HCBS, age <65, no SPMI | 6,699.9 | \$9,106,677 | \$1,359.22 | 5,895.0 | \$6,800,515 | \$1,153.60 | 0.849 |
| Community, age <65, with SPMI | 6,565.4 | \$7,436,908 | \$1,132.75 | 4,904.2 | \$4,248,138 | \$866.23 | 0.765 |
| Community, age <65, no SPMI | 9,900.5 | \$15,613,122 | \$1,577.00 | 7,865.6 | \$10,302,457 | \$1,309.81 | 0.831 |
| Intervention group | 61,200.6 | \$103,440,434 | \$1,690.19 | 47,319.8 | \$68,725,816 | \$1,452.37 | 0.859 |
| Facility, age 65+, with SPMI | 1,249.3 | \$3,181,407 | \$2,546.62 | 769.1 | \$1,005,089 | \$1,306.85 | 0.513 |
| Facility, age 65+, no SPMI | 4,252.8 | \$9,034,621 | \$2,124.41 | 2,098.4 | \$2,052,054 | \$977.92 | 0.460 |
| HCBS, age 65+, with SPMI | 2,628.5 | \$5,191,095 | \$1,974.89 | 2,019.5 | \$3,857,146 | \$1,909.93 | 0.967 |
| HCBS, age 65+, no SPMI | 11,866.5 | \$21,031,541 | \$1,772.34 | 8,656.1 | \$15,064,741 | \$1,740.36 | 0.982 |
| Community, age 65+, with SPMI | 1,951.3 | \$2,712,797 | \$1,390.23 | 1,654.6 | \$1,984,768 | \$1,199.57 | 0.863 |
| Community, age 65+, no SPMI | 11,506.7 | \$14,881,472 | \$1,293.29 | 9,526.2 | \$12,541,219 | \$1,316.50 | 1.018 |
| Facility, age <65, with SPMI | 423.5 | \$1,956,037 | \$4,619.24 | 334.5 | \$871,260 | \$2,605.01 | 0.564 |
| Facility, age <65, no SPMI | 696.3 | \$3,042,252 | \$4,369.28 | 555.5 | \$1,041,861 | \$1,875.37 | 0.429 |
| HCBS, age <65, with SPMI | 3,460.0 | \$6,775,101 | \$1,958.15 | 3,041.2 | \$4,430,152 | \$1,456.73 | 0.744 |
| HCBS, age <65, no SPMI | 6,699.9 | \$12,516,956 | \$1,868.23 | 5,895.0 | \$10,057,665 | \$1,706.13 | 0.913 |
| Community, age <65, with SPMI | 6,565.4 | \$8,598,440 | \$1,309.66 | 4,904.2 | \$5,452,573 | \$1,111.82 | 0.849 |
| Community, age <65, no SPMI | 9,900.5 | \$14,518,716 | \$1,466.46 | 7,865.6 | \$10,367,288 | \$1,318.05 | 0.899 |

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Table 3.I.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 3

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 61,200.6 | \$93,045,998 | \$1,520.35 | 37,725.3 | \$53,144,243 | \$1,408.72 | 0.927 |
| Facility, age 65+, with SPMI | 1,249.3 | \$2,839,727 | \$2,273.12 | 585.9 | \$841,469 | \$1,436.21 | 0.632 |
| Facility, age 65+, no SPMI | 4,252.8 | \$9,447,994 | \$2,221.61 | 1,329.2 | \$2,076,735 | \$1,562.39 | 0.703 |
| HCBS, age 65+, with SPMI | 2,628.5 | \$3,772,984 | \$1,435.39 | 1,648.4 | \$2,721,466 | \$1,651.02 | 1.150 |
| HCBS, age 65+, no SPMI | 11,866.5 | \$18,638,532 | \$1,570.68 | 6,588.3 | \$12,411,524 | \$1,883.87 | 1.199 |
| Community, age 65+, with SPMI | 1,951.3 | \$2,888,862 | \$1,480.46 | 1,336.1 | \$1,489,594 | \$1,114.87 | 0.753 |
| Community, age 65+, no SPMI | 11,506.7 | \$15,358,114 | \$1,334.72 | 7,504.0 | \$10,204,228 | \$1,359.84 | 1.019 |
| Facility, age <65, with SPMI | 423.5 | \$1,488,014 | \$3,513.99 | 288.2 | \$320,758 | \$1,113.11 | 0.317 |
| Facility, age <65, no SPMI | 696.3 | \$2,415,969 | \$3,469.81 | 474.7 | \$747,822 | \$1,575.43 | 0.454 |
| HCBS, age <65, with SPMI | 3,460.0 | \$4,039,095 | \$1,167.38 | 2,710.2 | \$2,405,292 | \$887.51 | 0.760 |
| HCBS, age <65, no SPMI | 6,699.9 | \$9,106,677 | \$1,359.22 | 5,102.9 | \$6,717,250 | \$1,316.36 | 0.968 |
| Community, age <65, with SPMI | 6,565.4 | \$7,436,908 | \$1,132.75 | 4,017.9 | \$3,858,490 | \$960.33 | 0.848 |
| Community, age <65, no SPMI | 9,900.5 | \$15,613,122 | \$1,577.00 | 6,139.7 | \$9,349,618 | \$1,522.82 | 0.966 |
| Intervention group | 61,200.6 | \$103,440,434 | \$1,690.19 | 37,725.3 | \$54,956,672 | \$1,456.76 | 0.862 |
| Facility, age 65+, with SPMI | 1,249.3 | \$3,181,407 | \$2,546.62 | 585.9 | \$883,903 | \$1,508.63 | 0.592 |
| Facility, age 65+, no SPMI | 4,252.8 | \$9,034,621 | \$2,124.41 | 1,329.2 | \$1,651,746 | \$1,242.65 | 0.585 |
| HCBS, age 65+, with SPMI | 2,628.5 | \$5,191,095 | \$1,974.89 | 1,648.4 | \$2,858,367 | \$1,734.07 | 0.878 |
| HCBS, age 65+, no SPMI | 11,866.5 | \$21,031,541 | \$1,772.34 | 6,588.3 | \$10,951,964 | \$1,662.33 | 0.938 |
| Community, age 65+, with SPMI | 1,951.3 | \$2,712,797 | \$1,390.23 | 1,336.1 | \$1,504,659 | \$1,126.15 | 0.810 |
| Community, age 65+, no SPMI | 11,506.7 | \$14,881,472 | \$1,293.29 | 7,504.0 | \$9,224,262 | \$1,229.25 | 0.950 |
| Facility, age <65, with SPMI | 423.5 | \$1,956,037 | \$4,619.24 | 288.2 | \$689,993 | \$2,394.44 | 0.518 |
| Facility, age <65, no SPMI | 696.3 | \$3,042,252 | \$4,369.28 | 474.7 | \$1,123,363 | \$2,366.58 | 0.542 |
| HCBS, age <65, with SPMI | 3,460.0 | \$6,775,101 | \$1,958.15 | 2,710.2 | \$3,958,714 | \$1,460.70 | 0.746 |
| HCBS, age <65, no SPMI | 6,699.9 | \$12,516,956 | \$1,868.23 | 5,102.9 | \$8,611,456 | \$1,687.57 | 0.903 |
| Community, age <65, with SPMI | 6,565.4 | \$8,598,440 | \$1,309.66 | 4,017.9 | \$5,037,682 | \$1,253.81 | 0.957 |
| Community, age <65, no SPMI | 9,900.5 | \$14,518,716 | \$1,466.46 | 6,139.7 | \$8,460,563 | \$1,378.02 | 0.940 |

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Table 3.J.1 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 3, by category of beneficiary: Cohort 4

| Category of beneficiary | Baseline period | | | Demonstration Year 3 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 62,395.6 | \$96,865,182 | \$1,552.44 | 60,468.5 | \$94,451,494 | \$1,562.00 | 1.006 |
| Facility, age 65+, with SPMI | 2,453.0 | \$6,453,449 | \$2,630.84 | 2,161.3 | \$4,410,378 | \$2,040.63 | 0.776 |
| Facility, age 65+, no SPMI | 2,527.9 | \$5,282,819 | \$2,089.78 | 2,128.4 | \$3,462,225 | \$1,626.66 | 0.778 |
| HCBS, age 65+, with SPMI | 4,306.6 | \$8,037,334 | \$1,866.30 | 4,115.4 | \$8,459,190 | \$2,055.50 | 1.101 |
| HCBS, age 65+, no SPMI | 9,921.7 | \$14,424,152 | \$1,453.79 | 9,486.1 | \$16,864,793 | \$1,777.84 | 1.223 |
| Community, age 65+, with SPMI | 2,937.0 | \$4,882,376 | \$1,662.39 | 2,898.9 | \$4,332,792 | \$1,494.66 | 0.899 |
| Community, age 65+, no SPMI | 13,051.3 | \$16,756,974 | \$1,283.93 | 12,887.2 | \$15,758,182 | \$1,222.77 | 0.952 |
| Facility, age <65, with SPMI | 701.0 | \$2,687,764 | \$3,834.18 | 614.6 | \$1,768,431 | \$2,877.39 | 0.750 |
| Facility, age <65, no SPMI | 435.0 | \$1,496,911 | \$3,441.17 | 339.6 | \$789,423 | \$2,324.68 | 0.676 |
| HCBS, age <65, with SPMI | 4,420.2 | \$5,880,332 | \$1,330.34 | 4,454.0 | \$6,887,082 | \$1,546.25 | 1.162 |
| HCBS, age <65, no SPMI | 5,763.7 | \$9,009,151 | \$1,563.09 | 6,053.6 | \$10,341,352 | \$1,708.30 | 1.093 |
| Community, age <65, with SPMI | 7,698.0 | \$8,968,160 | \$1,165.00 | 7,159.5 | \$8,338,063 | \$1,164.62 | 1.000 |
| Community, age <65, no SPMI | 8,180.2 | \$12,985,760 | \$1,587.47 | 8,169.9 | \$13,039,584 | \$1,596.05 | 1.005 |
| Intervention group | 62,395.6 | \$108,719,430 | \$1,742.42 | 60,468.5 | \$91,095,889 | \$1,506.50 | 0.865 |
| Facility, age 65+, with SPMI | 2,453.0 | \$8,183,909 | \$3,336.29 | 2,161.3 | \$4,023,074 | \$1,861.43 | 0.558 |
| Facility, age 65+, no SPMI | 2,527.9 | \$5,640,529 | \$2,231.28 | 2,128.4 | \$2,397,601 | \$1,126.46 | 0.505 |
| HCBS, age 65+, with SPMI | 4,306.6 | \$10,380,911 | \$2,410.48 | 4,115.4 | \$8,430,791 | \$2,048.60 | 0.850 |
| HCBS, age 65+, no SPMI | 9,921.7 | \$16,659,970 | \$1,679.14 | 9,486.1 | \$15,388,228 | \$1,622.19 | 0.966 |
| Community, age 65+, with SPMI | 2,937.0 | \$5,604,559 | \$1,908.28 | 2,898.9 | \$4,275,037 | \$1,474.73 | 0.773 |
| Community, age 65+, no SPMI | 13,051.3 | \$15,923,824 | \$1,220.09 | 12,887.2 | \$15,276,285 | \$1,185.38 | 0.972 |
| Facility, age <65, with SPMI | 701.0 | \$3,135,378 | \$4,472.72 | 614.6 | \$1,914,254 | \$3,114.66 | 0.696 |
| Facility, age <65, no SPMI | 435.0 | \$1,415,092 | \$3,253.09 | 339.6 | \$1,143,840 | \$3,368.37 | 1.035 |
| HCBS, age <65, with SPMI | 4,420.2 | \$7,918,350 | \$1,791.41 | 4,454.0 | \$7,709,467 | \$1,730.89 | 0.966 |
| HCBS, age <65, no SPMI | 5,763.7 | \$10,787,145 | \$1,871.58 | 6,053.6 | \$9,614,920 | \$1,588.30 | 0.849 |
| Community, age <65, with SPMI | 7,698.0 | \$11,310,650 | \$1,469.29 | 7,159.5 | \$8,787,583 | \$1,227.40 | 0.835 |
| Community, age <65, no SPMI | 8,180.2 | \$11,759,112 | \$1,437.51 | 8,169.9 | \$12,134,807 | \$1,485.30 | 1.033 |

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Table 3.J.2 — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 4

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 62,395.6 | \$96,865,182 | \$1,552.44 | 46,028.7 | \$69,458,738 | \$1,509.03 | 0.972 |
| Facility, age 65+, with SPMI | 2,453.0 | \$6,453,449 | \$2,630.84 | 1,450.9 | \$2,715,289 | \$1,871.42 | 0.711 |
| Facility, age 65+, no SPMI | 2,527.9 | \$5,282,819 | \$2,089.78 | 1,411.5 | \$1,952,252 | \$1,383.12 | 0.662 |
| HCBS, age 65+, with SPMI | 4,306.6 | \$8,037,334 | \$1,866.30 | 3,182.4 | \$5,594,516 | \$1,757.96 | 0.942 |
| HCBS, age 65+, no SPMI | 9,921.7 | \$14,424,152 | \$1,453.79 | 6,946.6 | \$12,526,852 | \$1,803.31 | 1.240 |
| Community, age 65+, with SPMI | 2,937.0 | \$4,882,376 | \$1,662.39 | 2,257.1 | \$2,796,114 | \$1,238.81 | 0.745 |
| Community, age 65+, no SPMI | 13,051.3 | \$16,756,974 | \$1,283.93 | 9,837.2 | \$13,560,312 | \$1,378.47 | 1.074 |
| Facility, age <65, with SPMI | 701.0 | \$2,687,764 | \$3,834.18 | 417.2 | \$1,011,444 | \$2,424.36 | 0.632 |
| Facility, age <65, no SPMI | 435.0 | \$1,496,911 | \$3,441.17 | 252.1 | \$539,750 | \$2,141.32 | 0.622 |
| HCBS, age <65, with SPMI | 4,420.2 | \$5,880,332 | \$1,330.34 | 3,765.4 | \$5,020,882 | \$1,333.43 | 1.002 |
| HCBS, age <65, no SPMI | 5,763.7 | \$9,009,151 | \$1,563.09 | 5,013.5 | \$8,677,925 | \$1,730.92 | 1.107 |
| Community, age <65, with SPMI | 7,698.0 | \$8,968,160 | \$1,165.00 | 5,408.1 | \$5,686,645 | \$1,051.50 | 0.903 |
| Community, age <65, no SPMI | 8,180.2 | \$12,985,760 | \$1,587.47 | 6,086.7 | \$9,376,757 | \$1,540.53 | 0.970 |
| Intervention group | 62,395.6 | \$108,719,430 | \$1,742.42 | 46,028.7 | \$68,678,275 | \$1,492.08 | 0.856 |
| Facility, age 65+, with SPMI | 2,453.0 | \$8,183,909 | \$3,336.29 | 1,450.9 | \$1,901,152 | \$1,310.30 | 0.393 |
| Facility, age 65+, no SPMI | 2,527.9 | \$5,640,529 | \$2,231.28 | 1,411.5 | \$1,408,242 | \$997.70 | 0.447 |
| HCBS, age 65+, with SPMI | 4,306.6 | \$10,380,911 | \$2,410.48 | 3,182.4 | \$5,993,420 | \$1,883.30 | 0.781 |
| HCBS, age 65+, no SPMI | 9,921.7 | \$16,659,970 | \$1,679.14 | 6,946.6 | \$11,933,812 | \$1,717.94 | 1.023 |
| Community, age 65+, with SPMI | 2,937.0 | \$5,604,559 | \$1,908.28 | 2,257.1 | \$3,518,455 | \$1,558.84 | 0.817 |
| Community, age 65+, no SPMI | 13,051.3 | \$15,923,824 | \$1,220.09 | 9,837.2 | \$12,188,645 | \$1,239.03 | 1.016 |
| Facility, age <65, with SPMI | 701.0 | \$3,135,378 | \$4,472.72 | 417.2 | \$1,039,231 | \$2,490.96 | 0.557 |
| Facility, age <65, no SPMI | 435.0 | \$1,415,092 | \$3,253.09 | 252.1 | \$410,563 | \$1,628.80 | 0.501 |
| HCBS, age <65, with SPMI | 4,420.2 | \$7,918,350 | \$1,791.41 | 3,765.4 | \$6,434,587 | \$1,708.87 | 0.954 |
| HCBS, age <65, no SPMI | 5,763.7 | \$10,787,145 | \$1,871.58 | 5,013.5 | \$8,204,195 | \$1,636.43 | 0.874 |
| Community, age <65, with SPMI | 7,698.0 | \$11,310,650 | \$1,469.29 | 5,408.1 | \$6,275,064 | \$1,160.30 | 0.790 |
| Community, age <65, no SPMI | 8,180.2 | \$11,759,112 | \$1,437.51 | 6,086.7 | \$9,370,909 | \$1,539.57 | 1.071 |

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Table 3.K — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 5A

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|----------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 65,787.6 | \$107,754,944 | \$1,637.92 | 63,414.2 | \$104,696,611 | \$1,651.00 | 1.008 |
| Facility, age 65+, with SPMI | 2,842.0 | \$6,504,251 | \$2,288.59 | 2,529.2 | \$4,910,713 | \$1,941.59 | 0.848 |
| Facility, age 65+, no SPMI | 2,190.1 | \$4,599,048 | \$2,099.96 | 1,872.9 | \$3,332,718 | \$1,779.46 | 0.847 |
| HCBS, age 65+, with SPMI | 6,618.4 | \$13,664,764 | \$2,064.67 | 6,299.1 | \$13,604,701 | \$2,159.80 | 1.046 |
| HCBS, age 65+, no SPMI | 8,388.5 | \$13,376,717 | \$1,594.65 | 8,231.0 | \$16,109,741 | \$1,957.21 | 1.227 |
| Community, age 65+, with SPMI | 5,124.6 | \$8,366,445 | \$1,632.59 | 4,813.2 | \$6,709,006 | \$1,393.87 | 0.854 |
| Community, age 65+, no SPMI | 11,804.2 | \$13,429,548 | \$1,137.69 | 11,384.8 | \$13,707,607 | \$1,204.02 | 1.058 |
| Facility, age <65, with SPMI | 776.5 | \$2,753,515 | \$3,545.99 | 767.7 | \$2,542,236 | \$3,311.59 | 0.934 |
| Facility, age <65, no SPMI | 321.0 | \$1,141,345 | \$3,555.59 | 328.5 | \$807,272 | \$2,457.16 | 0.691 |
| HCBS, age <65, with SPMI | 5,822.6 | \$10,322,639 | \$1,772.87 | 5,901.4 | \$12,996,456 | \$2,202.26 | 1.242 |
| HCBS, age <65, no SPMI | 4,131.8 | \$6,238,202 | \$1,509.81 | 4,410.6 | \$6,850,614 | \$1,553.23 | 1.029 |
| Community, age <65, with SPMI | 10,170.8 | \$13,698,967 | \$1,346.89 | 9,590.5 | \$11,350,683 | \$1,183.54 | 0.879 |
| Community, age <65, no SPMI | 7,597.1 | \$13,659,502 | \$1,797.99 | 7,285.4 | \$11,774,864 | \$1,616.23 | 0.899 |
| Intervention group | 65,787.6 | \$110,905,078 | \$1,685.80 | 63,414.2 | \$95,623,575 | \$1,507.92 | 0.894 |
| Facility, age 65+, with SPMI | 2,842.0 | \$9,014,995 | \$3,172.02 | 2,529.2 | \$4,368,153 | \$1,727.07 | 0.544 |
| Facility, age 65+, no SPMI | 2,190.1 | \$4,385,773 | \$2,002.58 | 1,872.9 | \$2,074,467 | \$1,107.63 | 0.553 |
| HCBS, age 65+, with SPMI | 6,618.4 | \$15,158,222 | \$2,290.32 | 6,299.1 | \$13,387,733 | \$2,125.35 | 0.928 |
| HCBS, age 65+, no SPMI | 8,388.5 | \$14,806,798 | \$1,765.13 | 8,231.0 | \$13,943,734 | \$1,694.06 | 0.960 |
| Community, age 65+, with SPMI | 5,124.6 | \$8,827,429 | \$1,722.55 | 4,813.2 | \$7,265,616 | \$1,509.51 | 0.876 |
| Community, age 65+, no SPMI | 11,804.2 | \$12,550,282 | \$1,063.21 | 11,384.8 | \$13,996,984 | \$1,229.44 | 1.156 |
| Facility, age <65, with SPMI | 776.5 | \$4,038,014 | \$5,200.17 | 767.7 | \$2,007,396 | \$2,614.89 | 0.503 |
| Facility, age <65, no SPMI | 321.0 | \$1,146,659 | \$3,572.15 | 328.5 | \$669,670 | \$2,038.33 | 0.571 |
| HCBS, age <65, with SPMI | 5,822.6 | \$12,311,204 | \$2,114.39 | 5,901.4 | \$10,578,587 | \$1,792.55 | 0.848 |
| HCBS, age <65, no SPMI | 4,131.8 | \$5,743,258 | \$1,390.02 | 4,410.6 | \$6,778,299 | \$1,536.83 | 1.106 |
| Community, age <65, with SPMI | 10,170.8 | \$13,754,663 | \$1,352.37 | 9,590.5 | \$11,482,105 | \$1,197.24 | 0.885 |
| Community, age <65, no SPMI | 7,597.1 | \$9,167,779 | \$1,206.74 | 7,285.4 | \$9,070,833 | \$1,245.07 | 1.032 |

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Table 3.L — MEDICARE
Eligible months, incurred claims, and PMPM for the re-weighted comparison group and the intervention group, baseline period, and the Demonstration Year 4, by category of beneficiary: Cohort 5B

| Category of beneficiary | Baseline period | | | Demonstration Year 4 | | | Trend |
|-------------------------------------|---------------------------|----------------------|-------------------|---------------------------|---------------------|-------------------|--------------|
| | Number of eligible months | Incurred claims | PMPM | Number of eligible months | Incurred claims | PMPM | (D/B) |
| Re-weighted comparison group | 65,411.2 | \$106,963,285 | \$1,635.24 | 48,134.7 | \$85,443,230 | \$1,775.09 | 1.086 |
| Facility, age 65+, with SPMI | 4,124.0 | \$7,793,211 | \$1,889.72 | 3,032.1 | \$5,339,132 | \$1,760.85 | 0.932 |
| Facility, age 65+, no SPMI | 2,334.6 | \$3,957,640 | \$1,695.24 | 1,729.1 | \$2,733,152 | \$1,580.66 | 0.932 |
| HCBS, age 65+, with SPMI | 8,071.3 | \$17,484,339 | \$2,166.25 | 5,905.3 | \$13,629,100 | \$2,307.95 | 1.065 |
| HCBS, age 65+, no SPMI | 9,031.3 | \$15,448,534 | \$1,710.55 | 6,539.3 | \$13,390,918 | \$2,047.76 | 1.197 |
| Community, age 65+, with SPMI | 6,083.6 | \$9,867,185 | \$1,621.94 | 4,393.1 | \$7,539,482 | \$1,716.20 | 1.058 |
| Community, age 65+, no SPMI | 14,579.5 | \$17,407,750 | \$1,193.99 | 10,565.1 | \$15,171,302 | \$1,435.98 | 1.203 |
| Facility, age <65, with SPMI | 1,284.5 | \$3,345,575 | \$2,604.48 | 973.6 | \$2,076,941 | \$2,133.19 | 0.819 |
| Facility, age <65, no SPMI | 579.0 | \$843,478 | \$1,456.78 | 455.5 | \$833,321 | \$1,829.37 | 1.256 |
| HCBS, age <65, with SPMI | 5,469.1 | \$9,451,656 | \$1,728.19 | 4,197.3 | \$7,861,520 | \$1,872.98 | 1.084 |
| HCBS, age <65, no SPMI | 3,758.0 | \$6,270,810 | \$1,668.64 | 2,831.0 | \$5,355,229 | \$1,891.64 | 1.134 |
| Community, age <65, with SPMI | 6,450.3 | \$9,197,331 | \$1,425.88 | 4,799.9 | \$6,918,940 | \$1,441.49 | 1.011 |
| Community, age <65, no SPMI | 3,646.1 | \$5,895,776 | \$1,617.02 | 2,713.2 | \$4,594,192 | \$1,693.27 | 1.047 |
| Intervention group | 65,411.2 | \$113,102,577 | \$1,729.10 | 48,134.7 | \$80,642,197 | \$1,675.35 | 0.969 |
| Facility, age 65+, with SPMI | 4,124.0 | \$11,220,281 | \$2,720.73 | 3,032.1 | \$6,007,581 | \$1,981.30 | 0.728 |
| Facility, age 65+, no SPMI | 2,334.6 | \$4,975,511 | \$2,131.24 | 1,729.1 | \$2,804,964 | \$1,622.19 | 0.761 |
| HCBS, age 65+, with SPMI | 8,071.3 | \$15,592,008 | \$1,931.80 | 5,905.3 | \$10,925,349 | \$1,850.10 | 0.958 |
| HCBS, age 65+, no SPMI | 9,031.3 | \$12,021,615 | \$1,331.10 | 6,539.3 | \$9,617,436 | \$1,470.71 | 1.105 |
| Community, age 65+, with SPMI | 6,083.6 | \$10,289,715 | \$1,691.40 | 4,393.1 | \$6,865,789 | \$1,562.85 | 0.924 |
| Community, age 65+, no SPMI | 14,579.5 | \$17,589,282 | \$1,206.44 | 10,565.1 | \$13,135,609 | \$1,243.30 | 1.031 |
| Facility, age <65, with SPMI | 1,284.5 | \$5,382,129 | \$4,189.90 | 973.6 | \$2,747,144 | \$2,821.54 | 0.673 |
| Facility, age <65, no SPMI | 579.0 | \$1,328,071 | \$2,293.73 | 455.5 | \$840,500 | \$1,845.13 | 0.804 |
| HCBS, age <65, with SPMI | 5,469.1 | \$11,128,966 | \$2,034.88 | 4,197.3 | \$8,856,950 | \$2,110.14 | 1.037 |
| HCBS, age <65, no SPMI | 3,758.0 | \$5,231,307 | \$1,392.03 | 2,831.0 | \$4,907,720 | \$1,733.56 | 1.245 |
| Community, age <65, with SPMI | 6,450.3 | \$11,304,842 | \$1,752.61 | 4,799.9 | \$8,385,035 | \$1,746.94 | 0.997 |
| Community, age <65, no SPMI | 3,646.1 | \$7,038,850 | \$1,930.53 | 2,713.2 | \$5,548,120 | \$2,044.86 | 1.059 |

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**Table 4.A —
Summary by cohort of per member per month (PMPM), baseline versus Demonstration Year 3**

| Cohort | Group (comparison/ intervention) | Baseline period | | | Demonstration Year 3 | | | Cost trend (Demonstration Year/baseline period) |
|---------|--|---|-----------------------------|------------|---|-----------------------------|------------|--|
| | | Number of eligible months (intervention group) | Medicare incurred claims | PMPM | Number of eligible months (intervention group) | Medicare incurred claims | PMPM | |
| 1A | C | 48,488.0 | \$78,754,198 | \$1,624.20 | 14,540.4 | \$27,919,868 | \$1,920.16 | 1.182 |
| | I | 48,488.0 | \$128,622,626 | \$2,652.67 | 14,540.4 | \$36,051,308 | \$2,479.39 | 0.935 |
| 1B | C | 83,567.1 | \$131,605,106 | \$1,574.84 | 28,211.3 | \$51,776,952 | \$1,835.33 | 1.165 |
| | I | 83,567.1 | \$108,476,913 | \$1,298.08 | 28,211.3 | \$40,016,796 | \$1,418.47 | 1.093 |
| 1C | C | 7,946.8 | \$12,115,020 | \$1,524.51 | 2,723.6 | \$4,987,358 | \$1,831.17 | 1.201 |
| | I | 7,946.8 | \$7,898,710 | \$993.94 | 2,723.6 | \$3,410,228 | \$1,252.11 | 1.260 |
| 1D | C | 129,399.2 | \$207,882,769 | \$1,606.52 | 42,529.9 | \$78,947,138 | \$1,856.28 | 1.155 |
| | I | 129,399.2 | \$219,493,469 | \$1,696.25 | 42,529.9 | \$73,252,412 | \$1,722.38 | 1.015 |
| 1E | C | 15,153.3 | \$23,465,894 | \$1,548.56 | 5,500.6 | \$9,906,663 | \$1,801.01 | 1.163 |
| | I | 15,153.3 | \$10,288,068 | \$678.93 | 5,500.6 | \$5,855,780 | \$1,064.57 | 1.568 |
| 1F | C | 15,986.6 | \$24,688,247 | \$1,544.31 | 5,968.2 | \$10,882,090 | \$1,823.35 | 1.181 |
| | I | 15,986.6 | \$9,731,043 | \$608.70 | 5,968.2 | \$6,178,596 | \$1,035.26 | 1.701 |
| 1 total | C | 300,541.1 | \$478,511,235 | \$1,592.17 | 99,473.9 | \$184,420,069 | \$1,853.95 | 1.164 |
| | I | 300,541.1 | \$484,510,829 | \$1,612.13 | 99,473.9 | \$164,765,120 | \$1,656.37 | 1.027 |
| 2 | C | 4,220.4 | \$7,342,975 | \$1,739.88 | 4,312.1 | \$5,986,553 | \$1,388.33 | 0.798 |
| | I | 4,220.4 | \$9,945,769 | \$2,356.60 | 4,312.1 | \$8,119,493 | \$1,882.97 | 0.799 |
| 3 | C | 61,200.6 | \$93,045,998 | \$1,520.35 | 47,319.8 | \$61,824,588 | \$1,306.53 | 0.859 |
| | I | 61,200.6 | \$103,440,434 | \$1,690.19 | 47,319.8 | \$68,725,816 | \$1,452.37 | 0.859 |
| 4 | C | 62,395.6 | \$96,865,182 | \$1,552.44 | 60,468.5 | \$94,451,494 | \$1,562.00 | 1.006 |
| | I | 62,395.6 | \$108,719,430 | \$1,742.42 | 60,468.5 | \$91,095,889 | \$1,506.50 | 0.865 |

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**Table 4.B —
Summary by cohort of per member per month (PMPM), baseline versus Demonstration Year 4**

| Cohort | Group | Baseline period | | | Demonstration Year 4 | | | Cost trend (Demonstration Year/baseline period) |
|---------|-------|---|-----------------------------|------------|---|-----------------------------|------------|--|
| | | Number of eligible months (intervention group) | Medicare incurred claims | PMPM | Number of eligible months (intervention group) | Medicare incurred claims | PMPM | |
| 1A | C | 48,488.0 | \$78,754,198 | \$1,624.20 | 12,196.5 | \$23,833,789 | \$1,954.14 | 1.203 |
| | I | 48,488.0 | \$128,622,626 | \$2,652.67 | 12,196.5 | \$31,144,889 | \$2,553.58 | 0.963 |
| 1B | C | 83,567.1 | \$131,605,106 | \$1,574.84 | 23,641.9 | \$44,485,413 | \$1,881.63 | 1.195 |
| | I | 83,567.1 | \$108,476,913 | \$1,298.08 | 23,641.9 | \$37,666,761 | \$1,593.22 | 1.227 |
| 1C | C | 7,946.8 | \$12,115,020 | \$1,524.51 | 2,117.5 | \$4,000,204 | \$1,889.13 | 1.239 |
| | I | 7,946.8 | \$7,898,710 | \$993.94 | 2,117.5 | \$2,702,837 | \$1,276.44 | 1.284 |
| 1D | C | 129,399.2 | \$207,882,769 | \$1,606.52 | 35,278.5 | \$66,759,737 | \$1,892.37 | 1.178 |
| | I | 129,399.2 | \$219,493,469 | \$1,696.25 | 35,278.5 | \$65,128,621 | \$1,846.13 | 1.088 |
| 1E | C | 15,153.3 | \$23,465,894 | \$1,548.56 | 4,418.6 | \$8,164,561 | \$1,847.76 | 1.193 |
| | I | 15,153.3 | \$10,288,068 | \$678.93 | 4,418.6 | \$5,380,302 | \$1,217.64 | 1.793 |
| 1F | C | 15,986.6 | \$24,688,247 | \$1,544.31 | 4,911.2 | \$9,222,691 | \$1,877.89 | 1.216 |
| | I | 15,986.6 | \$9,731,043 | \$608.70 | 4,911.2 | \$5,766,735 | \$1,174.20 | 1.929 |
| 1 total | C | 300,541.1 | \$478,511,235 | \$1,592.17 | 82,564.3 | \$156,466,395 | \$1,895.09 | 1.190 |
| | I | 300,541.1 | \$484,510,829 | \$1,612.13 | 82,564.3 | \$147,790,144 | \$1,790.00 | 1.110 |
| 2 | C | 4,220.4 | \$7,342,975 | \$1,739.88 | 3,476.8 | \$5,184,236 | \$1,491.08 | 0.857 |
| | I | 4,220.4 | \$9,945,769 | \$2,356.60 | 3,476.8 | \$6,979,455 | \$2,007.42 | 0.852 |
| 3 | C | 61,200.6 | \$93,045,998 | \$1,520.35 | 37,725.3 | \$53,144,243 | \$1,408.72 | 0.927 |
| | I | 61,200.6 | \$103,440,434 | \$1,690.19 | 37,725.3 | \$54,956,672 | \$1,456.76 | 0.862 |
| 4 | C | 62,395.6 | \$96,865,182 | \$1,552.44 | 46,028.7 | \$69,458,738 | \$1,509.03 | 0.972 |
| | I | 62,395.6 | \$108,719,430 | \$1,742.42 | 46,028.7 | \$68,678,275 | \$1,492.08 | 0.856 |

(continued)

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Table 4.B — (continued)
Summary by cohort of per member per month (PMPM), baseline versus Demonstration Year 4

| Cohort | Group | Baseline period | | | Demonstration Year 4 | | | Cost trend (Demonstration Year/baseline period) |
|--------|-------|---|-----------------------------|------------|---|-----------------------------|------------|--|
| | | Number of eligible months (intervention group) | Medicare incurred claims | PMPM | Number of eligible months (intervention group) | Medicare incurred claims | PMPM | |
| 5A | C | 65,787.6 | \$107,754,944 | \$1,637.92 | 63,414.2 | \$104,696,611 | \$1,651.00 | 1.008 |
| | I | 65,787.6 | \$110,905,078 | \$1,685.80 | 63,414.2 | \$95,623,575 | \$1,507.92 | 0.894 |
| 5B | C | 65,411.2 | \$106,963,285 | \$1,635.24 | 48,134.7 | \$85,443,230 | \$1,775.09 | 1.086 |
| | I | 65,411.2 | \$113,102,577 | \$1,729.10 | 48,134.7 | \$80,642,197 | \$1,675.35 | 0.969 |

5.2 Medicare AGA Adjustments

The trend in health care costs is not uniform across the United States; it varies by geographic area. The purpose of this adjustment is to control for geographic variation in secular cost trends. CMS measures these variations for each calendar year by county with the calculation of the Average Geographic Adjustment (AGA) factors. The factors measure the difference in average Medicare costs in each county from the national average. The factors are used to vary payment rates to Medicare Advantage plans by county. Hospice expenditures are excluded in the calculation of the AGA factors. We calculated the average AGA factor across all beneficiaries in the intervention group and the comparison group for the baseline period and the Demonstration Year separately. To determine the average AGA factor, the non-hospice expenditures for each beneficiary were grouped by calendar year and county of residence, and the weighted average AGA factor was calculated for each cohort and for each period (baseline period vs. Demonstration Year).⁶ *Tables 5.A* and *5.B* show the results of the calculations for Demonstration Years 3 and 4, respectively.

For each cohort and Demonstration Year, the AGA adjustment factor was determined by comparing the trend from the baseline period to the Demonstration Year for the intervention group versus that of the comparison group. For Cohort 1, from the baseline period to Demonstration Year 3, the AGA factor decreased by 0.63 percent (a factor of 0.9937) for the comparison group and increased by 4.52 percent (a factor of 1.0452) for the intervention group. If the AGA had increased by the same 4.52 percent in the comparison area as it did in the intervention area, instead of decreasing by 0.63 percent, then the trend of the comparison group would have increased by an additional 5.18 percent ($1.0452/0.9937 = 1.0518$), which is the AGA adjustment factor that we apply to the comparison group trend. For Cohort 2, the corresponding AGA adjustment factor is 1.0453, for Cohort 3 it is 1.0181 and for Cohort 4 it is 1.0100.

**Table 5.A —
Average AGA factor by group for baseline period and Demonstration Year 3**

| Cohort | Group Comparison Intervention | Baseline period | Demonstration Year 3 | Trend in AGA factor | Adjustment to comparison group trend |
|---------|-------------------------------------|-----------------|-------------------------|------------------------|--|
| 1 total | C | 0.89646 | 0.89083 | 0.99372 | 1.05182 |
| | I | 0.88374 | 0.92369 | 1.04521 | |
| 2 | C | 0.89647 | 0.89460 | 0.99792 | 1.04533 |
| | I | 0.89107 | 0.92953 | 1.04316 | |
| 3 | C | 0.88723 | 0.88898 | 1.00197 | 1.01812 |
| | I | 0.90748 | 0.92574 | 1.02012 | |
| 4 | C | 0.88806 | 0.89131 | 1.00366 | 1.01004 |
| | I | 0.90803 | 0.92051 | 1.01374 | |

⁶ The non-hospice expenditures of each beneficiary were divided by the AGA factor for their county and year and the sum of the results of this division was divided into the total non-hospice expenditures of the cohort.

For Demonstration Year 4, the corresponding calculations produced AGA adjustment factors of 1.05067 for Cohort 1, 1.04521 for Cohort 2, 1.01431 for Cohort 3, 1.00787 for Cohort 4, 0.99335 for Cohort 5A and 0.99658 for Cohort 5B.

**Table 5.B —
Average AGA factor by group for baseline period and Demonstration Year 4**

| Cohort | Group Comparison Intervention | Baseline period | Demonstration Year 4 | Trend in AGA factor | Adjustment to comparison group trend |
|---------|-------------------------------|-----------------|----------------------|---------------------|--------------------------------------|
| 1 total | C | 0.89646 | 0.89972 | 1.00364 | 1.05067 |
| | I | 0.88374 | 0.93190 | 1.05450 | |
| 2 | C | 0.89647 | 0.90186 | 1.00602 | 1.04521 |
| | I | 0.89107 | 0.93696 | 1.05150 | |
| 3 | C | 0.88723 | 0.89849 | 1.01268 | 1.01431 |
| | I | 0.90748 | 0.93214 | 1.02717 | |
| 4 | C | 0.88806 | 0.89823 | 1.01145 | 1.00787 |
| | I | 0.90803 | 0.92566 | 1.01941 | |
| 5A | C | 0.89198 | 0.90302 | 1.01237 | 0.99335 |
| | I | 0.92372 | 0.92894 | 1.00564 | |
| 5B | C | 0.90560 | 0.90589 | 1.00032 | 0.99658 |
| | I | 0.89980 | 0.89701 | 0.99690 | |

Tables 6.A–6.L show the Medicare savings calculations for each cohort and Demonstration Year, taking into account the AGA adjustment factors (but still excluding the outlier adjustment). Column (a) displays the number of member months during the Demonstration Year for the intervention group for each category of beneficiary. Column (b) displays the PMPM during the baseline period for the intervention group beneficiaries. This is the starting PMPM to which the trend factor will be applied to determine the target PMPM. Column (c) is the trend factor obtained by multiplying the PMPM trend from the comparison group by the AGA adjustment factor. Column (d) is the target PMPM, which is the baseline PMPM in column (b) times the trends factor in column (c). Column (e) is the actual PMPM for the intervention group in the Demonstration Year. Column (f) shows the PMPM savings, which is the difference between the actual PMPM in column (e) and the target PMPM in column (d). Multiplying the number of eligible months in column (a) by the PMPM savings gives the total dollar savings of column (g). Finally, column (h) shows the corresponding percentage savings, which is the PMPM savings divided by the target PMPM.

Table 6.G displays the Medicare savings calculation for Cohort 1 in total. The baseline PMPM was \$1,612.13. For Demonstration Year 3, the AGA adjusted trend from the comparison group was 1.185, resulting in a target PMPM of \$1,910.14. The actual PMPM for the intervention group was \$1,656.37, an increase of 2.74 percent over the \$1,612.13 baseline PMPM. Because the intervention group PMPM costs increased at a slower rate than the comparison group costs, we estimate a PMPM Medicare savings of \$253.78, a savings rate of

13.3 percent. The total calculated Medicare savings dollar amount was \$25,244,175. For Demonstration Year 4, we estimate a PMPM Medicare savings of \$163.92, or 8.4 percent, with total calculated dollar savings of \$13,533,660.

For Demonstration Year 3, the same calculations for Cohort 2 (as shown in *Table 6.H.1*) result in a PMPM negative Medicare savings of \$10.69, or -0.6 percent, and a negative savings dollar amount of \$46,097. For Demonstration Year 4 (as shown in *Table 6.H.2*), the savings is \$29.98 on a PMPM basis, 1.5 percent, and \$104,218 total dollars.

For Cohort 3, Demonstration Year 3 savings (as shown in *Table 6.I.1*) is \$30.99 PMPM, or 2.1 percent, and \$1,466,241 in total dollars. Demonstration Year 4 savings (as shown in *Table 6.I.2*) is \$147.66 PMPM, or 9.2 percent, and \$5,570,452 in total dollars.

For Cohort 4, Demonstration Year 3 savings (as shown in *Table 6.J.1*) is \$269.85 PMPM, or 15.2 percent, and \$16,317,609 in total dollars. Demonstration Year 4 savings (as shown in *Table 6.J.2*) is \$209.52 PMPM, or 12.3 percent, and \$9,643,731 in total dollars.

For Cohort 5A, Demonstration Year 4 savings (as shown in *Table 6.K*) is \$189.60 PMPM, or 11.2 percent, and \$12,023,413 in total dollars. For Cohort 5B, Demonstration Year 4 savings (as shown in *Table 6.L*) is \$150.95 PMPM, or 8.3 percent, and \$7,266,147 in total dollars.

**Table 6.A.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1A**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 14,540.4 | \$2,652.67 | 1.235 | \$3,275.81 | \$2,479.39 | \$796.42 | \$11,580,231 | 24.3 |
| Facility, age 65+, with SPMI | 231.9 | \$3,321.06 | 0.867 | \$2,879.18 | \$1,667.71 | \$1,211.47 | \$280,944 | 42.1 |
| Facility, age 65+, no SPMI | 356.4 | \$2,476.33 | 1.007 | \$2,494.37 | \$1,885.82 | \$608.55 | \$216,886 | 24.4 |
| HCBS, age 65+, with SPMI | 613.5 | \$2,903.67 | 1.268 | \$3,683.20 | \$2,696.69 | \$986.51 | \$605,273 | 26.8 |
| HCBS, age 65+, no SPMI | 2,687.8 | \$2,389.27 | 1.446 | \$3,454.82 | \$2,599.01 | \$855.80 | \$2,300,201 | 24.8 |
| Community, age 65+, with SPMI | 329.9 | \$2,067.95 | 1.394 | \$2,883.40 | \$1,406.88 | \$1,476.52 | \$487,144 | 51.2 |
| Community, age 65+, no SPMI | 2,577.6 | \$2,124.06 | 1.424 | \$3,023.72 | \$2,170.47 | \$853.25 | \$2,199,352 | 28.2 |
| Facility, age <65, with SPMI | 84.1 | \$5,306.80 | 0.830 | \$4,406.54 | \$1,791.81 | \$2,614.73 | \$220,028 | 59.3 |
| Facility, age <65, no SPMI | 215.0 | \$4,764.97 | 0.783 | \$3,729.49 | \$3,021.65 | \$707.84 | \$152,186 | 19.0 |
| HCBS, age <65, with SPMI | 1,254.4 | \$2,780.44 | 1.010 | \$2,809.25 | \$2,222.14 | \$587.11 | \$736,475 | 20.9 |
| HCBS, age <65, no SPMI | 3,118.2 | \$2,691.70 | 1.288 | \$3,468.22 | \$2,777.36 | \$690.86 | \$2,154,249 | 19.9 |
| Community, age <65, with SPMI | 951.2 | \$2,446.14 | 1.036 | \$2,533.98 | \$2,671.80 | -\$137.82 | -\$131,097 | -5.4 |
| Community, age <65, no SPMI | 2,120.2 | \$3,319.71 | 1.117 | \$3,708.28 | \$2,595.86 | \$1,112.42 | \$2,358,590 | 30.0 |

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**Table 6.A.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1A**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 12,196.5 | \$2,652.67 | 1.263 | \$3,351.18 | \$2,553.58 | \$797.59 | \$9,727,900 | 23.8 |
| Facility, age 65+, with SPMI | 174.0 | \$3,321.06 | 0.863 | \$2,867.00 | \$2,310.01 | \$556.99 | \$96,897 | 19.4 |
| Facility, age 65+, no SPMI | 246.6 | \$2,476.33 | 0.969 | \$2,399.89 | \$1,412.25 | \$987.63 | \$243,532 | 41.2 |
| HCBS, age 65+, with SPMI | 442.2 | \$2,903.67 | 1.330 | \$3,860.87 | \$2,634.07 | \$1,226.80 | \$542,482 | 31.8 |
| HCBS, age 65+, no SPMI | 2,174.8 | \$2,389.27 | 1.545 | \$3,690.81 | \$2,592.37 | \$1,098.43 | \$2,388,897 | 29.8 |
| Community, age 65+, with SPMI | 278.3 | \$2,067.95 | 1.460 | \$3,018.75 | \$1,634.74 | \$1,384.01 | \$385,217 | 45.8 |
| Community, age 65+, no SPMI | 2,015.5 | \$2,124.06 | 1.567 | \$3,328.07 | \$2,668.02 | \$660.06 | \$1,330,341 | 19.8 |
| Facility, age <65, with SPMI | 69.0 | \$5,306.80 | 0.825 | \$4,378.56 | \$723.48 | \$3,655.08 | \$252,201 | 83.5 |
| Facility, age <65, no SPMI | 174.8 | \$4,764.97 | 0.831 | \$3,960.45 | \$2,659.92 | \$1,300.53 | \$227,268 | 32.8 |
| HCBS, age <65, with SPMI | 1,144.6 | \$2,780.44 | 0.925 | \$2,570.97 | \$1,841.19 | \$729.78 | \$835,300 | 28.4 |
| HCBS, age <65, no SPMI | 2,726.6 | \$2,691.70 | 1.219 | \$3,280.59 | \$2,575.24 | \$705.34 | \$1,923,198 | 21.5 |
| Community, age <65, with SPMI | 835.2 | \$2,446.14 | 1.013 | \$2,477.68 | \$3,359.66 | -\$881.98 | -\$736,671 | -35.6 |
| Community, age <65, no SPMI | 1,915.0 | \$3,319.71 | 1.187 | \$3,942.09 | \$2,772.75 | \$1,169.34 | \$2,239,241 | 29.7 |

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**Table 6.B.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1B**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 28,211.3 | \$1,298.08 | 1.205 | \$1,564.15 | \$1,418.47 | \$145.68 | \$4,109,802 | 9.3 |
| Facility, age 65+, with SPMI | 595.9 | \$1,581.91 | 0.866 | \$1,369.38 | \$1,290.20 | \$79.18 | \$47,182 | 5.8 |
| Facility, age 65+, no SPMI | 963.4 | \$1,689.87 | 1.005 | \$1,698.18 | \$1,058.49 | \$639.69 | \$616,301 | 37.7 |
| HCBS, age 65+, with SPMI | 1,180.7 | \$1,412.22 | 1.267 | \$1,789.72 | \$1,772.51 | \$17.21 | \$20,314 | 1.0 |
| HCBS, age 65+, no SPMI | 4,851.2 | \$1,178.09 | 1.448 | \$1,706.14 | \$1,576.68 | \$129.46 | \$628,039 | 7.6 |
| Community, age 65+, with SPMI | 722.6 | \$1,140.11 | 1.394 | \$1,589.23 | \$1,231.07 | \$358.16 | \$258,821 | 22.5 |
| Community, age 65+, no SPMI | 5,795.9 | \$971.09 | 1.426 | \$1,384.89 | \$1,299.14 | \$85.75 | \$497,025 | 6.2 |
| Facility, age <65, with SPMI | 278.0 | \$3,244.58 | 0.813 | \$2,638.76 | \$1,381.08 | \$1,257.67 | \$349,633 | 47.7 |
| Facility, age <65, no SPMI | 152.7 | \$3,733.76 | 0.770 | \$2,873.73 | \$767.74 | \$2,105.99 | \$321,674 | 73.3 |
| HCBS, age <65, with SPMI | 2,672.0 | \$1,385.95 | 1.011 | \$1,400.52 | \$1,327.32 | \$73.20 | \$195,603 | 5.2 |
| HCBS, age <65, no SPMI | 3,788.8 | \$1,488.47 | 1.289 | \$1,919.28 | \$1,462.12 | \$457.16 | \$1,732,104 | 23.8 |
| Community, age <65, with SPMI | 3,177.1 | \$1,112.23 | 1.035 | \$1,151.51 | \$1,234.43 | -\$82.92 | -\$263,448 | -7.2 |
| Community, age <65, no SPMI | 4,032.8 | \$1,390.75 | 1.117 | \$1,553.36 | \$1,626.13 | -\$72.76 | -\$293,447 | -4.7 |

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Table 6.B.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1B

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 23,641.9 | \$1,298.08 | 1.234 | \$1,601.55 | \$1,593.22 | \$8.33 | \$196,932 | 0.5 |
| Facility, age 65+, with SPMI | 424.0 | \$1,581.91 | 0.862 | \$1,363.28 | \$1,356.14 | \$7.14 | \$3,029 | 0.5 |
| Facility, age 65+, no SPMI | 651.8 | \$1,689.87 | 0.967 | \$1,634.34 | \$1,330.05 | \$304.29 | \$198,327 | 18.6 |
| HCBS, age 65+, with SPMI | 963.6 | \$1,412.22 | 1.328 | \$1,875.39 | \$1,344.42 | \$530.96 | \$511,623 | 28.3 |
| HCBS, age 65+, no SPMI | 3,912.7 | \$1,178.09 | 1.547 | \$1,822.59 | \$1,715.22 | \$107.38 | \$420,136 | 5.9 |
| Community, age 65+, with SPMI | 595.9 | \$1,140.11 | 1.459 | \$1,662.86 | \$1,720.01 | -\$57.15 | -\$34,057 | -3.4 |
| Community, age 65+, no SPMI | 4,628.2 | \$971.09 | 1.570 | \$1,524.67 | \$1,605.29 | -\$80.62 | -\$373,135 | -5.3 |
| Facility, age <65, with SPMI | 241.6 | \$3,244.58 | 0.823 | \$2,670.25 | \$1,299.91 | \$1,370.33 | \$331,034 | 51.3 |
| Facility, age <65, no SPMI | 130.4 | \$3,733.76 | 0.819 | \$3,056.42 | \$1,269.57 | \$1,786.84 | \$233,064 | 58.5 |
| HCBS, age <65, with SPMI | 2,473.5 | \$1,385.95 | 0.924 | \$1,281.05 | \$1,234.91 | \$46.14 | \$114,128 | 3.6 |
| HCBS, age <65, no SPMI | 3,391.1 | \$1,488.47 | 1.219 | \$1,813.96 | \$1,693.80 | \$120.15 | \$407,458 | 6.6 |
| Community, age <65, with SPMI | 2,709.9 | \$1,112.23 | 1.015 | \$1,128.95 | \$1,467.63 | -\$338.68 | -\$917,765 | -30.0 |
| Community, age <65, no SPMI | 3,519.2 | \$1,390.75 | 1.187 | \$1,651.37 | \$1,849.40 | -\$198.03 | -\$696,909 | -12.0 |

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**Table 6.C.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1C**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 2,723.6 | \$993.94 | 1.238 | \$1,230.97 | \$1,252.11 | -\$21.14 | -\$57,574 | -1.7 |
| Facility, age 65+, with SPMI | 24.0 | \$2,437.80 | 0.863 | \$2,103.24 | \$65.66 | \$2,037.58 | \$48,902 | 96.9 |
| Facility, age 65+, no SPMI | 96.4 | \$1,615.10 | 1.001 | \$1,616.41 | \$1,025.97 | \$590.44 | \$56,926 | 36.5 |
| HCBS, age 65+, with SPMI | 165.1 | \$978.12 | 1.265 | \$1,237.01 | \$1,186.63 | \$50.39 | \$8,320 | 4.1 |
| HCBS, age 65+, no SPMI | 469.8 | \$905.53 | 1.451 | \$1,314.33 | \$1,475.96 | -\$161.63 | -\$75,939 | -12.3 |
| Community, age 65+, with SPMI | 145.0 | \$1,509.16 | 1.376 | \$2,076.74 | \$1,834.13 | \$242.61 | \$35,178 | 11.7 |
| Community, age 65+, no SPMI | 677.4 | \$760.14 | 1.421 | \$1,080.06 | \$1,020.14 | \$59.92 | \$40,588 | 5.5 |
| Facility, age <65, with SPMI | 6.0 | \$4,384.61 | 0.891 | \$3,906.99 | \$7,863.92 | -\$3,956.93 | -\$23,614 | -101.3 |
| Facility, age <65, no SPMI | 24.0 | \$10,040.68 | 0.700 | \$7,024.77 | \$5,520.18 | \$1,504.59 | \$36,110 | 21.4 |
| HCBS, age <65, with SPMI | 227.0 | \$739.84 | 1.006 | \$744.61 | \$628.56 | \$116.06 | \$26,345 | 15.6 |
| HCBS, age <65, no SPMI | 295.0 | \$880.51 | 1.286 | \$1,131.94 | \$977.46 | \$154.48 | \$45,578 | 13.6 |
| Community, age <65, with SPMI | 271.8 | \$832.44 | 1.035 | \$861.42 | \$1,328.97 | -\$467.54 | -\$127,082 | -54.3 |
| Community, age <65, no SPMI | 322.0 | \$1,013.70 | 1.111 | \$1,126.56 | \$1,526.83 | -\$400.27 | -\$128,888 | -35.5 |

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**Table 6.C.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1C**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--|---|--|---|--|---|--|--------------------------------|
| Total | 2,117.5 | \$993.94 | 1.294 | \$1,286.45 | \$1,276.44 | \$10.02 | \$21,208 | 0.8 |
| Facility, age 65+, with SPMI | 17.0 | \$2,437.80 | 0.868 | \$2,116.19 | \$890.67 | \$1,225.52 | \$20,834 | 57.9 |
| Facility, age 65+, no SPMI | 41.8 | \$1,615.10 | 0.962 | \$1,553.17 | \$626.66 | \$926.50 | \$38,753 | 59.7 |
| HCBS, age 65+, with SPMI | 125.3 | \$978.12 | 1.327 | \$1,297.52 | \$2,143.80 | -\$846.28 | -\$106,072 | -65.2 |
| HCBS, age 65+, no SPMI | 356.9 | \$905.53 | 1.548 | \$1,401.33 | \$1,234.36 | \$166.97 | \$59,598 | 11.9 |
| Community, age 65+, with SPMI | 121.5 | \$1,509.16 | 1.444 | \$2,179.24 | \$800.29 | \$1,378.95 | \$167,609 | 63.3 |
| Community, age 65+, no SPMI | 467.6 | \$760.14 | 1.564 | \$1,189.17 | \$1,615.03 | -\$425.86 | -\$199,135 | -35.8 |
| Facility, age <65, with SPMI | 12.0 | \$4,384.61 | 0.821 | \$3,598.95 | \$7,222.17 | -\$3,623.23 | -\$43,479 | -100.7 |
| Facility, age <65, no SPMI | 24.0 | \$10,040.68 | 0.744 | \$7,469.77 | \$270.92 | \$7,198.86 | \$172,773 | 96.4 |
| HCBS, age <65, with SPMI | 207.4 | \$739.84 | 0.920 | \$680.64 | \$629.56 | \$51.07 | \$10,594 | 7.5 |
| HCBS, age <65, no SPMI | 249.2 | \$880.51 | 1.218 | \$1,072.32 | \$1,289.43 | -\$217.11 | -\$54,094 | -20.2 |
| Community, age <65, with SPMI | 239.3 | \$832.44 | 1.014 | \$844.38 | \$1,108.31 | -\$263.93 | -\$63,164 | -31.3 |
| Community, age <65, no SPMI | 255.3 | \$1,013.70 | 1.184 | \$1,200.24 | \$1,133.69 | \$66.55 | \$16,992 | 5.5 |

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**Table 6.D.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1D**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 42,529.9 | \$1,696.25 | 1.195 | \$2,026.82 | \$1,722.38 | \$304.44 | \$12,947,823 | 15.0 |
| Facility, age 65+, with SPMI | 700.2 | \$2,345.53 | 0.868 | \$2,035.70 | \$1,358.55 | \$677.15 | \$474,158 | 33.3 |
| Facility, age 65+, no SPMI | 1,809.9 | \$2,040.09 | 1.002 | \$2,044.52 | \$1,374.65 | \$669.88 | \$1,212,420 | 32.8 |
| HCBS, age 65+, with SPMI | 1,682.5 | \$2,012.00 | 1.267 | \$2,548.86 | \$1,924.54 | \$624.33 | \$1,050,437 | 24.5 |
| HCBS, age 65+, no SPMI | 7,170.9 | \$1,699.59 | 1.445 | \$2,455.92 | \$1,973.78 | \$482.14 | \$3,457,338 | 19.6 |
| Community, age 65+, with SPMI | 989.1 | \$1,450.66 | 1.393 | \$2,020.93 | \$1,607.67 | \$413.25 | \$408,729 | 20.4 |
| Community, age 65+, no SPMI | 6,412.1 | \$1,352.84 | 1.424 | \$1,927.03 | \$1,528.99 | \$398.04 | \$2,552,271 | 20.7 |
| Facility, age <65, with SPMI | 233.8 | \$3,271.35 | 0.820 | \$2,681.34 | \$2,125.80 | \$555.54 | \$129,887 | 20.7 |
| Facility, age <65, no SPMI | 487.0 | \$4,766.02 | 0.780 | \$3,717.53 | \$2,770.60 | \$946.93 | \$461,154 | 25.5 |
| HCBS, age <65, with SPMI | 3,394.5 | \$1,644.72 | 1.010 | \$1,661.27 | \$1,705.55 | -\$44.29 | -\$150,326 | -2.7 |
| HCBS, age <65, no SPMI | 7,052.0 | \$1,817.35 | 1.288 | \$2,340.75 | \$1,902.21 | \$438.54 | \$3,092,564 | 18.7 |
| Community, age <65, with SPMI | 5,070.6 | \$1,327.43 | 1.034 | \$1,372.02 | \$1,222.79 | \$149.23 | \$756,677 | 10.9 |
| Community, age <65, no SPMI | 7,527.4 | \$1,578.14 | 1.118 | \$1,764.15 | \$1,830.24 | -\$66.09 | -\$497,486 | -3.7 |

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**Table 6.D.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1D**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period P MPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|--|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 35,278.5 | \$1,696.25 | 1.214 | \$2,059.03 | \$1,846.13 | \$212.90 | \$7,510,627 | 10.3 |
| Facility, age 65+, with SPMI | 479.9 | \$2,345.53 | 0.863 | \$2,024.16 | \$1,776.09 | \$248.07 | \$119,053 | 12.3 |
| Facility, age 65+, no SPMI | 1,197.6 | \$2,040.09 | 0.961 | \$1,961.24 | \$1,341.61 | \$619.63 | \$742,069 | 31.6 |
| HCBS, age 65+, with SPMI | 1,341.4 | \$2,012.00 | 1.329 | \$2,673.31 | \$2,157.80 | \$515.52 | \$691,518 | 19.3 |
| HCBS, age 65+, no SPMI | 5,705.5 | \$1,699.59 | 1.544 | \$2,624.55 | \$2,140.23 | \$484.32 | \$2,763,317 | 18.5 |
| Community, age 65+, with SPMI | 772.4 | \$1,450.66 | 1.456 | \$2,112.86 | \$1,378.41 | \$734.46 | \$567,301 | 34.8 |
| Community, age 65+, no SPMI | 5,229.4 | \$1,352.84 | 1.568 | \$2,121.53 | \$1,814.82 | \$306.70 | \$1,603,865 | 14.5 |
| Facility, age <65, with SPMI | 179.3 | \$3,271.35 | 0.819 | \$2,680.82 | \$1,455.52 | \$1,225.30 | \$219,645 | 45.7 |
| Facility, age <65, no SPMI | 330.1 | \$4,766.02 | 0.834 | \$3,976.47 | \$2,417.55 | \$1,558.92 | \$514,605 | 39.2 |
| HCBS, age <65, with SPMI | 3,123.1 | \$1,644.72 | 0.924 | \$1,519.89 | \$1,589.77 | -\$69.87 | -\$218,223 | -4.6 |
| HCBS, age <65, no SPMI | 6,132.5 | \$1,817.35 | 1.219 | \$2,214.65 | \$1,989.00 | \$225.65 | \$1,383,809 | 10.2 |
| Community, age <65, with SPMI | 4,374.3 | \$1,327.43 | 1.012 | \$1,343.84 | \$1,470.22 | -\$126.38 | -\$552,821 | -9.4 |
| Community, age <65, no SPMI | 6,413.0 | \$1,578.14 | 1.189 | \$1,876.30 | \$1,926.75 | -\$50.45 | -\$323,511 | -2.7 |

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**Table 6.E.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1E**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 5,500.6 | \$678.93 | 1.195 | \$811.32 | \$1,064.57 | -\$253.25 | -\$1,393,018 | -31.2 |
| Facility, age 65+, with SPMI | 48.0 | \$1,222.01 | 0.873 | \$1,067.14 | \$94.38 | \$972.76 | \$46,692 | 91.2 |
| Facility, age 65+, no SPMI | 283.9 | \$860.02 | 1.001 | \$861.18 | \$579.06 | \$282.12 | \$80,104 | 32.8 |
| HCBS, age 65+, with SPMI | 69.4 | \$682.88 | 1.258 | \$859.27 | \$3,012.54 | -\$2,153.27 | -\$149,372 | -250.6 |
| HCBS, age 65+, no SPMI | 923.0 | \$808.12 | 1.445 | \$1,167.62 | \$1,347.25 | -\$179.63 | -\$165,806 | -15.4 |
| Community, age 65+, with SPMI | 109.1 | \$771.30 | 1.386 | \$1,069.19 | \$1,095.62 | -\$26.43 | -\$2,882 | -2.5 |
| Community, age 65+, no SPMI | 1,318.2 | \$534.63 | 1.424 | \$761.51 | \$828.54 | -\$67.02 | -\$88,351 | -8.8 |
| Facility, age <65, with SPMI | 53.0 | \$422.56 | 0.817 | \$345.21 | \$2,635.08 | -\$2,289.87 | -\$121,363 | -663.3 |
| Facility, age <65, no SPMI | 79.6 | \$1,235.18 | 0.783 | \$967.57 | \$1,586.41 | -\$618.84 | -\$49,247 | -64.0 |
| HCBS, age <65, with SPMI | 324.4 | \$582.37 | 1.011 | \$588.74 | \$1,156.36 | -\$567.62 | -\$184,156 | -96.4 |
| HCBS, age <65, no SPMI | 685.5 | \$573.21 | 1.289 | \$738.79 | \$1,337.45 | -\$598.66 | -\$410,367 | -81.0 |
| Community, age <65, with SPMI | 714.9 | \$695.05 | 1.032 | \$717.58 | \$830.67 | -\$113.09 | -\$80,853 | -15.8 |
| Community, age <65, no SPMI | 891.6 | \$608.17 | 1.113 | \$676.85 | \$976.79 | -\$299.94 | -\$267,415 | -44.3 |

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**Table 6.E.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1E**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 4,418.6 | \$678.93 | 1.217 | \$826.36 | \$1,217.64 | -\$391.28 | -\$1,728,929 | -47.4 |
| Facility, age 65+, with SPMI | 39.4 | \$1,222.01 | 0.861 | \$1,052.49 | \$627.72 | \$424.77 | \$16,736 | 40.4 |
| Facility, age 65+, no SPMI | 156.4 | \$860.02 | 0.958 | \$824.01 | \$1,880.63 | -\$1,056.61 | -\$165,263 | -128.2 |
| HCBS, age 65+, with SPMI | 50.6 | \$682.88 | 1.321 | \$901.87 | \$1,325.09 | -\$423.22 | -\$21,407 | -46.9 |
| HCBS, age 65+, no SPMI | 678.9 | \$808.12 | 1.542 | \$1,245.94 | \$1,674.73 | -\$428.79 | -\$291,095 | -34.4 |
| Community, age 65+, with SPMI | 83.2 | \$771.30 | 1.454 | \$1,121.15 | \$1,335.36 | -\$214.21 | -\$17,815 | -19.1 |
| Community, age 65+, no SPMI | 999.1 | \$534.63 | 1.568 | \$838.35 | \$1,051.08 | -\$212.73 | -\$212,532 | -25.4 |
| Facility, age <65, with SPMI | 48.0 | \$422.56 | 0.821 | \$346.78 | \$1,955.82 | -\$1,609.04 | -\$77,234 | -464.0 |
| Facility, age <65, no SPMI | 63.0 | \$1,235.18 | 0.826 | \$1,020.25 | \$987.36 | \$32.89 | \$2,072 | 3.2 |
| HCBS, age <65, with SPMI | 317.8 | \$582.37 | 0.925 | \$538.69 | \$1,032.27 | -\$493.58 | -\$156,880 | -91.6 |
| HCBS, age <65, no SPMI | 589.8 | \$573.21 | 1.221 | \$699.62 | \$1,207.29 | -\$507.67 | -\$299,412 | -72.6 |
| Community, age <65, with SPMI | 626.1 | \$695.05 | 1.015 | \$705.41 | \$884.67 | -\$179.26 | -\$112,239 | -25.4 |
| Community, age <65, no SPMI | 766.4 | \$608.17 | 1.185 | \$720.69 | \$1,234.61 | -\$513.93 | -\$393,861 | -71.3 |

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**Table 6.F.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1F**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 5,968.2 | \$608.70 | 1.166 | \$709.68 | \$1,035.26 | -\$325.57 | -\$1,943,089 | -45.9 |
| Facility, age 65+, with SPMI | 53.5 | \$1,241.30 | 0.857 | \$1,063.60 | \$353.98 | \$709.62 | \$37,957 | 66.7 |
| Facility, age 65+, no SPMI | 199.2 | \$1,121.79 | 1.002 | \$1,123.75 | \$923.23 | \$200.52 | \$39,952 | 17.8 |
| HCBS, age 65+, with SPMI | 218.0 | \$803.19 | 1.257 | \$1,009.25 | \$1,893.58 | -\$884.34 | -\$192,785 | -87.6 |
| HCBS, age 65+, no SPMI | 750.3 | \$690.94 | 1.439 | \$994.56 | \$1,135.84 | -\$141.29 | -\$106,014 | -14.2 |
| Community, age 65+, with SPMI | 141.0 | \$719.43 | 1.386 | \$997.14 | \$925.57 | \$71.57 | \$10,091 | 7.2 |
| Community, age 65+, no SPMI | 1,474.7 | \$477.67 | 1.419 | \$677.78 | \$1,406.35 | -\$728.57 | -\$1,074,450 | -107.5 |
| Facility, age <65, with SPMI | 60.0 | \$551.42 | 0.808 | \$445.44 | \$1,745.80 | -\$1,300.36 | -\$78,022 | -291.9 |
| Facility, age <65, no SPMI | 47.7 | \$441.48 | 0.786 | \$347.00 | \$1,573.18 | -\$1,226.19 | -\$58,540 | -353.4 |
| HCBS, age <65, with SPMI | 306.5 | \$725.74 | 1.010 | \$732.86 | \$801.90 | -\$69.04 | -\$21,161 | -9.4 |
| HCBS, age <65, no SPMI | 883.4 | \$381.65 | 1.291 | \$492.76 | \$700.12 | -\$207.36 | -\$183,174 | -42.1 |
| Community, age <65, with SPMI | 550.0 | \$779.84 | 1.034 | \$806.62 | \$768.52 | \$38.10 | \$20,955 | 4.7 |
| Community, age <65, no SPMI | 1,283.8 | \$489.77 | 1.116 | \$546.41 | \$809.62 | -\$263.21 | -\$337,898 | -48.2 |

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**Table 6.F.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1F**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 4,911.2 | \$608.70 | 1.195 | \$727.45 | \$1,174.20 | -\$446.75 | -\$2,194,077 | -61.4 |
| Facility, age 65+, with SPMI | 36.0 | \$1,241.30 | 0.858 | \$1,064.58 | \$428.27 | \$636.31 | \$22,907 | 59.8 |
| Facility, age 65+, no SPMI | 148.4 | \$1,121.79 | 0.960 | \$1,076.48 | \$1,167.58 | -\$91.11 | -\$13,522 | -8.5 |
| HCBS, age 65+, with SPMI | 182.6 | \$803.19 | 1.319 | \$1,059.21 | \$2,391.37 | -\$1,332.16 | -\$243,312 | -125.8 |
| HCBS, age 65+, no SPMI | 561.6 | \$690.94 | 1.537 | \$1,061.66 | \$1,171.48 | -\$109.82 | -\$61,677 | -10.3 |
| Community, age 65+, with SPMI | 130.0 | \$719.43 | 1.449 | \$1,042.81 | \$679.60 | \$363.22 | \$47,218 | 34.8 |
| Community, age 65+, no SPMI | 1,151.3 | \$477.67 | 1.562 | \$746.25 | \$1,446.14 | -\$699.89 | -\$805,748 | -93.8 |
| Facility, age <65, with SPMI | 47.0 | \$551.42 | 0.813 | \$448.13 | \$1,722.11 | -\$1,273.98 | -\$59,877 | -284.3 |
| Facility, age <65, no SPMI | 36.0 | \$441.48 | 0.836 | \$368.97 | \$226.17 | \$142.80 | \$5,141 | 38.7 |
| HCBS, age <65, with SPMI | 263.2 | \$725.74 | 0.922 | \$669.17 | \$432.51 | \$236.66 | \$62,295 | 35.4 |
| HCBS, age <65, no SPMI | 770.6 | \$381.65 | 1.219 | \$465.37 | \$834.86 | -\$369.48 | -\$284,725 | -79.4 |
| Community, age <65, with SPMI | 483.0 | \$779.84 | 1.012 | \$788.85 | \$1,309.56 | -\$520.70 | -\$251,499 | -66.0 |
| Community, age <65, no SPMI | 1,101.5 | \$489.77 | 1.187 | \$581.11 | \$1,136.08 | -\$554.97 | -\$611,278 | -95.5 |

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**Table 6.G.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1 total**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 99,473.9 | \$1,612.13 | 1.185 | \$1,910.14 | \$1,656.37 | \$253.78 | \$25,244,175 | 13.3 |
| Facility, age 65+, with SPMI | 1,653.5 | \$2,187.68 | 0.848 | \$1,855.30 | \$1,289.32 | \$565.98 | \$935,834 | 30.5 |
| Facility, age 65+, no SPMI | 3,709.3 | \$1,891.49 | 0.976 | \$1,846.62 | \$1,247.43 | \$599.19 | \$2,222,589 | 32.4 |
| HCBS, age 65+, with SPMI | 3,929.2 | \$1,892.37 | 1.230 | \$2,327.50 | \$1,985.91 | \$341.59 | \$1,342,187 | 14.7 |
| HCBS, age 65+, no SPMI | 16,853.1 | \$1,566.85 | 1.424 | \$2,231.95 | \$1,873.69 | \$358.26 | \$6,037,821 | 16.1 |
| Community, age 65+, with SPMI | 2,436.7 | \$1,375.13 | 1.390 | \$1,911.16 | \$1,419.89 | \$491.27 | \$1,197,081 | 25.7 |
| Community, age 65+, no SPMI | 18,255.9 | \$1,218.15 | 1.390 | \$1,693.26 | \$1,467.22 | \$226.03 | \$4,126,435 | 13.3 |
| Facility, age <65, with SPMI | 714.9 | \$3,424.47 | 0.735 | \$2,517.24 | \$1,850.66 | \$666.58 | \$476,550 | 26.5 |
| Facility, age <65, no SPMI | 1,006.1 | \$4,229.44 | 0.779 | \$3,293.40 | \$2,435.27 | \$858.13 | \$863,336 | 26.1 |
| HCBS, age <65, with SPMI | 8,178.9 | \$1,670.54 | 0.987 | \$1,649.37 | \$1,575.67 | \$73.70 | \$602,780 | 4.5 |
| HCBS, age <65, no SPMI | 15,822.9 | \$1,786.30 | 1.269 | \$2,266.91 | \$1,860.47 | \$406.43 | \$6,430,954 | 17.9 |
| Community, age <65, with SPMI | 10,735.7 | \$1,286.74 | 1.029 | \$1,324.24 | \$1,307.92 | \$16.32 | \$175,152 | 1.2 |
| Community, age <65, no SPMI | 16,177.8 | \$1,647.99 | 1.091 | \$1,797.16 | \$1,745.64 | \$51.52 | \$833,456 | 2.9 |

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**Table 6.G.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1 total**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 82,564.3 | \$1,612.13 | 1.212 | \$1,953.92 | \$1,790.00 | \$163.92 | \$13,533,660 | 8.4 |
| Facility, age 65+, with SPMI | 1,170.2 | \$2,187.68 | 0.845 | \$1,849.13 | \$1,610.33 | \$238.80 | \$279,456 | 12.9 |
| Facility, age 65+, no SPMI | 2,442.6 | \$1,891.49 | 0.944 | \$1,784.72 | \$1,357.35 | \$427.37 | \$1,043,895 | 23.9 |
| HCBS, age 65+, with SPMI | 3,105.7 | \$1,892.37 | 1.276 | \$2,415.54 | \$1,972.86 | \$442.67 | \$1,374,831 | 18.3 |
| HCBS, age 65+, no SPMI | 13,390.5 | \$1,566.85 | 1.529 | \$2,395.35 | \$2,001.10 | \$394.25 | \$5,279,176 | 16.5 |
| Community, age 65+, with SPMI | 1,981.4 | \$1,375.13 | 1.452 | \$1,997.02 | \$1,434.03 | \$562.98 | \$1,115,472 | 28.2 |
| Community, age 65+, no SPMI | 14,491.1 | \$1,218.15 | 1.536 | \$1,870.90 | \$1,778.18 | \$92.72 | \$1,343,656 | 5.0 |
| Facility, age <65, with SPMI | 596.8 | \$3,424.47 | 0.738 | \$2,527.74 | \$1,485.08 | \$1,042.66 | \$622,290 | 41.2 |
| Facility, age <65, no SPMI | 758.3 | \$4,229.44 | 0.829 | \$3,508.21 | \$1,985.14 | \$1,523.07 | \$1,154,922 | 43.4 |
| HCBS, age <65, with SPMI | 7,529.7 | \$1,670.54 | 0.902 | \$1,506.93 | \$1,420.98 | \$85.95 | \$647,214 | 5.7 |
| HCBS, age <65, no SPMI | 13,859.7 | \$1,786.30 | 1.200 | \$2,144.05 | \$1,922.09 | \$221.96 | \$3,076,235 | 10.4 |
| Community, age <65, with SPMI | 9,267.9 | \$1,286.74 | 1.009 | \$1,298.24 | \$1,582.46 | -\$284.22 | -\$2,634,159 | -21.9 |
| Community, age <65, no SPMI | 13,970.4 | \$1,647.99 | 1.168 | \$1,924.94 | \$1,908.43 | \$16.51 | \$230,673 | 0.9 |

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**Table 6.H.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 2**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 4,312.1 | \$2,356.60 | 0.794 | \$1,872.28 | \$1,882.97 | –\$10.69 | –\$46,097 | –0.6 |
| Facility, age 65+, with SPMI | 32.0 | \$6,327.51 | 0.766 | \$4,845.90 | \$778.23 | \$4,067.67 | \$130,166 | 83.9 |
| Facility, age 65+, no SPMI | 139.5 | \$5,338.95 | 0.524 | \$2,799.02 | \$520.65 | \$2,278.37 | \$317,870 | 81.4 |
| HCBS, age 65+, with SPMI | 143.4 | \$1,791.38 | 0.988 | \$1,770.65 | \$2,088.66 | –\$318.02 | –\$45,599 | –18.0 |
| HCBS, age 65+, no SPMI | 633.3 | \$2,315.40 | 1.123 | \$2,599.24 | \$1,900.73 | \$698.51 | \$442,358 | 26.9 |
| Community, age 65+, with SPMI | 137.9 | \$2,564.32 | 1.093 | \$2,802.52 | \$2,294.13 | \$508.38 | \$70,092 | 18.1 |
| Community, age 65+, no SPMI | 781.1 | \$2,029.05 | 0.890 | \$1,806.54 | \$1,123.69 | \$682.85 | \$533,363 | 37.8 |
| Facility, age <65, with SPMI | 53.0 | \$2,265.17 | 0.573 | \$1,297.63 | \$925.56 | \$372.07 | \$19,720 | 28.7 |
| Facility, age <65, no SPMI | 30.0 | \$9,194.32 | 0.562 | \$5,170.17 | \$2,589.28 | \$2,580.88 | \$77,427 | 49.9 |
| HCBS, age <65, with SPMI | 276.8 | \$2,892.19 | 0.606 | \$1,753.52 | \$2,095.07 | –\$341.55 | –\$94,544 | –19.5 |
| HCBS, age <65, no SPMI | 718.1 | \$2,269.10 | 0.920 | \$2,087.04 | \$2,094.48 | –\$7.45 | –\$5,347 | –0.4 |
| Community, age <65, with SPMI | 315.5 | \$2,048.38 | 0.685 | \$1,403.29 | \$999.59 | \$403.70 | \$127,373 | 28.8 |
| Community, age <65, no SPMI | 1,051.5 | \$1,441.79 | 0.778 | \$1,121.92 | \$2,661.59 | –\$1,539.67 | –\$1,618,973 | –137.2 |

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**Table 6.H.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 2**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 3,476.8 | \$2,356.60 | 0.865 | \$2,037.40 | \$2,007.42 | \$29.98 | \$104,218 | 1.5 |
| Facility, age 65+, with SPMI | 36.0 | \$6,327.51 | 0.505 | \$3,194.46 | \$1,170.39 | \$2,024.08 | \$72,867 | 63.4 |
| Facility, age 65+, no SPMI | 125.4 | \$5,338.95 | 0.636 | \$3,394.24 | \$668.88 | \$2,725.36 | \$341,637 | 80.3 |
| HCBS, age 65+, with SPMI | 105.0 | \$1,791.38 | 1.213 | \$2,173.04 | \$1,324.68 | \$848.36 | \$89,078 | 39.0 |
| HCBS, age 65+, no SPMI | 492.2 | \$2,315.40 | 1.079 | \$2,498.51 | \$2,930.04 | -\$431.54 | -\$212,422 | -17.3 |
| Community, age 65+, with SPMI | 98.5 | \$2,564.32 | 1.128 | \$2,891.36 | \$2,593.63 | \$297.73 | \$29,326 | 10.3 |
| Community, age 65+, no SPMI | 620.5 | \$2,029.05 | 1.094 | \$2,218.83 | \$1,446.74 | \$772.09 | \$479,044 | 34.8 |
| Facility, age <65, with SPMI | 50.0 | \$2,265.17 | 0.338 | \$766.42 | \$606.08 | \$160.34 | \$8,011 | 20.9 |
| Facility, age <65, no SPMI | 23.9 | \$9,194.32 | 0.439 | \$4,033.81 | \$7,509.35 | -\$3,475.54 | -\$83,189 | -86.2 |
| HCBS, age <65, with SPMI | 261.0 | \$2,892.19 | 0.760 | \$2,198.40 | \$2,075.04 | \$123.36 | \$32,197 | 5.6 |
| HCBS, age <65, no SPMI | 571.3 | \$2,269.10 | 0.967 | \$2,195.02 | \$1,648.39 | \$546.63 | \$312,317 | 24.9 |
| Community, age <65, with SPMI | 268.3 | \$2,048.38 | 0.905 | \$1,853.20 | \$958.27 | \$894.93 | \$240,081 | 48.3 |
| Community, age <65, no SPMI | 824.8 | \$1,441.79 | 0.810 | \$1,168.54 | \$2,629.25 | -\$1,460.71 | -\$1,204,728 | -125.0 |

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**Table 6.I.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 3**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 47,319.8 | \$1,690.19 | 0.878 | \$1,483.35 | \$1,452.37 | \$30.99 | \$1,466,241 | 2.1 |
| Facility, age 65+, with SPMI | 769.1 | \$2,546.62 | 0.718 | \$1,828.00 | \$1,306.85 | \$521.15 | \$400,810 | 28.5 |
| Facility, age 65+, no SPMI | 2,098.4 | \$2,124.41 | 0.676 | \$1,435.52 | \$977.92 | \$457.59 | \$960,206 | 31.9 |
| HCBS, age 65+, with SPMI | 2,019.5 | \$1,974.89 | 1.194 | \$2,358.46 | \$1,909.93 | \$448.53 | \$905,814 | 19.0 |
| HCBS, age 65+, no SPMI | 8,656.1 | \$1,772.34 | 1.024 | \$1,814.79 | \$1,740.36 | \$74.44 | \$644,321 | 4.1 |
| Community, age 65+, with SPMI | 1,654.6 | \$1,390.23 | 0.791 | \$1,099.90 | \$1,199.57 | -\$99.68 | -\$164,922 | -9.1 |
| Community, age 65+, no SPMI | 9,526.2 | \$1,293.29 | 1.026 | \$1,326.32 | \$1,316.50 | \$9.82 | \$93,507 | 0.7 |
| Facility, age <65, with SPMI | 334.5 | \$4,619.24 | 0.595 | \$2,746.41 | \$2,605.01 | \$141.40 | \$47,292 | 5.1 |
| Facility, age <65, no SPMI | 555.5 | \$4,369.28 | 0.562 | \$2,455.24 | \$1,875.37 | \$579.86 | \$322,143 | 23.6 |
| HCBS, age <65, with SPMI | 3,041.2 | \$1,958.15 | 0.722 | \$1,414.41 | \$1,456.73 | -\$42.31 | -\$128,685 | -3.0 |
| HCBS, age <65, no SPMI | 5,895.0 | \$1,868.23 | 0.864 | \$1,614.02 | \$1,706.13 | -\$92.11 | -\$542,983 | -5.7 |
| Community, age <65, with SPMI | 4,904.2 | \$1,309.66 | 0.778 | \$1,019.24 | \$1,111.82 | -\$92.58 | -\$454,023 | -9.1 |
| Community, age <65, no SPMI | 7,865.6 | \$1,466.46 | 0.845 | \$1,239.58 | \$1,318.05 | -\$78.47 | -\$617,241 | -6.3 |

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**Table 6.I.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 3**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 37,725.3 | \$1,690.19 | 0.949 | \$1,604.42 | \$1,456.76 | \$147.66 | \$5,570,452 | 9.2 |
| Facility, age 65+, with SPMI | 585.9 | \$2,546.62 | 0.638 | \$1,624.09 | \$1,508.63 | \$115.46 | \$67,646 | 7.1 |
| Facility, age 65+, no SPMI | 1,329.2 | \$2,124.41 | 0.710 | \$1,507.64 | \$1,242.65 | \$264.99 | \$352,223 | 17.6 |
| HCBS, age 65+, with SPMI | 1,648.4 | \$1,974.89 | 1.165 | \$2,301.10 | \$1,734.07 | \$567.03 | \$934,664 | 24.6 |
| HCBS, age 65+, no SPMI | 6,588.3 | \$1,772.34 | 1.214 | \$2,151.82 | \$1,662.33 | \$489.49 | \$3,224,899 | 22.7 |
| Community, age 65+, with SPMI | 1,336.1 | \$1,390.23 | 0.763 | \$1,061.23 | \$1,126.15 | -\$64.92 | -\$86,740 | -6.1 |
| Community, age 65+, no SPMI | 7,504.0 | \$1,293.29 | 1.032 | \$1,334.93 | \$1,229.25 | \$105.68 | \$793,046 | 7.9 |
| Facility, age <65, with SPMI | 288.2 | \$4,619.24 | 0.321 | \$1,484.39 | \$2,394.44 | -\$910.05 | -\$262,245 | -61.3 |
| Facility, age <65, no SPMI | 474.7 | \$4,369.28 | 0.458 | \$1,999.39 | \$2,366.58 | -\$367.19 | -\$174,296 | -18.4 |
| HCBS, age <65, with SPMI | 2,710.2 | \$1,958.15 | 0.770 | \$1,508.13 | \$1,460.70 | \$47.43 | \$128,546 | 3.1 |
| HCBS, age <65, no SPMI | 5,102.9 | \$1,868.23 | 0.982 | \$1,834.98 | \$1,687.57 | \$147.42 | \$752,244 | 8.0 |
| Community, age <65, with SPMI | 4,017.9 | \$1,309.66 | 0.860 | \$1,125.95 | \$1,253.81 | -\$127.87 | -\$513,757 | -11.4 |
| Community, age <65, no SPMI | 6,139.7 | \$1,466.46 | 0.979 | \$1,435.71 | \$1,378.02 | \$57.69 | \$354,223 | 4.0 |

**Table 6.J.1 — MEDICARE Demonstration Year 3
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 4**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 60,468.5 | \$1,742.42 | 1.019 | \$1,776.35 | \$1,506.50 | \$269.85 | \$16,317,609 | 15.2 |
| Facility, age 65+, with SPMI | 2,161.3 | \$3,336.29 | 0.782 | \$2,608.35 | \$1,861.43 | \$746.91 | \$1,614,289 | 28.6 |
| Facility, age 65+, no SPMI | 2,128.4 | \$2,231.28 | 0.785 | \$1,750.47 | \$1,126.46 | \$624.01 | \$1,328,154 | 35.6 |
| HCBS, age 65+, with SPMI | 4,115.4 | \$2,410.48 | 1.111 | \$2,677.12 | \$2,048.60 | \$628.52 | \$2,586,606 | 23.5 |
| HCBS, age 65+, no SPMI | 9,486.1 | \$1,679.14 | 1.234 | \$2,071.30 | \$1,622.19 | \$449.11 | \$4,260,276 | 21.7 |
| Community, age 65+, with SPMI | 2,898.9 | \$1,908.28 | 0.907 | \$1,731.72 | \$1,474.73 | \$256.99 | \$744,969 | 14.8 |
| Community, age 65+, no SPMI | 12,887.2 | \$1,220.09 | 0.961 | \$1,172.78 | \$1,185.38 | -\$12.60 | -\$162,431 | -1.1 |
| Facility, age <65, with SPMI | 614.6 | \$4,472.72 | 0.758 | \$3,389.34 | \$3,114.66 | \$274.68 | \$168,816 | 8.1 |
| Facility, age <65, no SPMI | 339.6 | \$3,253.09 | 0.682 | \$2,218.07 | \$3,368.37 | -\$1,150.29 | -\$390,620 | -51.9 |
| HCBS, age <65, with SPMI | 4,454.0 | \$1,791.41 | 1.174 | \$2,102.43 | \$1,730.89 | \$371.54 | \$1,654,851 | 17.7 |
| HCBS, age <65, no SPMI | 6,053.6 | \$1,871.58 | 1.104 | \$2,065.70 | \$1,588.30 | \$477.40 | \$2,889,957 | 23.1 |
| Community, age <65, with SPMI | 7,159.5 | \$1,469.29 | 1.010 | \$1,483.36 | \$1,227.40 | \$255.96 | \$1,832,538 | 17.3 |
| Community, age <65, no SPMI | 8,169.9 | \$1,437.51 | 1.015 | \$1,459.62 | \$1,485.30 | -\$25.68 | -\$209,796 | -1.8 |

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**Table 6.J.2 — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 4**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 46,028.7 | \$1,742.42 | 0.977 | \$1,701.59 | \$1,492.08 | \$209.52 | \$9,643,731 | 12.3 |
| Facility, age 65+, with SPMI | 1,450.9 | \$3,336.29 | 0.714 | \$2,381.93 | \$1,310.30 | \$1,071.63 | \$1,554,856 | 45.0 |
| Facility, age 65+, no SPMI | 1,411.5 | \$2,231.28 | 0.664 | \$1,482.50 | \$997.70 | \$484.80 | \$684,287 | 32.7 |
| HCBS, age 65+, with SPMI | 3,182.4 | \$2,410.48 | 0.947 | \$2,281.63 | \$1,883.30 | \$398.33 | \$1,267,642 | 17.5 |
| HCBS, age 65+, no SPMI | 6,946.6 | \$1,679.14 | 1.248 | \$2,095.06 | \$1,717.94 | \$377.12 | \$2,619,701 | 18.0 |
| Community, age 65+, with SPMI | 2,257.1 | \$1,908.28 | 0.751 | \$1,432.37 | \$1,558.84 | -\$126.47 | -\$285,455 | -8.8 |
| Community, age 65+, no SPMI | 9,837.2 | \$1,220.09 | 1.081 | \$1,318.90 | \$1,239.03 | \$79.87 | \$785,663 | 6.1 |
| Facility, age <65, with SPMI | 417.2 | \$4,472.72 | 0.637 | \$2,848.47 | \$2,490.96 | \$357.52 | \$149,156 | 12.6 |
| Facility, age <65, no SPMI | 252.1 | \$3,253.09 | 0.626 | \$2,036.39 | \$1,628.80 | \$407.59 | \$102,738 | 20.0 |
| HCBS, age <65, with SPMI | 3,765.4 | \$1,791.41 | 1.009 | \$1,808.16 | \$1,708.87 | \$99.29 | \$373,865 | 5.5 |
| HCBS, age <65, no SPMI | 5,013.5 | \$1,871.58 | 1.115 | \$2,086.01 | \$1,636.43 | \$449.57 | \$2,253,911 | 21.6 |
| Community, age <65, with SPMI | 5,408.1 | \$1,469.29 | 0.910 | \$1,336.38 | \$1,160.30 | \$176.08 | \$952,239 | 13.2 |
| Community, age <65, no SPMI | 6,086.7 | \$1,437.51 | 0.978 | \$1,405.69 | \$1,539.57 | -\$133.88 | -\$814,871 | -9.5 |

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Table 6.K — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 5A

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 63,414.2 | \$1,685.80 | 1.007 | \$1,697.52 | \$1,507.92 | \$189.60 | \$12,023,413 | 11.2 |
| Facility, age 65+, with SPMI | 2,529.2 | \$3,172.02 | 0.841 | \$2,669.13 | \$1,727.07 | \$942.06 | \$2,382,680 | 35.3 |
| Facility, age 65+, no SPMI | 1,872.9 | \$2,002.58 | 0.840 | \$1,683.16 | \$1,107.63 | \$575.53 | \$1,077,892 | 34.2 |
| HCBS, age 65+, with SPMI | 6,299.1 | \$2,290.32 | 1.038 | \$2,378.03 | \$2,125.35 | \$252.68 | \$1,591,662 | 10.6 |
| HCBS, age 65+, no SPMI | 8,231.0 | \$1,765.13 | 1.217 | \$2,148.83 | \$1,694.06 | \$454.78 | \$3,743,247 | 21.2 |
| Community, age 65+, with SPMI | 4,813.2 | \$1,722.55 | 0.848 | \$1,460.35 | \$1,509.51 | -\$49.16 | -\$236,623 | -3.4 |
| Community, age 65+, no SPMI | 11,384.8 | \$1,063.21 | 1.051 | \$1,117.17 | \$1,229.44 | -\$112.27 | -\$1,278,150 | -10.0 |
| Facility, age <65, with SPMI | 767.7 | \$5,200.17 | 0.928 | \$4,823.20 | \$2,614.89 | \$2,208.31 | \$1,695,271 | 45.8 |
| Facility, age <65, no SPMI | 328.5 | \$3,572.15 | 0.686 | \$2,450.77 | \$2,038.33 | \$412.44 | \$135,501 | 16.8 |
| HCBS, age <65, with SPMI | 5,901.4 | \$2,114.39 | 1.233 | \$2,607.91 | \$1,792.55 | \$815.36 | \$4,811,789 | 31.3 |
| HCBS, age <65, no SPMI | 4,410.6 | \$1,390.02 | 1.022 | \$1,419.99 | \$1,536.83 | -\$116.84 | -\$515,352 | -8.2 |
| Community, age <65, with SPMI | 9,590.5 | \$1,352.37 | 0.873 | \$1,180.33 | \$1,197.24 | -\$16.91 | -\$162,163 | -1.4 |
| Community, age <65, no SPMI | 7,285.4 | \$1,206.74 | 0.893 | \$1,077.29 | \$1,245.07 | -\$167.78 | -\$1,222,342 | -15.6 |

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**Table 6.L — MEDICARE Demonstration Year 4
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 5B**

| Category of beneficiary | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Percent savings |
|--------------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------|
| Total | 48,134.7 | \$1,729.10 | 1.056 | \$1,826.30 | \$1,675.35 | \$150.95 | \$7,266,147 | 8.3 |
| Facility, age 65+, with SPMI | 3,032.1 | \$2,720.73 | 0.918 | \$2,497.49 | \$1,981.30 | \$516.18 | \$1,565,143 | 20.7 |
| Facility, age 65+, no SPMI | 1,729.1 | \$2,131.24 | 0.919 | \$1,957.70 | \$1,622.19 | \$335.51 | \$580,145 | 17.1 |
| HCBS, age 65+, with SPMI | 5,905.3 | \$1,931.80 | 1.049 | \$2,027.09 | \$1,850.10 | \$176.99 | \$1,045,173 | 8.7 |
| HCBS, age 65+, no SPMI | 6,539.3 | \$1,331.10 | 1.179 | \$1,569.52 | \$1,470.71 | \$98.81 | \$646,120 | 6.3 |
| Community, age 65+, with SPMI | 4,393.1 | \$1,691.40 | 1.042 | \$1,762.70 | \$1,562.85 | \$199.86 | \$877,999 | 11.3 |
| Community, age 65+, no SPMI | 10,565.1 | \$1,206.44 | 1.185 | \$1,429.10 | \$1,243.30 | \$185.80 | \$1,963,001 | 13.0 |
| Facility, age <65, with SPMI | 973.6 | \$4,189.90 | 0.807 | \$3,379.88 | \$2,821.54 | \$558.34 | \$543,619 | 16.5 |
| Facility, age <65, no SPMI | 455.5 | \$2,293.73 | 1.237 | \$2,837.06 | \$1,845.13 | \$991.93 | \$451,844 | 35.0 |
| HCBS, age <65, with SPMI | 4,197.3 | \$2,034.88 | 1.067 | \$2,171.71 | \$2,110.14 | \$61.57 | \$258,443 | 2.8 |
| HCBS, age <65, no SPMI | 2,831.0 | \$1,392.03 | 1.116 | \$1,554.04 | \$1,733.56 | -\$179.53 | -\$508,245 | -11.6 |
| Community, age <65, with SPMI | 4,799.9 | \$1,752.61 | 0.996 | \$1,744.80 | \$1,746.94 | -\$2.13 | -\$10,228 | -0.1 |
| Community, age <65, no SPMI | 2,713.2 | \$1,930.53 | 1.031 | \$1,990.73 | \$2,044.86 | -\$54.13 | -\$146,866 | -2.7 |

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Tables 7.A–7.C summarize the savings calculation (before the attributed savings and the outlier adjustment) by cohort for the entire Demonstration Year (1, 2, 3, and 4 combined) and Demonstration Years 3 and 4 separately.

Table 7.A shows that for all four Demonstration Years so far combined, the total savings before the outlier adjustment is \$156.9 million or 9.9 percent.

Table 7.B shows that for Demonstration Year 3, the total savings was \$25.2 million for Cohort 1, with the largest contributions to savings coming from Cohorts 1A and 1D. The three small sub-cohorts (1C, 1E, and 1F) produced negative savings. For Cohort 2, the savings was negative \$46 thousand, for Cohort 3, the savings was \$1.5 million and for Cohort 4, the savings was \$16.3 million. The total savings before the outlier adjustment for Demonstration Year 3 was \$43.0 million or 11.4 percent.

Table 7.C indicates that for Demonstration Year 4, the total savings before the outlier adjustment by cohort was \$13.5 million (Cohort 1), \$104 thousand (Cohort 2), \$5.6 million (Cohort 3), \$9.6 million (Cohort 4), \$12.0 million (Cohort 5A) and \$7.3 million (Cohort 5B) for a total of \$48.1 million or 9.6 percent. Per the previous Washington Medicare Savings reports, total Demonstration Year 1 savings was \$35.4 million or 9.4 percent and total Demonstration Year 2 savings was \$30.4 million or 9.4 percent.

Table 7.A — MEDICARE
Summary of Demonstration Years 1, 2, 3 and 4 savings by cohort not including attributed savings and outlier adjustment

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|--------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| 1A | 77,387.2 | \$2,652.67 | 1.208 | \$3,205.45 | \$2,560.67 | \$644.78 | \$49,897,690 | 20.1 |
| 1B | 141,482.1 | \$1,298.08 | 1.187 | \$1,540.37 | \$1,445.81 | \$94.56 | \$13,378,963 | 6.1 |
| 1C | 13,291.0 | \$993.94 | 1.227 | \$1,219.54 | \$1,280.49 | -\$60.95 | -\$810,062 | -5.0 |
| 1D | 205,229.1 | \$1,696.25 | 1.182 | \$2,005.59 | \$1,744.30 | \$261.30 | \$53,625,420 | 13.0 |
| 1E | 25,246.9 | \$678.93 | 1.184 | \$804.17 | \$1,110.48 | -\$306.31 | -\$7,733,414 | -38.1 |
| 1F | 26,625.8 | \$608.70 | 1.168 | \$711.19 | \$1,084.68 | -\$373.49 | -\$9,944,350 | -52.5 |
| 1 total | 489,262.0 | \$1,612.13 | 1.183 | \$1,907.05 | \$1,705.91 | \$201.15 | \$98,412,830 | 10.5 |
| 2 | 19,835.8 | \$2,356.60 | 0.843 | \$1,986.22 | \$1,935.15 | \$51.06 | \$1,012,874 | 2.6 |
| 3 | 144,368.2 | \$1,690.19 | 0.915 | \$1,546.80 | \$1,462.08 | \$84.72 | \$12,231,556 | 5.5 |
| 4 | 106,497.2 | \$1,742.42 | 1.001 | \$1,744.04 | \$1,500.27 | \$243.77 | \$25,961,340 | 14.0 |
| 5A | 63,414.2 | \$1,685.80 | 1.007 | \$1,697.52 | \$1,507.92 | \$189.60 | \$12,023,413 | 11.2 |
| 5B | 48,134.7 | \$1,729.10 | 1.056 | \$1,826.30 | \$1,675.35 | \$150.95 | \$7,266,147 | 8.3 |
| Total 1,2,3,4&5A/B | 871,512.1 | | | \$1,809.55 | \$1,629.51 | \$180.04 | \$156,911,038 | 9.9 |

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Table 7.B — MEDICARE
Summary of Demonstration Year 3 savings by cohort not including attributed savings and outlier adjustment

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|---------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| 1A | 14,540.4 | \$2,652.67 | 1.235 | \$3,275.81 | \$2,479.39 | \$796.42 | \$11,580,231 | 24.3 |
| 1B | 28,211.3 | \$1,298.08 | 1.205 | \$1,564.15 | \$1,418.47 | \$145.68 | \$4,109,802 | 9.3 |
| 1C | 2,723.6 | \$993.94 | 1.238 | \$1,230.97 | \$1,252.11 | -\$21.14 | -\$57,574 | -1.7 |
| 1D | 42,529.9 | \$1,696.25 | 1.195 | \$2,026.82 | \$1,722.38 | \$304.44 | \$12,947,823 | 15.0 |
| 1E | 5,500.6 | \$678.93 | 1.195 | \$811.32 | \$1,064.57 | -\$253.25 | -\$1,393,018 | -31.2 |
| 1F | 5,968.2 | \$608.70 | 1.166 | \$709.68 | \$1,035.26 | -\$325.57 | -\$1,943,089 | -45.9 |
| 1 total | 99,473.9 | \$1,612.13 | 1.185 | \$1,910.14 | \$1,656.37 | \$253.78 | \$25,244,175 | 13.3 |
| 2 | 4,312.1 | \$2,356.60 | 0.794 | \$1,872.28 | \$1,882.97 | -\$10.69 | -\$46,097 | -0.6 |
| 3 | 47,319.8 | \$1,690.19 | 0.878 | \$1,483.35 | \$1,452.37 | \$30.99 | \$1,466,241 | 2.1 |
| 4 | 60,468.5 | \$1,742.42 | 1.019 | \$1,776.35 | \$1,506.50 | \$269.85 | \$16,317,609 | 15.2 |
| Total 1,2,3&4 | 211,574.3 | | | \$1,775.68 | \$1,572.53 | \$203.15 | \$42,981,927 | 11.4 |

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Table 7.C — MEDICARE
Summary of Demonstration Year 4 savings by cohort not including attributed savings and outlier adjustment

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|-----------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| 1A | 12,196.5 | \$2,652.67 | 1.263 | \$3,351.18 | \$2,553.58 | \$797.59 | \$9,727,900 | 23.8 |
| 1B | 23,641.9 | \$1,298.08 | 1.234 | \$1,601.55 | \$1,593.22 | \$8.33 | \$196,932 | 0.5 |
| 1C | 2,117.5 | \$993.94 | 1.294 | \$1,286.45 | \$1,276.44 | \$10.02 | \$21,208 | 0.8 |
| 1D | 35,278.5 | \$1,696.25 | 1.214 | \$2,059.03 | \$1,846.13 | \$212.90 | \$7,510,627 | 10.3 |
| 1E | 4,418.6 | \$678.93 | 1.217 | \$826.36 | \$1,217.64 | -\$391.28 | -\$1,728,929 | -47.4 |
| 1F | 4,911.2 | \$608.70 | 1.195 | \$727.45 | \$1,174.20 | -\$446.75 | -\$2,194,077 | -61.4 |
| 1 total | 82,564.3 | \$1,612.13 | 1.212 | \$1,953.92 | \$1,790.00 | \$163.92 | \$13,533,660 | 8.4 |
| 2 | 3,476.8 | \$2,356.60 | 0.865 | \$2,037.40 | \$2,007.42 | \$29.98 | \$104,218 | 1.5 |
| 3 | 37,725.3 | \$1,690.19 | 0.949 | \$1,604.42 | \$1,456.76 | \$147.66 | \$5,570,452 | 9.2 |
| 4 | 46,028.7 | \$1,742.42 | 0.977 | \$1,701.59 | \$1,492.08 | \$209.52 | \$9,643,731 | 12.3 |
| 5A | 63,414.2 | \$1,685.80 | 1.007 | \$1,697.52 | \$1,507.92 | \$189.60 | \$12,023,413 | 11.2 |
| 5B | 48,134.7 | \$1,729.10 | 1.056 | \$1,826.30 | \$1,675.35 | \$150.95 | \$7,266,147 | 8.3 |
| Total 1,2,3,4&5A/B | 281,344.0 | | | \$1,787.18 | \$1,616.07 | \$171.11 | \$48,141,623 | 9.6 |

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5.3 Outlier Adjustment

To ensure that a disproportionate number of high-cost beneficiaries were not having a disproportionate impact on either the intervention or the comparison group, we tabulated the costs of each beneficiary separately for the baseline and all Demonstration Years in order to identify outliers. We combined beneficiaries in the intervention and comparison groups for each cohort, ranked the per-beneficiary total Medicare expenditures and identified the threshold amount, the expenditure level which represented the 99th percentile per-beneficiary expenditures for each cohort in each of the analysis periods. The expenditures for any individual that exceed this threshold amount are truncated to the threshold amount. The costs above the threshold are subtracted from the total costs, and the PMPMs are recalculated by excluding the amounts above the threshold. **Table 8** shows the results of this tabulation. These results are used to make the outlier adjustment as shown in **Table 9**, which has the same column headings as **Table 7**. **Table 9** shows the outlier adjustment for each cohort and each Demonstration Year. For the intervention group PMPM in the baseline period and in the Demonstration Year, the truncated PMPMs are substituted for the untruncated PMPMs.

The comparison group trend is modified by a factor that is derived from the ratio of the trend for the truncated PMPMs to that of the untruncated PMPMs. For Cohort 1, the trend factor calculated from the comparison group from the baseline period to Demonstration Year 3 is 1.0789 ($= \$1,726.51 / \$1,600.30$) for the untruncated PMPMs, and it is 1.0434 ($= \$1,634.25 / \$1,566.21$) for the truncated PMPMs. The ratio of these trend factors is the outlier adjustment factor 0.96717 ($= 1.0434 / 1.0789$) that is to be applied to the comparison group trend. For Demonstration Year 4, the resulting outlier adjustment factor is 0.9729. For Cohort 2, the corresponding outlier adjustment factor for the comparison group trend is 0.9708 for Demonstration Year 3 and 0.9614 for Demonstration Year 4. For Cohort 3, the outlier adjustment factor is 0.9885 for Demonstration Year 3 and 0.9719 for Demonstration Year 4. For Cohort 4, the outlier adjustment factor is 0.9950 for Demonstration Year 3 and 0.9878 for Demonstration Year 4. For Cohort 5A, the outlier adjustment factor is 0.9973 for Demonstration Year 4 and for Cohort 5B, the outlier adjustment factor is 1.0015 for Demonstration Year 4.

Table 8 — MEDICARE Outlier adjustment data

| Group / Year | Total number of beneficiaries | Number of beneficiaries in the top 1 percentile | Total PMPM | PMPM after truncating costs to the 99th percentile | Truncated PMPM/ total PMPM |
|-----------------------------------|--------------------------------------|--|-------------------|---|-----------------------------------|
| Cohort 1 | | | | | |
| Intervention – Baseline | 13,979 | 153 | \$1,612.13 | \$1,570.53 | 97.42% |
| Comparison – Baseline | 23,233 | 219 | \$1,600.30 | \$1,566.21 | 97.87% |
| Intervention – Demo Year 3 | 13,979 | 158 | \$1,656.37 | \$1,585.47 | 95.72% |
| Comparison – Demo Year 3 | 23,233 | 215 | \$1,726.51 | \$1,634.25 | 94.66% |
| Comparison group trend factor DP3 | | | 1.07886 | 1.04344 | 0.96717 |
| Intervention – Demo Year 4 | 13,979 | 183 | \$1,790.00 | \$1,689.56 | 94.39% |
| Comparison – Demo Year 4 | 23,233 | 190 | \$1,773.42 | \$1,688.56 | 95.21% |
| Comparison group trend factor DP4 | | | 1.10818 | 1.07812 | 0.97288 |
| Cohort 2 | | | | | |
| Intervention – Baseline | 690 | 10 | \$2,356.60 | \$2,280.88 | 96.79% |
| Comparison – Baseline | 4,331 | 41 | \$1,607.19 | \$1,565.31 | 97.39% |
| Intervention – Demo Year 3 | 690 | 16 | \$1,882.97 | \$1,748.62 | 92.86% |
| Comparison – Demo Year 3 | 4,331 | 35 | \$1,353.00 | \$1,279.28 | 94.55% |
| Comparison group trend factor DP3 | | | 0.84184 | 0.81727 | 0.97081 |
| Intervention – Demo Year 4 | 690 | 16 | \$2,007.42 | \$1,781.52 | 88.75% |
| Comparison – Demo Year 4 | 4,331 | 35 | \$1,459.82 | \$1,366.91 | 93.64% |
| Comparison group trend factor DP4 | | | 0.90831 | 0.87326 | 0.96141 |
| Cohort 3 | | | | | |
| Intervention – Baseline | 5,645 | 75 | \$1,690.19 | \$1,628.93 | 96.38% |
| Comparison – Baseline | 6,444 | 46 | \$1,673.66 | \$1,643.68 | 98.21% |
| Intervention – Demo Year 3 | 5,645 | 77 | \$1,452.37 | \$1,370.64 | 94.37% |
| Comparison – Demo Year 3 | 6,444 | 44 | \$1,312.11 | \$1,273.79 | 97.08% |
| Comparison group trend factor DP3 | | | 0.78398 | 0.77496 | 0.98850 |

(continued)

Table 8 — MEDICARE Outlier adjustment data (continued)

| Group / Year | Total number of beneficiaries | Number of beneficiaries in the top 1 percentile | Total PMPM | PMPM after truncating costs to the 99th percentile | Truncated PMPM/ total PMPM |
|-----------------------------------|--------------------------------------|--|-------------------|---|-----------------------------------|
| Intervention – Demo Year 4 | 5,645 | 70 | \$1,456.76 | \$1,395.08 | 95.77% |
| Comparison – Demo Year 4 | 6,444 | 51 | \$1,364.04 | \$1,301.94 | 95.45% |
| Comparison group trend factor DP4 | | | 0.81500 | 0.79209 | 0.97188 |
| Cohort 4 | | | | | |
| Intervention – Baseline | 5,823 | 65 | \$1,742.42 | \$1,688.50 | 96.91% |
| Comparison – Baseline | 7,219 | 66 | \$1,738.02 | \$1,696.19 | 97.59% |
| Intervention – Demo Year 3 | 5,823 | 54 | \$1,506.50 | \$1,457.21 | 96.73% |
| Comparison – Demo Year 3 | 7,219 | 77 | \$1,587.04 | \$1,541.16 | 97.11% |
| Comparison group trend factor DP3 | | | 0.91313 | 0.90860 | 0.99504 |
| Intervention – Demo Year 4 | 5,823 | 63 | \$1,492.08 | \$1,433.26 | 96.06% |
| Comparison – Demo Year 4 | 7,219 | 68 | \$1,487.84 | \$1,434.32 | 96.40% |
| Comparison group trend factor DP4 | | | 0.85605 | 0.84561 | 0.98780 |
| Cohort 5A | | | | | |
| Intervention – Baseline | 6,165 | 69 | \$1,685.80 | \$1,629.26 | 96.65% |
| Comparison – Baseline | 5,469 | 48 | \$1,817.10 | \$1,769.83 | 97.40% |
| Intervention – Demo Year 4 | 6,165 | 51 | \$1,507.92 | \$1,446.23 | 95.91% |
| Comparison – Demo Year 4 | 5,469 | 66 | \$1,683.90 | \$1,635.75 | 97.14% |
| Comparison group trend factor DP4 | | | 0.92670 | 0.92424 | 0.99735 |
| Cohort 5B | | | | | |
| Intervention – Baseline | 5,930 | 98 | \$1,729.10 | \$1,661.88 | 96.11% |
| Comparison – Baseline | 20,441 | 166 | \$1,580.88 | \$1,527.80 | 96.64% |
| Intervention – Demo Year 4 | 5,930 | 81 | \$1,675.35 | \$1,600.68 | 95.54% |
| Comparison – Demo Year 4 | 20,441 | 183 | \$1,645.63 | \$1,592.70 | 96.78% |
| Comparison group trend factor DP4 | | | 1.04096 | 1.04248 | 1.00146 |

**Table 9 — MEDICARE
Summary of Demonstration Years 3 and 4 savings by cohort,
including the outlier adjustment but excluding attributed savings**

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|---|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| Demonstration Years 1, 2, 3 and 4 Combined | | | | | | | | |
| Cohort 1 – total | 489,262.0 | \$1,612.13 | 1.182 | \$1,905.41 | \$1,704.27 | \$201.15 | \$98,414,181 | 10.6 |
| Outlier adjusted | 489,262.0 | \$1,570.53 | 1.159 | \$1,819.55 | \$1,634.73 | \$184.82 | \$90,425,060 | 10.2 |
| Cohort 2 | 19,835.8 | \$1,612.13 | 1.232 | \$1,985.37 | \$1,934.30 | \$51.06 | \$1,012,897 | 2.6 |
| Outlier adjusted | 19,835.8 | \$1,570.53 | 1.207 | \$1,895.83 | \$1,821.15 | \$74.67 | \$1,481,163 | 3.9 |
| Cohort 3 | 144,368.2 | \$1,612.13 | 0.959 | \$1,546.80 | \$1,462.08 | \$84.72 | \$12,231,556 | 5.5 |
| Outlier adjusted | 144,368.2 | \$1,570.53 | 0.934 | \$1,467.20 | \$1,402.17 | \$65.04 | \$9,389,073 | 4.4 |
| Cohort 4 | 106,497.2 | \$1,742.42 | 1.001 | \$1,744.04 | \$1,500.27 | \$243.77 | \$25,961,340 | 14.0 |
| Outlier adjusted | 106,497.2 | \$1,688.50 | 0.993 | \$1,676.53 | \$1,446.86 | \$229.67 | \$24,459,283 | 13.7 |
| Cohort 5A | 63,414.2 | \$1,685.80 | 1.007 | \$1,697.52 | \$1,507.92 | \$189.60 | \$12,023,413 | 11.2 |
| Outlier adjusted | 63,414.2 | \$1,629.26 | 1.004 | \$1,636.23 | \$1,446.23 | \$190.00 | \$12,048,892 | 11.6 |
| Cohort 5B | 48,134.7 | \$1,729.10 | 1.056 | \$1,826.30 | \$1,675.35 | \$150.95 | \$7,266,147 | 8.3 |
| Outlier adjusted | 48,134.7 | \$1,661.88 | 1.058 | \$1,757.86 | \$1,600.68 | \$157.18 | \$7,565,731 | 8.9 |
| Cohorts 1+2+3+4+5A/B | 871,512.1 | | | \$1,808.61 | \$1,628.57 | \$180.04 | \$156,909,535 | 10.0 |
| Outlier Adjusted | 871,512.1 | | | \$1,728.69 | \$1,561.89 | \$166.80 | \$145,369,202 | 9.6 |
| Demonstration Year 3 | | | | | | | | |
| Cohort 1 – total | 99,473.9 | \$1,612.13 | 1.185 | \$1,910.14 | \$1,656.37 | \$253.78 | \$25,244,175 | 13.3 |
| Outlier adjusted | 99,473.9 | \$1,570.53 | 1.146 | \$1,799.76 | \$1,585.47 | \$214.29 | \$21,316,089 | 11.9 |
| Cohort 2 | 4,312.1 | \$2,356.60 | 0.794 | \$1,872.28 | \$1,882.97 | –\$10.69 | –\$46,097 | –0.6 |
| Outlier adjusted | 4,312.1 | \$2,280.88 | 0.771 | \$1,759.23 | \$1,748.62 | \$10.61 | \$45,754 | 0.6 |
| Cohort 3 | 47,319.8 | \$1,690.19 | 0.878 | \$1,483.35 | \$1,452.37 | \$30.99 | \$1,466,241 | 2.1 |
| Outlier adjusted | 47,319.8 | \$1,628.93 | 0.868 | \$1,413.15 | \$1,370.64 | \$42.52 | \$2,011,822 | 3.0 |

(continued)

Table 9 — MEDICARE (continued)
Summary of Demonstration Years 3 and 4 savings by cohort,
including the outlier adjustment but excluding attributed savings

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|-----------------------------|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| Cohort 4 | 60,468.5 | 1,742.4 | 1.019 | \$1,776.35 | \$1,506.50 | \$269.85 | \$16,317,609 | 15.2 |
| Outlier adjusted | 60,468.5 | \$1,688.50 | 1.014 | \$1,712.85 | \$1,457.21 | \$255.64 | \$15,457,893 | 14.9 |
| Cohorts 1+2+3+4 | 211,574.3 | | | \$1,775.68 | \$1,572.53 | \$203.15 | \$42,981,927 | 11.4 |
| Outlier Adjusted | 211,574.3 | | | \$1,687.63 | \$1,504.09 | \$183.54 | \$38,831,557 | 10.9 |
| Demonstration Year 4 | | | | | | | | |
| Cohort 1 – total | 82,564.3 | \$1,612.13 | 1.212 | \$1,953.92 | \$1,790.00 | \$163.92 | \$13,533,660 | 8.4 |
| Outlier adjusted | 82,564.3 | \$1,570.53 | 1.179 | \$1,851.87 | \$1,689.56 | \$162.31 | \$13,401,278 | 8.8 |
| Cohort 2 | 3,476.8 | \$2,356.60 | 0.865 | \$2,037.40 | \$2,007.42 | \$29.98 | \$104,218 | 1.5 |
| Outlier adjusted | 3,476.8 | \$2,280.88 | 0.831 | \$1,895.83 | \$1,781.52 | \$114.31 | \$397,435 | 6.0 |
| Cohort 3 | 37,725.3 | \$1,690.19 | 0.949 | \$1,604.42 | \$1,456.76 | \$147.66 | \$5,570,452 | 9.2 |
| Outlier adjusted | 37,725.3 | \$1,628.93 | 0.923 | \$1,502.79 | \$1,395.08 | \$107.71 | \$4,063,279 | 7.2 |
| Cohort 4 | 46,028.7 | 1,742.4 | 0.977 | \$1,701.59 | \$1,492.08 | \$209.52 | \$9,643,731 | 12.3 |
| Outlier adjusted | 46,028.7 | \$1,688.50 | 0.965 | \$1,628.82 | \$1,433.26 | \$195.56 | \$9,001,390 | 12.0 |
| Cohort 5A | 63,414.2 | 1,685.8 | 1.007 | \$1,697.52 | \$1,507.92 | \$189.60 | \$12,023,413 | 11.2 |
| Outlier adjusted | 63,414.2 | \$1,629.26 | 1.004 | \$1,636.23 | \$1,446.23 | \$190.00 | \$12,048,892 | 11.6 |
| Cohort 5B | 48,134.7 | \$1,729.10 | 1.056 | \$1,826.30 | \$1,675.35 | \$150.95 | \$7,266,147 | 8.3 |
| Outlier adjusted | 48,134.7 | \$1,661.88 | 1.058 | \$1,757.86 | \$1,600.68 | \$157.18 | \$7,565,731 | 8.9 |
| Cohorts 1+2+3+4+5A/B | 281,344.0 | | | \$1,787.18 | \$1,616.07 | \$171.11 | \$48,141,623 | 9.6 |
| Outlier Adjusted | 281,344.0 | | | \$1,704.43 | \$1,539.23 | \$165.20 | \$46,478,006 | 9.7 |

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Table 10 — MEDICARE
Summary of Demonstration Years 3 and 4 savings by cohort,
After all adjustments including the outlier adjustment and attributed savings

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|--|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| Demonstration Years 1, 2, 3 and 4 Combined (outlier adjusted) | | | | | | | | |
| Cohort 1 | 489,262.0 | \$1,570.53 | 1.159 | \$1,819.55 | \$1,634.73 | \$184.82 | \$90,425,060 | 10.2 |
| Cohort 2 | 19,835.77 | \$1,570.53 | 1.207 | \$1,895.83 | \$1,821.15 | \$74.67 | \$1,481,163 | 3.94 |
| Cohort 3 | 144,368.23 | \$1,570.53 | 0.934 | \$1,467.20 | \$1,402.17 | \$65.04 | \$9,389,073 | 4.43 |
| Cohort 4 | 106,497.18 | \$1,688.50 | 0.993 | \$1,676.53 | \$1,446.86 | \$229.67 | \$24,459,283 | 13.70 |
| Cohort 5A | 63,414.24 | \$1,629.26 | 1.004 | \$1,636.23 | \$1,446.23 | \$190.00 | \$12,048,892 | 11.61 |
| Cohort 5B | 48,134.66 | \$1,661.88 | 1.058 | \$1,757.86 | \$1,600.68 | \$157.18 | \$7,565,731 | 8.94 |
| Cohorts 1+2+3+4+5A/B | 871,512.12 | | | \$1,728.69 | \$1,561.89 | \$166.80 | \$145,369,202 | 9.65 |
| Attributed Savings | | | | | | | | |
| Cohort 2 | 1,809.40 | \$1,817.45 | | | | \$161.78 | \$292,723 | 8.90 |
| Cohort 3 | 36,294.60 | \$1,365.18 | | | | \$75.52 | \$2,740,977 | 5.50 |
| Cohort 4 | 35,488.55 | \$1,478.37 | | | | \$55.51 | \$1,970,085 | 3.76 |
| Cohort 5A | 35,843.05 | \$1,442.97 | | | | \$215.36 | \$7,719,063 | 14.92 |
| Cohort 6A Estimate | 28,745.64 | | | | | \$190.00 | \$5,461,756 | |
| Cohort 6B Estimate | 20,497.17 | | | | | \$157.18 | \$3,221,713 | |
| Cohorts 1+2+3+4 | 1,030,190.53 | | | | | | \$166,775,519 | |
| Demonstration Year 1 (outlier adjusted) | | | | | | | | |
| Cohort 1 | 190,783.10 | \$1,566.42 | 1.169 | \$1,830.64 | \$1,667.68 | \$162.96 | \$31,089,525 | 8.90 |
| Cohort 2 | 6,799.00 | \$2,288.30 | 0.893 | \$2,043.13 | \$1,930.11 | \$113.02 | \$768,444 | 5.50 |
| Cohorts 1+2 | 197,582.10 | | | \$1,837.95 | \$1,676.71 | \$161.24 | \$31,857,968 | 8.80 |

(continued)

Table 10 — MEDICARE (continued)
Summary of Demonstration Years 3 and 4 savings by cohort,
After all adjustments including the outlier adjustment and attributed savings

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|--|-------------------------------|--|---|------------------------------------|---|------------------------------|-------------------------------|---------------------------|
| Attributed Savings | | | | | | | | |
| Cohort 2 | 1,809.40 | \$1,817.45 | | | | \$161.78 | \$292,723 | 8.90 |
| Cohort 3 | 36,294.60 | \$1,365.18 | | | | \$75.52 | \$2,740,977 | 5.50 |
| Cohorts 1+2+3 | 235,686.10 | \$1,558.18 | | | | \$148.04 | \$34,891,668 | |
| Demonstration Year 2 (outlier adjusted) | | | | | | | | |
| Cohort 1 | 116,440.81 | \$1,566.42 | 1.155 | \$1,809.13 | \$1,597.70 | \$211.42 | \$24,618,168 | 11.69 |
| Cohort 2 | 5,247.88 | \$2,288.30 | 0.796 | \$1,821.17 | \$1,769.81 | \$51.36 | \$269,530 | 2.82 |
| Cohort 3 | 59,323.07 | \$1,627.53 | 0.914 | \$1,487.69 | \$1,431.82 | \$55.86 | \$3,313,972 | 3.76 |
| Cohorts 1+2+3 | 181,011.76 | | | \$1,704.13 | \$1,548.33 | \$155.80 | \$28,201,670 | 9.14 |
| Attributed Savings | | | | | | | | |
| Cohort 4 | 35,488.55 | \$1,478.37 | | | | \$55.51 | \$1,970,085 | 3.76 |
| Cohorts 1+2+3+4 | 216,500.31 | | | | | \$139.36 | \$30,171,755 | |
| Demonstration Year 3 (outlier adjusted) | | | | | | | | |
| Cohort 1 | 99,473.87 | \$1,570.53 | 1.146 | \$1,799.76 | \$1,585.47 | \$214.29 | \$21,316,089 | 11.91 |
| Cohort 2 | 4,312.07 | \$2,280.88 | 0.771 | \$1,759.23 | \$1,748.62 | \$10.61 | \$45,754 | 0.60 |
| Cohort 3 | 47,319.84 | \$1,628.93 | 0.868 | \$1,413.15 | \$1,370.64 | \$42.52 | \$2,011,822 | 3.01 |
| Cohort 4 | 60,468.49 | \$1,688.50 | 1.014 | \$1,712.85 | \$1,457.21 | \$255.64 | \$15,457,893 | 14.92 |
| Cohorts 1+2+3+4 | 211,574.27 | | | \$1,687.63 | \$1,504.09 | \$183.54 | \$38,831,557 | 10.88 |
| Attributed Savings | | | | | | | | |
| Cohort 5A | 35,843.05 | \$1,442.97 | | | | \$215.36 | \$7,719,063 | 14.92 |
| Cohorts 1+2+3+4+5 | 247,417.32 | | | | | \$188.15 | \$46,550,620 | |

(continued)

Table 10 — MEDICARE (continued)
Summary of Demonstration Years 3 and 4 savings by cohort,
After all adjustments including the outlier adjustment and attributed savings

| Cohort | (a) Number of eligible months | (b) Baseline period PMPM from intervention group | (c) AGA adjusted cost trend from comparison group | (d) Target Demonstration Year PMPM | (e) Actual Demonstration Year PMPM for intervention group | (f) PMPM savings = (d) – (e) | (g) Total savings = (a) * (f) | (h) Savings percent = f/d |
|--|--------------------------------------|---|--|---|--|-------------------------------------|--------------------------------------|----------------------------------|
| Demonstration Year 4 (outlier adjusted) | | | | | | | | |
| Cohort 1 | 82,564.26 | \$1,570.53 | 1.179 | \$1,851.87 | \$1,689.56 | \$162.31 | \$13,401,278 | 8.76 |
| Cohort 2 | 3,476.82 | \$2,280.88 | 0.831 | \$1,895.83 | \$1,781.52 | \$114.31 | \$397,435 | 6.03 |
| Cohort 3 | 37,725.32 | \$1,628.93 | 0.923 | \$1,502.79 | \$1,395.08 | \$107.71 | \$4,063,279 | 7.17 |
| Cohort 4 | 46,028.69 | \$1,688.50 | 0.965 | \$1,628.82 | \$1,433.26 | \$195.56 | \$9,001,390 | 12.01 |
| Cohort 5A | 63,414.24 | \$1,629.26 | 1.004 | \$1,636.23 | \$1,446.23 | \$190.00 | \$12,048,892 | 11.61 |
| Cohort 5B | 48,134.66 | \$1,661.88 | 1.058 | \$1,757.86 | \$1,600.68 | \$157.18 | \$7,565,731 | 8.94 |
| Cohorts 1+2+3+4+5A/B | 281,343.99 | | | \$1,704.43 | \$1,539.23 | \$165.20 | \$46,478,006 | 9.69 |
| Attributed Savings | | | | | | | | |
| Cohort 6A Estimate | 28,745.64 | | | | | \$190.00 | \$5,461,756 | |
| Cohort 6B Estimate | 20,497.17 | | | | | \$157.18 | \$3,221,713 | |
| Cohorts 1 to 6A/B | 330,586.80 | | | | | \$166.86 | \$55,161,475 | |

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5.4 Attributed Medicare Savings

Cohort 1 consists of those who are eligible for the demonstration on the start date of July 1, 2013. On every successive January 1, a new cohort is formed from those newly eligible for the demonstration. According to the Final Demonstration Agreement, for each cohort after the first, the savings percentage calculated for beneficiaries in the prior cohort will be attributed to those months in the current cohort that are during the demonstration and for which beneficiaries are eligible for the demonstration but prior to the start date of the current cohort. For Cohort 2, this consists of the months July through December 2013. For Cohort 3, this consists of the months January 2014 through December 2014. For Cohort 4, this consists of the months January through December 2015. For Cohort 5A, this consists of the months January through December 2016. For Cohort 6A, this consists of the months January through December 2017. For Cohort 6B, this consists of the months April through December 2017.

Note that there is no potential attributed savings for Cohort 5B beneficiaries. They were all immediately eligible upon expansion of the demonstration to the new service area. As there is no attributed savings for Cohort 1 prior to the start of Demonstration Year 1, there is also no attributed savings for Cohort 5B. During the baseline period, all months for which a beneficiary meets the basic eligibility requirements are included in determining the baseline PMPMs, and those months for which WA also flagged demonstration eligibility are included in the attributed savings calculation for newly eligible cohorts.

Table 10 shows the amount of attributed Medicare savings for Cohorts 2, 3, 4 and 5. For Cohort 2, there were 1,809.4 months of eligibility during the months July through December 2013 and the PMPM during those months was \$1,817.45. The savings percentage for Cohort 1 during Demonstration Year 1 was 8.9 percent. Applying the 8.9 percent to the \$1,817.45 PMPM yields attributed Medicare savings of \$161.78 PMPM. Multiplying this savings PMPM by the months of eligibility results in \$292,723 of attributed Medicare savings.

Cohort 3 experienced 36,294.6 months of eligibility during the period January through December 2014 and a PMPM of \$1,365.18. The savings percentage for Cohort 2 during this period was 5.5 percent. Applying a similar calculation as was done for Cohort 2 results in a PMPM savings of \$75.52 and aggregate attributed savings of \$2,740,977.

Cohort 4 experienced 35,488.55 months of eligibility during the period of January through December 2015 and a PMPM of \$1,478.37. The savings percentage for Cohort 3 during this period was 3.76 percent. Applying this percentage to Cohort 4 experience yields a PMPM savings of \$55.51 and aggregate attributed savings of \$1,970,085.

Cohort 5A experienced 35,843.05 months of eligibility during the period of January through December 2016 and a PMPM of \$1,442.97. The savings percentage for Cohort 4 during this period was 14.92 percent. Applying this percentage to Cohort 5A experience yields a PMPM savings of \$215.36 and aggregate attributed savings of \$7,719,063.

Cohort 6A consists of those individuals whose experience will be added to the Demonstration Year 5 savings calculation on January 1, 2018, after becoming eligible for the demonstration during calendar year 2017 and Cohort 6B consists of those individuals whose experience will be added to the Demonstration Year 4 savings calculation on January 1, 2018,

after becoming eligible for the demonstration during the period of April 1, 2017 through December 31, 2017. Cohort 6A has an estimated 4,726 beneficiaries who had 28,745.64 months of eligibility during calendar year 2017 and the PMPM savings determined for Cohort 5A was \$190.00. This results in \$5,461,756 savings being preliminarily attributed to Cohort 6A. Cohort 6B has an estimated 3,279 beneficiaries who had 20,497.17 months of eligibility during the period April 1, 2017 through December 31, 2017 and the PMPM savings determined for Cohort 5B was \$157.18. This results in \$3,221,713 savings being preliminarily attributed to Cohort 6B. Additionally, please note the preliminary nature of the attributed savings for Cohorts 6A and 6B.

The attributed savings methodology has greater potential volatility than all other aspects of the savings analysis between the preliminary and final results due to the fact that there is not yet a PMPM with which to apply the previous cohort savings percentage and we instead are applying the previous cohort PMPM savings to the estimated number of eligible months. This may provide a rough estimation of the attributed savings that will eventually be calculated with adequate claims runout and retroactive eligibility adjustment but should not be relied on as a precise estimate of attributed savings.

5.5 Summary of Total Gross Medicare Savings

Table 9 summarizes the savings calculation by cohort including the outlier adjustment. For the four Demonstration Years to date combined, the outlier adjustment reduced the total Medicare savings by about \$11.5 million. Medicare savings were reduced for Cohorts 1, 3 and 4, but increased for Cohorts 2 and 5B, and remained effectively constant for Cohort 5A. The reduction was \$8.0 million for Cohort 1 (\$98.4 million to \$90.4 million), \$2.8 million for Cohort 3 (\$12.2 million to \$9.4 million), \$1.5 million for Cohort 4 (\$26.0 million to \$24.5 million). The increase was \$468 thousand for Cohort 2 and \$300 thousand for Cohort 5B. The total reduction across all cohorts 1–5B in *Table 9* was \$11.5 million (\$156.9 million to \$145.4 million). Across all five cohorts and all four Demonstration Years, total Medicare savings after the outlier adjustment was \$145.4 million, or 9.6 percent.

Table 10 summarizes total gross Medicare savings calculations, including the attributed savings from Cohorts 2, 3, 4, 5A, 6A and 6B. Attributed savings are \$0.3 million, \$2.7 million, \$2.0 million, and \$7.7 million for Cohorts 2, 3, 4 and 5A and estimated to be \$5.5 million and \$3.2 million for Cohorts 6A and 6B, respectively, bringing the total Medicare savings for all five cohorts to \$166.8 million, of which \$34.9 million was for Demonstration Year 1, \$30.2 million was for Demonstration Year 2, \$46.6 million was for Demonstration Year 3 and \$55.2 million was for Demonstration Year 4.

The Medicare savings for Demonstration Year 3, \$46,550,620 (*Table 10*), is now considered to be final. The Medicare savings for Demonstration Year 4 is considered to be preliminary and will be updated in a future report. Demonstration Year 4 savings will be updated to include any retroactive adjustments to claims and eligibility for beneficiaries in both the intervention and comparison groups.

5.6 Additional Analysis

Tables 11 (A, B, C and D) show additional analysis of the savings by month for Demonstration Years 3 and 4 for each cohort. *Tables 12 (A and B)* show additional results of the savings by type of service for all cohorts combined for each Demonstration Year. These tables include the AGA adjustment but not the outlier adjustment (which cannot be applied by month or by type of service) nor the attributed savings. *Tables 11* show, for each month of the Demonstration Year, the target PMPM, the actual intervention PMPM, and the ratio of the demonstration PMPM to the target PMPM (or, the D/T ratio). A ratio less than 1.00 shows savings, whereas a ratio greater than 1.00 shows negative savings.

It can be seen that the D/T ratio is significantly under 1.00 for Cohort 1 in most months. The average over all 24 months is 0.89 and the average for the last 6 months is 0.95. The D/T ratio for Cohort 2 varies widely, and is not surprising given the small size of the cohort. The average over the 24 months of Cohort 2 is 1.00 and the average over the last 6 months is 1.01. For Cohort 3, the D/T ratio shows one outlier month on the high side of 1.10 in November 2016 and on the low side of 0.74 in February 2017 but is otherwise generally close to 1.00. The average over the 24 months of operations is 0.95 and over the last 6 months is 0.91. For Cohort 4, the ratio is consistently less than 1.00. The average over the 24 months of operation is 0.86 and over the last 6 months is 0.89. For Cohort 5A, the ratio is consistently less than 1.00. The average over the 12 months of operation is 0.89. For Cohort 5B, the ratio is consistently less than 1.00. The average over the 9 months of operation is 0.92.

Table 12 shows the D/T ratio by type of service. For all cohorts and both Demonstration Years, the lowest D/T ratio is for hospice services. However, in dollar terms, significant savings were achieved for home health agency costs, inpatient hospital costs, and professional services. Increased costs were experienced for outpatient hospital services and SNF services.

Tables 13.A and B show more detail on the savings by type of service by Demonstration Year and category of beneficiary for all cohorts combined. The savings by type of service are similar for Demonstration Year 3 and Demonstration Year 4, and in line with what was previously seen in Demonstration Years 1 and 2.

**Table 11.A — MEDICARE
PMPM costs for intervention and comparison groups, by month: Cohort 1**

| Month/Year | Intervention group | | PMPM | | | |
|--------------|----------------------|------------------|----------------|----------------|----------------|-------------|
| | Incurred claims | Eligible months | Intervention | Comparison | Target | Ratio (D/T) |
| Baseline | \$484,510,829 | 300,541.1 | \$1,612 | \$1,592 | \$1,612 | 1.00 |
| Jan-2016 | \$14,775,101 | 8,944.8 | \$1,652 | \$1,807 | \$1,870 | 0.88 |
| Feb-2016 | \$13,817,364 | 8,813.7 | \$1,568 | \$1,856 | \$1,915 | 0.82 |
| Mar-2016 | \$15,432,436 | 8,702.0 | \$1,773 | \$1,950 | \$2,015 | 0.88 |
| Apr-2016 | \$14,363,894 | 8,588.2 | \$1,673 | \$1,982 | \$2,043 | 0.82 |
| May-2016 | \$14,954,834 | 8,470.6 | \$1,765 | \$1,818 | \$1,874 | 0.94 |
| Jun-2016 | \$13,313,939 | 8,338.8 | \$1,597 | \$1,986 | \$2,040 | 0.78 |
| Jul-2016 | \$12,700,467 | 8,132.8 | \$1,562 | \$1,819 | \$1,866 | 0.84 |
| Aug-2016 | \$13,516,533 | 8,054.7 | \$1,678 | \$1,902 | \$1,958 | 0.86 |
| Sep-2016 | \$13,162,083 | 7,942.7 | \$1,657 | \$1,779 | \$1,835 | 0.90 |
| Oct-2016 | \$13,324,288 | 7,941.7 | \$1,678 | \$1,747 | \$1,797 | 0.93 |
| Nov-2016 | \$12,493,618 | 7,832.9 | \$1,595 | \$1,767 | \$1,823 | 0.88 |
| Dec-2016 | \$12,910,565 | 7,710.8 | \$1,674 | \$1,813 | \$1,864 | 0.90 |
| Jan-2017 | \$12,842,571 | 7,636.7 | \$1,682 | \$1,856 | \$1,913 | 0.88 |
| Feb-2017 | \$11,730,194 | 7,488.7 | \$1,566 | \$1,763 | \$1,819 | 0.86 |
| Mar-2017 | \$13,650,526 | 7,455.5 | \$1,831 | \$2,023 | \$2,074 | 0.88 |
| Apr-2017 | \$12,781,675 | 7,406.5 | \$1,726 | \$1,936 | \$1,981 | 0.87 |
| May-2017 | \$13,148,493 | 7,056.5 | \$1,863 | \$2,018 | \$2,075 | 0.90 |
| Jun-2017 | \$12,638,870 | 6,815.9 | \$1,854 | \$1,970 | \$2,031 | 0.91 |
| Jul-2017 | \$12,303,194 | 6,703.0 | \$1,835 | \$1,764 | \$1,823 | 1.01 |
| Aug-2017 | \$12,719,103 | 6,622.9 | \$1,920 | \$1,994 | \$2,061 | 0.93 |
| Sep-2017 | \$11,614,466 | 6,512.3 | \$1,783 | \$1,843 | \$1,908 | 0.93 |
| Oct-2017 | \$12,452,203 | 6,383.8 | \$1,951 | \$1,995 | \$2,060 | 0.95 |
| Nov-2017 | \$11,403,287 | 6,295.1 | \$1,811 | \$1,725 | \$1,794 | 1.01 |
| Dec-2017 | \$10,505,564 | 6,187.3 | \$1,698 | \$1,837 | \$1,896 | 0.90 |
| Total | \$312,555,264 | 182,038.1 | \$1,717 | \$1,873 | \$1,930 | 0.89 |

**Table 11.B — MEDICARE
PMPM costs for intervention and comparison groups, by month: Cohort 2**

| Month/Year | Intervention group | | PMPM | | | Ratio (D/T) |
|--------------|---------------------|-----------------|----------------|----------------|----------------|-------------|
| | Incurred claims | Eligible months | Intervention | Comparison | Target | |
| Baseline | \$9,945,769 | 4,220.4 | \$2,357 | \$1,740 | \$2,357 | 1.00 |
| Jan-2016 | \$888,447 | 389.6 | 2,280.3 | 1,227.7 | \$1,670 | 1.37 |
| Feb-2016 | \$686,917 | 385.0 | 1,784.2 | 1,447.2 | \$1,989 | 0.90 |
| Mar-2016 | \$754,802 | 381.6 | 1,977.9 | 1,429.7 | \$1,935 | 1.02 |
| Apr-2016 | \$679,991 | 377.0 | 1,803.7 | 1,382.6 | \$1,820 | 0.99 |
| May-2016 | \$733,640 | 376.5 | 1,948.7 | 1,325.6 | \$1,795 | 1.09 |
| Jun-2016 | \$729,222 | 366.9 | 1,987.3 | 1,401.1 | \$1,852 | 1.07 |
| Jul-2016 | \$610,822 | 354.4 | 1,723.4 | 1,532.9 | \$2,064 | 0.83 |
| Aug-2016 | \$674,175 | 348.6 | 1,933.7 | 1,297.1 | \$1,728 | 1.12 |
| Sep-2016 | \$776,457 | 342.3 | 2,268.1 | 1,419.6 | \$1,869 | 1.21 |
| Oct-2016 | \$626,949 | 335.1 | 1,870.8 | 1,291.1 | \$1,764 | 1.06 |
| Nov-2016 | \$556,325 | 329.8 | 1,686.9 | 1,447.3 | \$1,971 | 0.86 |
| Dec-2016 | \$401,746 | 325.1 | 1,235.8 | 1,475.2 | \$2,035 | 0.61 |
| Jan-2017 | \$642,059 | 322.6 | 1,990.0 | 1,329.4 | \$1,788 | 1.11 |
| Feb-2017 | \$600,940 | 316.4 | 1,899.1 | 1,193.3 | \$1,708 | 1.11 |
| Mar-2017 | \$581,120 | 310.9 | 1,868.9 | 1,767.3 | \$2,420 | 0.77 |
| Apr-2017 | \$567,267 | 305.9 | 1,854.6 | 1,653.8 | \$2,301 | 0.81 |
| May-2017 | \$725,179 | 288.8 | 2,510.7 | 1,781.3 | \$2,486 | 1.01 |
| Jun-2017 | \$607,428 | 282.5 | 2,150.2 | 1,414.3 | \$1,928 | 1.12 |
| Jul-2017 | \$665,382 | 283.0 | \$2,351 | \$1,298 | \$1,743 | 1.35 |
| Aug-2017 | \$462,130 | 278.8 | \$1,658 | \$1,593 | \$2,082 | 0.80 |
| Sep-2017 | \$452,174 | 276.0 | \$1,638 | \$1,240 | \$1,709 | 0.96 |
| Oct-2017 | \$557,963 | 271.7 | \$2,054 | \$1,585 | \$2,126 | 0.97 |
| Nov-2017 | \$481,570 | 272.9 | \$1,765 | \$1,540 | \$2,104 | 0.84 |
| Dec-2017 | \$636,242 | 267.3 | \$2,381 | \$1,511 | \$2,057 | 1.16 |
| Total | \$15,098,947 | 7,788.9 | \$1,939 | \$1,434 | \$1,946 | 1.00 |

**Table 11.C — MEDICARE
PMPM costs for intervention and comparison groups, by month: Cohort 3**

| Month/Year | Intervention group | | PMPM | | | Ratio (D/T) |
|--------------|----------------------|-----------------|----------------|----------------|----------------|-------------|
| | Incurred claims | Eligible months | Intervention | Comparison | Target | |
| Baseline | \$103,440,434 | 61,200.6 | \$1,690 | \$1,520 | \$1,690 | 1.00 |
| Jan-2016 | \$5,897,208 | 4,330.1 | 1,361.9 | 1,260.6 | \$1,434 | 0.95 |
| Feb-2016 | \$5,923,845 | 4,254.3 | 1,392.4 | 1,188.9 | \$1,350 | 1.03 |
| Mar-2016 | \$7,305,830 | 4,183.5 | 1,746.3 | 1,450.3 | \$1,646 | 1.06 |
| Apr-2016 | \$6,369,944 | 4,114.2 | 1,548.3 | 1,386.7 | \$1,567 | 0.99 |
| May-2016 | \$6,309,502 | 4,032.3 | 1,564.7 | 1,320.0 | \$1,511 | 1.04 |
| Jun-2016 | \$5,159,471 | 3,959.3 | 1,303.1 | 1,289.8 | \$1,457 | 0.89 |
| Jul-2016 | \$5,034,560 | 3,857.2 | 1,305.2 | 1,306.3 | \$1,486 | 0.88 |
| Aug-2016 | \$6,015,218 | 3,807.1 | 1,580.0 | 1,425.0 | \$1,642 | 0.96 |
| Sep-2016 | \$5,024,006 | 3,734.8 | 1,345.2 | 1,218.6 | \$1,391 | 0.97 |
| Oct-2016 | \$5,153,305 | 3,729.4 | 1,381.8 | 1,306.6 | \$1,480 | 0.93 |
| Nov-2016 | \$5,541,076 | 3,677.1 | 1,506.9 | 1,224.1 | \$1,370 | 1.10 |
| Dec-2016 | \$4,991,850 | 3,640.5 | 1,371.2 | 1,295.9 | \$1,462 | 0.94 |
| Jan-2017 | \$5,035,137 | 3,620.9 | 1,390.6 | 1,289.1 | \$1,426 | 0.98 |
| Feb-2017 | \$4,171,651 | 3,538.2 | 1,179.0 | 1,389.5 | \$1,591 | 0.74 |
| Mar-2017 | \$4,879,614 | 3,507.7 | 1,391.1 | 1,304.7 | \$1,455 | 0.96 |
| Apr-2017 | \$4,651,959 | 3,471.2 | 1,340.1 | 1,228.5 | \$1,389 | 0.96 |
| May-2017 | \$5,753,037 | 3,280.6 | 1,753.7 | 1,566.5 | \$1,791 | 0.98 |
| Jun-2017 | \$4,578,624 | 3,065.5 | 1,493.6 | 1,451.0 | \$1,693 | 0.88 |
| Jul-2017 | \$4,579,122 | 2,994.6 | \$1,529 | \$1,326 | \$1,509 | 1.01 |
| Aug-2017 | \$4,459,208 | 2,943.7 | \$1,515 | \$1,567 | \$1,803 | 0.84 |
| Sep-2017 | \$3,895,953 | 2,895.0 | \$1,346 | \$1,426 | \$1,651 | 0.81 |
| Oct-2017 | \$4,713,994 | 2,838.9 | \$1,661 | \$1,598 | \$1,814 | 0.92 |
| Nov-2017 | \$3,988,809 | 2,806.7 | \$1,421 | \$1,501 | \$1,752 | 0.81 |
| Dec-2017 | \$4,249,562 | 2,762.5 | \$1,538 | \$1,329 | \$1,473 | 1.04 |
| Total | \$123,682,488 | 85,045.2 | \$1,454 | \$1,352 | \$1,537 | 0.95 |

**Table 11.D — MEDICARE
PMPM costs for intervention and comparison groups, by month: Cohort 4**

| Month/Year | Intervention group | | PMPM | | | Ratio (D/T) |
|--------------|----------------------|------------------|----------------|----------------|----------------|-------------|
| | Incurred claims | Eligible months | Intervention | Comparison | Target | |
| Baseline | \$108,719,430 | 62,395.6 | \$1,742 | \$1,552 | \$1,742 | 1.00 |
| Jan-2016 | \$9,653,760 | 5,783.5 | 1,669.2 | 1,610.7 | \$1,850 | 0.90 |
| Feb-2016 | \$8,531,659 | 5,600.1 | 1,523.5 | 1,586.1 | \$1,818 | 0.84 |
| Mar-2016 | \$9,273,085 | 5,432.1 | 1,707.1 | 1,751.1 | \$1,995 | 0.86 |
| Apr-2016 | \$7,732,387 | 5,301.3 | 1,458.6 | 1,546.1 | \$1,766 | 0.83 |
| May-2016 | \$8,346,486 | 5,177.1 | 1,612.2 | 1,657.4 | \$1,896 | 0.85 |
| Jun-2016 | \$7,565,700 | 5,065.6 | 1,493.5 | 1,550.3 | \$1,748 | 0.85 |
| Jul-2016 | \$7,565,092 | 4,923.3 | 1,536.6 | 1,413.9 | \$1,601 | 0.96 |
| Aug-2016 | \$7,322,080 | 4,810.4 | 1,522.1 | 1,540.1 | \$1,745 | 0.87 |
| Sep-2016 | \$6,307,854 | 4,686.6 | 1,345.9 | 1,533.8 | \$1,736 | 0.78 |
| Oct-2016 | \$6,488,855 | 4,657.6 | 1,393.2 | 1,462.1 | \$1,662 | 0.84 |
| Nov-2016 | \$6,308,593 | 4,561.6 | 1,383.0 | 1,512.3 | \$1,705 | 0.81 |
| Dec-2016 | \$6,000,340 | 4,469.3 | 1,342.6 | 1,531.7 | \$1,732 | 0.78 |
| Jan-2017 | \$6,214,704 | 4,398.1 | 1,413.0 | 1,583.3 | \$1,787 | 0.79 |
| Feb-2017 | \$5,450,747 | 4,277.6 | 1,274.3 | 1,470.5 | \$1,656 | 0.77 |
| Mar-2017 | \$6,973,165 | 4,262.8 | 1,635.8 | 1,513.1 | \$1,705 | 0.96 |
| Apr-2017 | \$6,131,445 | 4,206.7 | 1,457.5 | 1,424.9 | \$1,617 | 0.90 |
| May-2017 | \$6,321,027 | 4,031.8 | 1,567.8 | 1,501.7 | \$1,692 | 0.93 |
| Jun-2017 | \$5,724,467 | 3,802.5 | 1,505.4 | 1,498.6 | \$1,701 | 0.88 |
| Jul-2017 | \$5,386,388 | 3,697.2 | \$1,457 | \$1,509 | \$1,716 | 0.85 |
| Aug-2017 | \$5,524,257 | 3,623.7 | \$1,524 | \$1,596 | \$1,795 | 0.85 |
| Sep-2017 | \$5,411,694 | 3,538.7 | \$1,529 | \$1,534 | \$1,754 | 0.87 |
| Oct-2017 | \$5,790,579 | 3,455.8 | \$1,676 | \$1,429 | \$1,590 | 1.05 |
| Nov-2017 | \$4,665,350 | 3,392.8 | \$1,375 | \$1,475 | \$1,655 | 0.83 |
| Dec-2017 | \$5,084,452 | 3,340.9 | \$1,522 | \$1,578 | \$1,751 | 0.87 |
| Total | \$159,774,164 | 106,497.2 | \$1,500 | \$1,539 | \$1,744 | 0.86 |

**Table 11.E — MEDICARE
PMPM costs for intervention and comparison groups, by month: Cohort 5A**

| Month/Year | Intervention group | | PMPM | | | Ratio (D/T) |
|--------------|---------------------|-----------------|----------------|----------------|----------------|-------------|
| | Incurred claims | Eligible months | Intervention | Comparison | Target | |
| Baseline | \$110,905,078 | 65,787.6 | \$1,686 | \$1,638 | \$1,686 | 1.00 |
| Jan-2017 | \$9,793,012 | 6,136.0 | 1,596.0 | 1,638.1 | \$1,677 | 0.95 |
| Feb-2017 | \$8,938,610 | 5,913.1 | 1,511.7 | 1,525.1 | \$1,558 | 0.97 |
| Mar-2017 | \$8,923,496 | 5,812.4 | 1,535.3 | 1,786.5 | \$1,821 | 0.84 |
| Apr-2017 | \$8,422,603 | 5,663.6 | 1,487.1 | 1,644.2 | \$1,676 | 0.89 |
| May-2017 | \$8,020,163 | 5,437.8 | 1,474.9 | 1,582.2 | \$1,625 | 0.91 |
| Jun-2017 | \$7,725,167 | 5,280.0 | 1,463.1 | 1,655.5 | \$1,710 | 0.86 |
| Jul-2017 | \$7,655,589 | 5,138.6 | 1,489.8 | 1,554.7 | \$1,598 | 0.93 |
| Aug-2017 | \$8,109,281 | 5,042.2 | 1,608.3 | 1,913.3 | \$1,985 | 0.81 |
| Sep-2017 | \$7,221,704 | 4,923.2 | 1,466.9 | 1,589.1 | \$1,620 | 0.91 |
| Oct-2017 | \$7,659,287 | 4,777.7 | 1,603.1 | 1,877.6 | \$1,963 | 0.82 |
| Nov-2017 | \$6,386,559 | 4,689.4 | 1,361.9 | 1,452.4 | \$1,505 | 0.90 |
| Dec-2017 | \$6,768,105 | 4,600.3 | 1,471.2 | 1,596.7 | \$1,643 | 0.90 |
| Total | \$95,623,575 | 63,414.2 | \$1,508 | \$1,651 | \$1,698 | 0.89 |

**Table 11.F — MEDICARE
PMPM costs for intervention and comparison groups, by month: Cohort 5B**

| Month/Year | Intervention group | | PMPM | | | Ratio (D/T) |
|--------------|---------------------|-----------------|----------------|----------------|----------------|-------------|
| | Incurred claims | Eligible months | Intervention | Comparison | Target | |
| Baseline | \$113,102,577 | 65,411.2 | \$1,729 | \$1,635 | \$1,729 | 1.00 |
| Apr-2017 | \$10,087,731 | 5,907.2 | 1,707.7 | 1,636.7 | \$1,700 | 1.00 |
| May-2017 | \$10,767,397 | 5,718.3 | 1,883.0 | 1,825.3 | \$1,898 | 0.99 |
| Jun-2017 | \$9,446,911 | 5,603.7 | 1,685.8 | 1,766.8 | \$1,830 | 0.92 |
| Jul-2017 | \$8,566,031 | 5,483.4 | 1,562.2 | 1,754.8 | \$1,810 | 0.86 |
| Aug-2017 | \$9,006,876 | 5,343.5 | 1,685.6 | 1,862.8 | \$1,907 | 0.88 |
| Sep-2017 | \$8,033,446 | 5,214.9 | 1,540.5 | 1,642.9 | \$1,684 | 0.91 |
| Oct-2017 | \$8,676,096 | 5,071.4 | 1,710.8 | 1,843.5 | \$1,903 | 0.90 |
| Nov-2017 | \$8,549,901 | 4,964.7 | 1,722.1 | 1,800.5 | \$1,829 | 0.94 |
| Dec-2017 | \$7,507,808 | 4,827.6 | 1,555.2 | 1,865.5 | \$1,890 | 0.82 |
| Total | \$80,642,197 | 48,134.7 | \$1,675 | \$1,775 | \$1,826 | 0.92 |

**Table 12.A — MEDICARE
PMPM costs for Demonstration Year 3 based on incurred Medicare claims for Cohorts 1, 2, 3 and 4**

| Type of service | Intervention | | PMPM | | | | PMPM Savings | Dollar Savings |
|---------------------------|----------------------|------------------|-------------------|-------------------|-------------------|-------------|-----------------|---------------------|
| | Incurred Claims | Member Months | Intervention (D) | Comparison | Target (T) | Ratio (D/T) | | |
| Baseline | \$930,624,118 | 559,556.5 | \$1,663.15 | \$1,591.41 | | | | |
| Durable medical equipment | \$12,828,231 | 211,574.3 | \$60.63 | \$67.86 | \$73.05 | 0.83 | \$12.42 | \$2,628,107 |
| Home health agency | \$13,704,153 | 211,574.3 | \$64.77 | \$92.80 | \$101.70 | 0.64 | \$36.93 | \$7,813,824 |
| Hospice | \$3,980,986 | 211,574.3 | \$18.82 | \$55.97 | \$58.83 | 0.32 | \$40.01 | \$8,465,679 |
| Inpatient | \$128,171,443 | 211,574.3 | \$605.80 | \$595.31 | \$646.58 | 0.94 | \$40.78 | \$8,628,093 |
| Outpatient | \$82,767,598 | 211,574.3 | \$391.20 | \$354.88 | \$381.13 | 1.03 | -\$10.07 | -\$2,130,534 |
| Professional | \$62,050,183 | 211,574.3 | \$293.28 | \$359.34 | \$390.35 | 0.75 | \$97.07 | \$20,537,141 |
| SNF | \$29,203,724 | 211,574.3 | \$138.03 | \$112.44 | \$124.04 | 1.11 | -\$13.99 | -\$2,960,382 |
| Total | \$332,706,318 | 211,574.3 | \$1,572.53 | \$1,638.59 | \$1,775.68 | 0.89 | \$203.15 | \$42,981,927 |

**Table 12.B — MEDICARE
PMPM costs for Demonstration Year 4 based on incurred Medicare claims for Cohorts 1, 2, 3, 4 and 5A/B**

| Type of service | Intervention | | PMPM | | | | PMPM Savings | Dollar Savings |
|---------------------------|----------------------|------------------|-------------------|-------------------|-------------------|-------------|-----------------|---------------------|
| | Incurred Claims | Member Months | Intervention (D) | Comparison | Target (T) | Ratio (D/T) | | |
| Baseline | \$930,624,118 | 559,556.5 | \$1,663.15 | \$1,591.41 | | | | |
| Durable medical equipment | \$15,314,194 | 281,344.0 | \$54.43 | \$60.81 | \$63.87 | 0.85 | \$9.43 | \$2,654,137 |
| Home health agency | \$19,825,534 | 281,344.0 | \$70.47 | \$100.85 | \$105.87 | 0.67 | \$35.40 | \$9,960,490 |
| Hospice | \$4,365,406 | 281,344.0 | \$15.52 | \$60.00 | \$63.39 | 0.24 | \$47.87 | \$13,468,277 |
| Inpatient | \$176,543,875 | 281,344.0 | \$627.50 | \$615.02 | \$653.19 | 0.96 | \$25.69 | \$7,228,244 |
| Outpatient | \$111,588,100 | 281,344.0 | \$396.63 | \$356.08 | \$373.76 | 1.06 | -\$22.86 | -\$6,432,096 |
| Professional | \$87,342,385 | 281,344.0 | \$310.45 | \$367.88 | \$390.43 | 0.80 | \$79.98 | \$22,502,724 |
| SNF | \$39,690,825 | 281,344.0 | \$141.08 | \$125.53 | \$136.67 | 1.03 | -\$4.41 | -\$1,240,154 |
| Total | \$454,670,318 | 281,344.0 | \$1,616.07 | \$1,686.17 | \$1,787.18 | 0.90 | \$171.11 | \$48,141,623 |

**Table 13.A —
PMPM costs by category of beneficiary for Demonstration Year 3 based on incurred Medicare claims for Cohorts 1, 2, 3 and 4**

| Category of beneficiary | Total | | Durable Medical Equipment | | Home Health Agency | | Hospice | | Inpatient | | Outpatient | | Professional | | SNF | |
|-------------------------|-------------|----------------|---------------------------|----------------|--------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|--------------|----------------|-------------|----------------|
| | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings |
| Total | \$203.15 | \$42,981,927 | \$12.42 | \$2,628,107 | \$36.93 | \$7,813,824 | \$40.01 | \$8,465,679 | \$40.78 | \$8,628,093 | -\$10.07 | -\$2,130,534 | \$97.07 | \$20,537,141 | -\$13.99 | -\$2,960,382 |
| Fac 65+ SPMI | \$667.50 | \$3,081,098 | \$0.30 | \$1,383 | -\$10.94 | -\$50,501 | \$137.14 | \$633,022 | \$141.17 | \$651,624 | \$149.91 | \$691,982 | \$147.74 | \$681,939 | \$102.18 | \$471,651 |
| Fac 65+ xSPMI | \$597.95 | \$4,828,819 | -\$3.75 | -\$30,266 | -\$5.74 | -\$46,356 | \$167.92 | \$1,356,028 | \$164.90 | \$1,331,655 | \$50.90 | \$411,057 | \$128.99 | \$1,041,669 | \$94.73 | \$765,033 |
| HCBS 65+ SPMI | \$469.16 | \$4,789,008 | \$16.39 | \$167,286 | \$45.86 | \$468,100 | \$75.03 | \$765,866 | \$111.51 | \$1,138,241 | \$64.20 | \$655,284 | \$148.99 | \$1,520,785 | \$7.20 | \$73,446 |
| HCBS 65+ xSPMI | \$319.54 | \$11,384,776 | \$8.42 | \$300,169 | \$69.43 | \$2,473,594 | \$85.33 | \$3,040,184 | \$53.32 | \$1,899,810 | -\$5.66 | -\$201,769 | \$125.11 | \$4,457,359 | -\$16.41 | -\$584,572 |
| Com 65+ SPMI | \$259.15 | \$1,847,219 | \$13.05 | \$93,042 | \$27.31 | \$194,685 | \$27.89 | \$198,777 | \$120.91 | \$861,818 | -\$42.83 | -\$305,306 | \$95.38 | \$679,859 | \$17.44 | \$124,345 |
| Com 65+ xSPMI | \$110.76 | \$4,590,874 | \$12.69 | \$526,188 | \$37.05 | \$1,535,672 | \$24.83 | \$1,029,371 | \$12.65 | \$524,332 | -\$35.48 | -\$1,470,660 | \$79.37 | \$3,289,920 | -\$20.36 | -\$843,948 |
| Fac <65 SPMI | \$414.90 | \$712,378 | -\$5.66 | -\$9,716 | -\$31.28 | -\$53,714 | \$53.16 | \$91,268 | \$1.86 | \$3,198 | \$69.59 | \$119,484 | \$269.50 | \$462,728 | \$57.74 | \$99,130 |
| Fac <65 xSPMI | \$451.68 | \$872,285 | \$5.97 | \$11,524 | -\$22.65 | -\$43,744 | \$110.50 | \$213,391 | -\$151.95 | -\$293,452 | \$113.41 | \$219,020 | \$342.16 | \$660,781 | \$54.25 | \$104,765 |
| HCBS <65 SPMI | \$127.54 | \$2,034,401 | \$13.33 | \$212,628 | \$34.12 | \$544,306 | \$26.23 | \$418,349 | \$54.19 | \$864,326 | -\$42.37 | -\$675,794 | \$81.55 | \$1,300,837 | -\$39.51 | -\$630,250 |
| HCBS <65 xSPMI | \$307.92 | \$8,772,581 | \$27.58 | \$785,698 | \$70.75 | \$2,015,700 | \$13.37 | \$380,881 | \$107.81 | \$3,071,484 | \$2.48 | \$70,524 | \$107.48 | \$3,062,051 | -\$21.54 | -\$613,756 |
| Com <65 SPMI | \$72.73 | \$1,681,041 | \$10.92 | \$252,483 | \$17.39 | \$401,927 | \$6.13 | \$141,759 | \$52.85 | \$1,221,626 | -\$34.57 | -\$799,111 | \$65.09 | \$1,504,561 | -\$45.09 | -\$1,042,204 |
| Com <65 xSPMI | -\$48.48 | -\$1,612,554 | \$9.55 | \$317,687 | \$11.25 | \$374,157 | \$5.92 | \$196,784 | -\$79.56 | -\$2,646,568 | -\$25.41 | -\$845,243 | \$56.36 | \$1,874,653 | -\$26.58 | -\$884,022 |

**Table 13B —
PMPM costs by category of beneficiary for Demonstration Year 4 based on incurred Medicare claims for Cohorts 1, 2, 3, 4
and 5A/B**

| Category of beneficiary | Total | | Durable Medical Equipment | | Home Health Agency | | Hospice | | Inpatient | | Outpatient | | Professional | | SNF | |
|-------------------------|-------------|----------------|---------------------------|----------------|--------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|--------------|----------------|-------------|----------------|
| | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings | PMPM Saving | Dollar Savings |
| Total | \$171.11 | \$48,141,623 | \$9.43 | \$2,654,137 | \$35.40 | \$9,960,490 | \$47.87 | \$13,468,277 | \$25.69 | \$7,228,244 | -\$22.86 | -\$6,432,096 | \$79.98 | \$22,502,724 | -\$4.41 | -\$1,240,154 |
| Fac 65+ SPMI | \$672.69 | \$5,922,648 | \$2.48 | \$21,875 | -\$20.17 | -\$177,567 | \$161.67 | \$1,423,391 | \$54.00 | \$475,464 | \$192.92 | \$1,698,520 | \$194.31 | \$1,710,760 | \$87.48 | \$770,204 |
| Fac 65+ xSPMI | \$457.89 | \$4,080,078 | -\$3.37 | -\$30,019 | -\$7.69 | -\$68,503 | \$169.93 | \$1,514,202 | \$20.76 | \$185,000 | \$98.84 | \$880,758 | \$112.13 | \$999,151 | \$67.28 | \$599,488 |
| HCBS 65+ SPMI | \$311.33 | \$6,303,049 | \$26.30 | \$532,453 | \$77.40 | \$1,567,047 | \$71.81 | \$1,453,889 | \$57.90 | \$1,172,318 | \$13.85 | \$280,334 | \$97.08 | \$1,965,487 | -\$33.02 | -\$668,479 |
| HCBS 65+ xSPMI | \$362.68 | \$15,300,722 | \$9.67 | \$407,850 | \$58.38 | \$2,462,804 | \$92.87 | \$3,917,838 | \$80.92 | \$3,413,963 | -\$32.78 | -\$1,383,019 | \$126.64 | \$5,342,872 | \$26.98 | \$1,138,414 |
| Com 65+ SPMI | \$95.03 | \$1,413,980 | \$10.57 | \$157,229 | \$47.93 | \$713,159 | \$29.28 | \$435,631 | -\$7.15 | -\$106,353 | -\$30.00 | -\$446,402 | \$58.65 | \$872,746 | -\$14.25 | -\$212,030 |
| Com 65+ xSPMI | \$75.11 | \$4,086,260 | \$12.89 | \$701,446 | \$36.31 | \$1,975,178 | \$29.57 | \$1,608,704 | -\$6.16 | -\$334,862 | -\$42.44 | -\$2,308,848 | \$53.15 | \$2,891,718 | -\$8.22 | -\$447,077 |
| Fac <65 SPMI | \$890.94 | \$2,756,101 | \$31.66 | \$97,943 | -\$27.62 | -\$85,437 | \$62.14 | \$192,221 | \$156.20 | \$483,198 | \$95.21 | \$294,530 | \$364.13 | \$1,126,434 | \$209.22 | \$647,212 |
| Fac <65 xSPMI | \$692.33 | \$1,587,521 | -\$4.10 | -\$9,391 | -\$16.85 | -\$38,630 | \$137.67 | \$315,683 | \$243.57 | \$558,512 | -\$33.25 | -\$76,243 | \$299.98 | \$687,853 | \$65.30 | \$149,738 |
| HCBS <65 SPMI | \$256.60 | \$6,252,055 | -\$0.42 | -\$10,273 | \$48.87 | \$1,190,688 | \$28.00 | \$682,275 | \$150.18 | \$3,659,215 | -\$27.05 | -\$659,035 | \$71.49 | \$1,741,781 | -\$14.47 | -\$352,597 |
| HCBS <65 xSPMI | \$168.96 | \$5,371,110 | \$2.26 | \$71,930 | \$46.63 | \$1,482,410 | \$41.94 | \$1,333,189 | \$44.00 | \$1,398,655 | -\$43.43 | -\$1,380,445 | \$88.48 | \$2,812,654 | -\$10.92 | -\$347,283 |
| Com <65 SPMI | -\$63.80 | -\$2,127,987 | \$10.43 | \$347,928 | \$17.45 | \$582,029 | \$4.17 | \$139,211 | -\$53.60 | -\$1,787,533 | -\$54.83 | -\$1,828,606 | \$51.09 | \$1,704,105 | -\$38.53 | -\$1,285,122 |
| Com <65 xSPMI | -\$75.74 | -\$2,803,912 | \$9.86 | \$365,166 | \$9.65 | \$357,312 | \$12.21 | \$452,042 | -\$51.04 | -\$1,889,332 | -\$40.62 | -\$1,503,641 | \$17.48 | \$647,163 | -\$33.30 | -\$1,232,623 |

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 29

INTEGRATING CARE FOR BENEFICIARIES OF MEDICARE AND MEDICAID: A WHITE PAPER



IDEAS
ACTION
RESULTS

Integrating Care for Beneficiaries Eligible for Medicare and Medicaid: An Update

WHITE PAPER

APRIL 2020

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HEALTH PROJECT

Under the leadership of former Senate Majority Leaders Tom Daschle and Bill Frist, M.D., BPC's Health Project develops bipartisan policy recommendations that will improve health care quality, lower costs, and enhance coverage and delivery. The project focuses on coverage and access to care, delivery system reform, cost containment, chronic and long-term care, and rural and behavioral health.

ADVISORS

The Bipartisan Policy Center staff produced this white paper in collaboration with a distinguished group of senior advisors and experts, including Sheila Burke, Jim Capretta, and Chris Jennings. BPC would also like to thank Henry Claypool and Tim Westmoreland for their contributions to this white paper.

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DISCLAIMER

The findings and recommendations expressed herein do not necessarily represent the views or opinions of BPC's founders or its board of directors.

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COVERAGE AND FINANCING**

18 CONCLUSION

Glossary of Terms

Activities of Daily Living (ADLs)

Assistant Secretary for Planning and Evaluation (ASPE)

Center for Medicare and Medicaid Innovation (CMMI)

Centers for Disease Control and Prevention (CDC)

Centers for Medicare and Medicaid Services (CMS)

Children's Health Insurance Program (CHIP)

Calendar Year (CY)

Dual-Eligible Special Needs Plan (D-SNP)

Fee-for-service (FFS)

Financial Alignment Initiative (FAI)

Fully-Integrated Dual-Eligible Special Needs Plan (FIDE-SNP)

Highly-Integrated Dual-Eligible Special Needs Plan (HIDE-SNP)

Long-Term Services and Supports (LTSS)

Managed Long-Term Services and Supports (MLTSS)

Medicaid and CHIP Payment and Access Commission (MACPAC)

Medicare Advantage (MA)

Medicare Payment and Advisory Commission (MedPAC)

Medicare-Medicaid Coordination Office (MMCO)

Medicare-Medicaid Plan (MMP)

Program of All-Inclusive Care for the Elderly (PACE)

U.S. Department of Health and Human Services (HHS)

Overview

The Bipartisan Policy Center is continuing its efforts to improve quality of care through the integration of Medicare and Medicaid services for individuals who are eligible for both programs.ⁱ These Medicare-Medicaid beneficiaries, commonly known as “dual-eligible individuals,” must navigate two separate programs with different benefits and eligibility requirements. For most individuals, this would be daunting, but for dual-eligible individuals and their families, who are often dealing with chronic conditions and functional limitations, these challenges can be overwhelming.

In August of 2019, BPC began work on policy recommendations to improve care for dual-eligible individuals. In recent months however, the COVID-19 outbreak has become an immediate threat to this vulnerable population. According to the Centers for Disease Control and Prevention (CDC), older adults, especially those above age 65, and individuals of any age with serious underlying medical conditions, such as lung disease, heart conditions, and those undergoing cancer treatment, are at a higher risk of experiencing severe cases of COVID-19.¹ Additionally, individuals living in nursing homes or long-term care facilities are at increased risk of exposure to the virus. Because many dual-eligible individuals fall into one or more of the CDC’s high-risk categories, we believe it is necessary to broaden the scope of the project to include recommendations to limit exposure to COVID-19 for this population. While not directly addressed in this white paper, we hope to include recommendations based on stakeholder feedback in our final report.

In recent years, policymakers have sought to better integrate Medicare and Medicaid services for the estimated 12.2 million dual-eligible individuals.^{ii 2} When done well, clinical health, behavioral health,

i Previous reports from the Bipartisan Policy Center that address dual-eligible individuals include: *Delivery System Reform: Improving Care for Individuals Dually Eligible for Medicare and Medicaid*, September 2016. *A Policy Roadmap for Individuals with Complex Care Needs*, Jan 2018. *Next Steps in Chronic Care: Expanding Innovative Medicare Benefits*, Jul 2019.

ii For the purposes of this paper, when we use the term “integration” we are referring to alignment of Medicare and Medicaid program administrative requirements, financing, benefits, and care delivery. Integration may also mean that Medicare and Medicaid services are coordinated and are provided seamlessly to an eligible individual through a single point of contact.

social services, and LTSS are coordinated and provided seamlessly to an eligible individual. Integration efforts have included establishing the Medicare-Medicaid Coordination Office (MMCO) to coordinate programs within the Centers for Medicare & Medicaid Services (CMS), permanent authorization of Medicare Advantage plans designed to serve dual-eligible individuals, facilitating integration by states, and establishing demonstration programs. Many stakeholders, however, believe that more should be done to integrate care.

Integration for dual-eligible individuals is especially challenging, given the heterogeneity of the population and the unique and significant needs of the various sub-populations. Many have multiple chronic conditions and may need assistance with activities of daily living, or ADLs, such as bathing or dressing.³ They may have mental illnesses, cognitive impairments, physical limitations, or a combination of these conditions. While the majority are older Americans, 39% of dual-eligible individuals are under age 65,⁴ and less than 10% are enrolled in programs or care models that integrate Medicare and Medicaid services.⁵

This is the first of two white papers on the integration of care for dual-eligible individuals. The purpose of this paper is to provide necessary background on this population of low-income Medicare beneficiaries. The paper discusses important demographics, eligibility for Medicare and Medicaid, covered services under each program, and the implications of being enrolled in both programs. It also discusses different types of integration of Medicare and Medicaid services, and how state and federal policymakers have worked to make the programs function better for those who are enrolled, what has worked, and what has not. The second white paper provides options for consideration by state and federal policymakers, as well as stakeholders representing consumers, providers, and plans. BPC will issue final recommendations in the summer of 2020 and is seeking comments on the second paper.

Background on Dual-Eligible Individuals

To understand challenges associated with integrating care for dual-eligible individuals, it is helpful to review key characteristics of the population, the pathways to becoming a dual-eligible individual, how the programs are administered, and what services are covered by both programs. The following is designed to provide the necessary background on these issues.

Medicare Eligibility and Benefits

In 2018, approximately 85% of the nearly 60 million Medicare beneficiaries qualified for Medicare on the basis of age.⁶ The remaining 15% were eligible based on disability.⁷ For those with disabilities, Medicare eligibility is triggered for individuals who qualify for Social Security Disability Income payments for a permanent disability for at least 24 months.⁸ Individuals may also qualify for Medicare coverage based on a diagnosis of End-Stage Renal Disease.⁹ These individuals qualify for Medicare irrespective of their age, but make up only about one percent of the Medicare population.¹⁰

Medicare covers clinical health services such as inpatient hospitalization, professional office visits, outpatient surgical procedures, and in certain circumstances, home health care, skilled nursing facility care, rehabilitation services and other services. Medicare is divided into four parts, with different financing and cost-sharing requirements:¹¹

- Medicare Part A is financed through employer and employee payroll taxes and generally covers inpatient services and limited stays at skilled nursing facilities.¹²
- Medicare Part B – for which individuals pay a monthly premium that covers the majority of Part B costs – covers professional services furnished by physicians and other non-physician practitioners, hospital outpatient facility and ambulatory surgical center services, certain home health services, dialysis services, and clinical-laboratory services.¹³
- Medicare Part C is Medicare’s managed care program, known as Medicare Advantage, which covers services covered under Parts A, B, and may also cover Part D services, as outlined below.

- Medicare Part D covers prescription drugs and is offered through Medicare Advantage health plans or as a stand-alone plan for those who choose to remain in Medicare fee-for-service.¹⁴

Total Medicare spending for calendar year 2018 was \$741 billion for all beneficiaries.¹⁵ Net spending, when taking into account beneficiary premiums and cost-sharing, was \$605 billion in 2018.¹⁶

Medicaid Eligibility and Benefits

Medicaid is a joint federal-state program that provided health care coverage to an estimated 86.7 million low-income individuals in FY 2018.¹⁷ Medicaid serves low-income children and their parents, pregnant women, people with disabilities, and individuals age 65 and older.¹⁸ In the 37 states, including the District of Columbia, that have expanded Medicaid eligibility under the Affordable Care Act, other low-income adults with incomes up to 138% of the federal poverty level are also covered.¹⁹ Total Medicaid spending was \$621 billion in FY 2018 for all beneficiaries.²⁰

Medicare beneficiaries qualify for Medicaid if they have low incomes and are aged, blind, or have a disabling condition. For dual-eligible individuals who receive full benefits, the Medicaid program covers clinical health services that are not covered by Medicare, as well as non-clinical services, such as targeted case-management services and transportation to medical appointments. States must cover certain mandatory benefits under Medicaid, while other services are optional. Medicaid covers long-term services and supports (LTSS), which include services to address beneficiaries' deficits in ADLs in either an institutional setting for nursing facility residents or through personal-care services and other home and community-based services.²¹

Dual-Eligible Individuals

While most dual-eligible individuals are over age 65, there are 39% under age 65.²² About half of dual-eligible individuals first qualify for Medicare based on disability and about half qualify when they turn age 65.²³ The proportion of all individuals who qualify for Medicare based on disability and who are also eligible for Medicaid has grown from 44.3% in 2006 to 52.3% in 2018, according to the Medicare-Medicaid Coordination Office (MMCO) at the U.S. Department of Health and Human Services' Centers for Medicare and Medicaid Services, or CMS.²⁴

Dual-eligible individuals tend to have poorer health and functional status than those eligible for Medicare only. According to the MMCO, 41% have at least one mental health diagnosis, 49% receive LTSS and 60% have multiple

chronic conditions.²⁵ The average dual-eligible individual receiving full Medicare and Medicaid benefits has six chronic conditions, while all other Medicare beneficiaries average only four.²⁶ Depression and Alzheimer's disease or related dementia were among the most prevalent conditions for full-benefit dual-eligible individuals.²⁷ As a result, those with multiple chronic conditions typically have higher utilization of services, such as emergency room visits, hospitalizations, and eventual need for LTSS. Accordingly, the HHS Office of the Assistant Secretary for Planning and Evaluation, or ASPE, has found that dual-eligible status was the most powerful predictor of poor Medicare outcomes among social risk factors.²⁸

Dual-eligible individuals are also more likely to have greater limitations in ADLs than non-dual eligible individuals.²⁹ In 2016, 26% of dual-eligible individuals had limitations in one to two ADLs, compared to 18% of non-dual eligible individuals and 28% had limitations in three to six ADLs, compared to 9% of non-dual-eligible individuals.³⁰ As a result, dual-eligible individuals are among the most medically complex individuals and often have wide-ranging health care needs that require additional services and supports.³¹

Eligibility and Benefits

While all dual-eligible individuals are eligible for Medicare, their Medicaid benefits vary based on income. Full-benefit dual-eligible individuals are entitled to the full-range of medically-necessary Medicare benefits, as well as medically-necessary benefits covered under the Medicaid state plan. In 2018, full-benefit individuals numbered 8.7 million, or 71% of total dual-eligible individuals.³² Partial-benefit individuals, typically with incomes at or slightly above the federal poverty level, are eligible for all Medicare-covered services, but their Medicaid benefits are limited to the assistance with Medicare premiums, deductibles, and copays through the Medicare Savings Program. They are not eligible for Medicaid-covered services.³³

Many low-income Medicare beneficiaries who qualify as partial-benefit dual-eligible individuals are not enrolled in the Medicare Savings Program.³⁴ The cost of Medicare premiums, deductibles and co-payments may create a barrier to accessing care. In 2018, there were 3.5 million partial-benefit dual-eligible individuals, or 29% of total dual-eligible individuals.³⁵ Between 2006 and 2018, the total number of full-benefit and partial-benefit dual-eligible individuals has grown on average each year by 2.9%.³⁶

For full-benefit dual-eligible beneficiaries, Medicare is the primary payer of acute care and clinical health services. Medicare covers clinical health services such as hospitalization, physician office visits, surgical procedures, and in certain circumstances, skilled home health care, skilled nursing

facility care, and rehabilitation services.³⁷ Medicaid is then responsible for covering Medicare premiums, cost-sharing, long-term care services and certain behavioral health services.

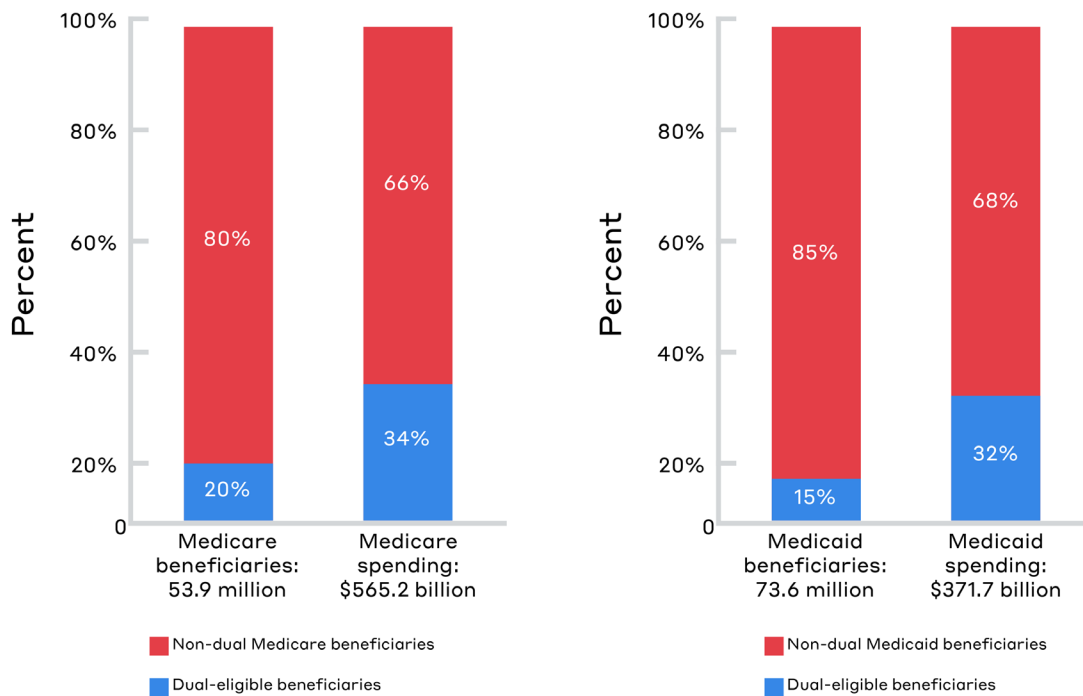
An ASPE report found that 67% of full-benefit dual-eligible individuals qualify for Medicare before also becoming eligible for Medicaid, and 27% qualify for Medicaid first.³⁸ Only about 5% of individuals become simultaneously eligible for both Medicare and Medicaid.³⁹ Of those who qualified for Medicare before Medicaid, 59% qualified for Medicare on the basis of age. For those who already had Medicare, 37% qualified for Medicaid because they met criteria established by the state based on income or another eligibility requirement. For example, states are permitted to provide Medicaid coverage to Medicare beneficiaries with incomes up to 300% of the SSI income limit. Another 22% qualified under Medicaid's Medically Needy spend-down.⁴⁰ Of those who follow the Medicaid-to-Medicare pathway to full-benefit dual-eligible status, 55% qualified for Medicare based on SSI eligibility, and 66% qualified based on disability.⁴¹

Spending

Given the severity of illness and disabilities, per-capita spending on dual-eligible individuals is more than three times higher than for Medicare-only beneficiaries.⁴² The average annual spending per dual-eligible individual in 2013 was approximately \$29,238.⁴³ The average annual spending for those covered only by Medicare came in significantly lower, at \$8,593 per person.⁴⁴

While dual-eligible individuals comprise 20% of the Medicare population, they account for 34% of total Medicare expenditures (see Figure 1).⁴⁵ Similarly, dual-eligible individuals comprise only 15% of the Medicaid population, but account for 32% of total Medicaid expenditures.⁴⁶ Dual-eligible individuals, including partial-benefit dual-eligible individuals, account for only 9.15% of those who have Medicare and/or Medicaid coverage, while their expenditures constitute 33.21% of total expenditures for both programs in 2012.⁴⁷ From 2012 to 2018, total expenditures for both programs have increased by 36%; the disproportionate cost of duals has likely increased accordingly but recent data is unavailable.⁴⁸

Figure 1: Dual-Eligible Beneficiaries as a Share of Medicare & Medicaid Enrollment and Spending, CY 2013



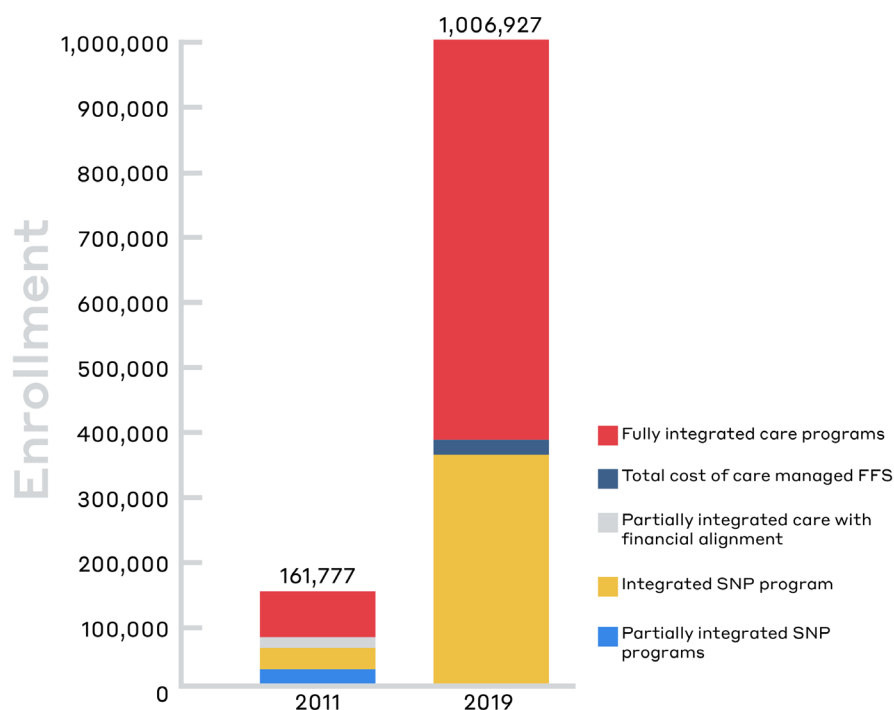
Source: MedPAC, MACPAC, Data book: *Beneficiaries dually eligible for Medicare Medicaid*. Jan 2018

Integration of Medicare and Medicaid Coverage and Financing

Despite the availability of models that integrate Medicare and Medicaid, many dual-eligible individuals are enrolled in separate Medicare and Medicaid managed care plans that do not provide integrated care or care coordination for all services. There are many approaches to integration that include some level of care coordination. Delivery and payment models range from Medicare Advantage D-SNPs that offer all Medicare and Medicaid-covered services, to advanced versions of D-SNPs that meet greater coordination requirements, to PACE. The Center for Medicare and Medicaid Innovation, or CMMI, and MMCO within CMS have also partnered to

allow states to test capitated and managed fee-for-service demonstration models under the FAI that feature a high level of integration. Some models in each category have excelled in providing high-quality integrated care, while others have fallen short, posing a threat to patient health and creating disruptions in long-term beneficiary-provider relationships. While the number of dual-eligible individuals in integrated programs has grown significantly between 2011 and 2019 (see Figure 2), a relatively small percentage, roughly 8.25% according to MMCO, are enrolled in integrated programs.⁴⁹

Figure 2: Total Integrated Care Enrollment by Program Type: 2011 and 2019



Source: Medicare-Medicaid Coordination Office, *FY 2019, Report to Congress*, p. 8ⁱⁱⁱ

iii From the report: [A]nalysis performed by the Integrated Care Resource Center, under contract with CMS. “Fully Integrated Programs/Models” include MMP, Fully Integrated Dual Eligible (FIDE) SNP, and PACE enrollment through July 2019. This category also includes the FIDE SNPs previously noted as “Legacy Medi-Medi Demo Programs” and categorized separately in previous reports. “Total Cost of Care Managed FFS” includes enrollment in the Washington Managed Fee-For-Service demonstration under the Medicare-Medicaid Financial Alignment Initiative. “Integrated SNP Program” enrollment includes programs in which a dually eligible individual receives both Medicare and Medicaid services from companion or aligned Medicare D-SNPs and Medicaid managed care plans; several state programs were reclassified from partially integrated to integrated to align with the integration standards for D-SNPs finalized in the 2020 Medicare Advantage and Part D final rule. “Partially Integrated Care with Financial Alignment” refers to the North Carolina Medicare Health Care Quality Demonstration, for which no 2019 information is included because the initiative had ended. No state data was available in July 2019 for “Partially Integrated SNP Program” enrollment. The 2019 analysis newly includes data from existing integrated care options in Oregon, select D-SNPs in California, and FIDE-SNPs and certain types of D-SNPs in Florida.

In recent years, Congress and CMS have made efforts to advance the integration of Medicare and Medicaid services for dual-eligible individuals by actively encouraging states to adopt more fully integrated programs. There are three main approaches that states can take to integrate Medicare and Medicaid:

- Dual-eligible special needs plans (D-SNPs);
- Program of All-Inclusive Care for the Elderly (PACE); and
- The Financial Alignment Initiative (FAI), a demonstration that integrates coverage and financing.

Dual-Eligible Special Needs Plans

Congress permanently authorized D-SNPs through the Bipartisan Budget Act of 2018.⁵⁰ That law also established new integration standards for D-SNPs and unified Medicare and Medicaid grievance and appeals procedures for certain D-SNPs beginning in contract year 2021.⁵¹

CMS released regulations in April 2019 implementing the new D-SNP requirements.⁵² Under the regulations, D-SNPs must meet the integration criteria beginning CY 2021. Plans must: (1) be a fully integrated dual-eligible special needs plan, called FIDE-SNP, or a highly integrated dual-eligible special needs plan, called HIDE-SNP,^{iv} or (2) notify the state Medicaid agency, or its designee, of hospital and skilled nursing facility admissions for at least one group of high-risk full-benefit dual-eligible individuals.⁵³ Beginning CY 2021 through CY 2025, CMS will impose the intermediate sanction of prohibiting new enrollment into a D-SNP if it determines the D-SNP does not meet the new integration standards.⁵⁴

iv The regulation, codified at 42 CFR § 422.2, defines a FIDE-SNP as a type of D-SNP: (1) that provides dual-eligible individuals access to Medicare and Medicaid benefits under a single entity that holds both an MA contract with CMS and a Medicaid managed care organization contract under section 1903(m) of the [SSA] with the applicable State; (2) whose capitated contract with the state Medicaid agency provides coverage, consistent with state policy, of specified primary care, acute care, behavioral health, and long-term services and supports, and provides coverage of nursing facility services for a period of at least 180 days during the plan year; (3) that coordinates the delivery of covered Medicare and Medicaid services using aligned care management and specialty care network methods for high-risk beneficiaries; and (4) that employs policies and procedures approved by CMS and the State to coordinate or integrate beneficiary communication materials, enrollment, communications, grievance and appeals, and quality improvement. The regulation, codified at 42 CFR § 422.2, defines a HIDE-SNP as a type of D-SNP offered by an MA organization that provides coverage, consistent with state policy, of long-term services and supports, behavioral health services, or both, under a capitated contract that meets one of the following arrangements— (1) the capitated contract is between the MA organization the Medicaid agency; or (2) the capitated contract is between the MA organization's parent organization (or another entity that is owned and controlled by its parent organization) and the Medicaid agency.

D-SNPs must have a coordinated Medicare and Medicaid grievances and appeals process beginning CY 2020, while FIDE-SNPs and HIDE-SNPs with exclusively aligned enrollment must implement a unified Medicare and Medicaid grievances and appeals process beginning CY 2021.^{55, v} The unified grievances and appeals process will allow individuals to follow one resolution pathway at the plan level when filing a complaint or contesting an adverse coverage determination for Medicare non-Part D benefits and Medicaid services.⁵⁶

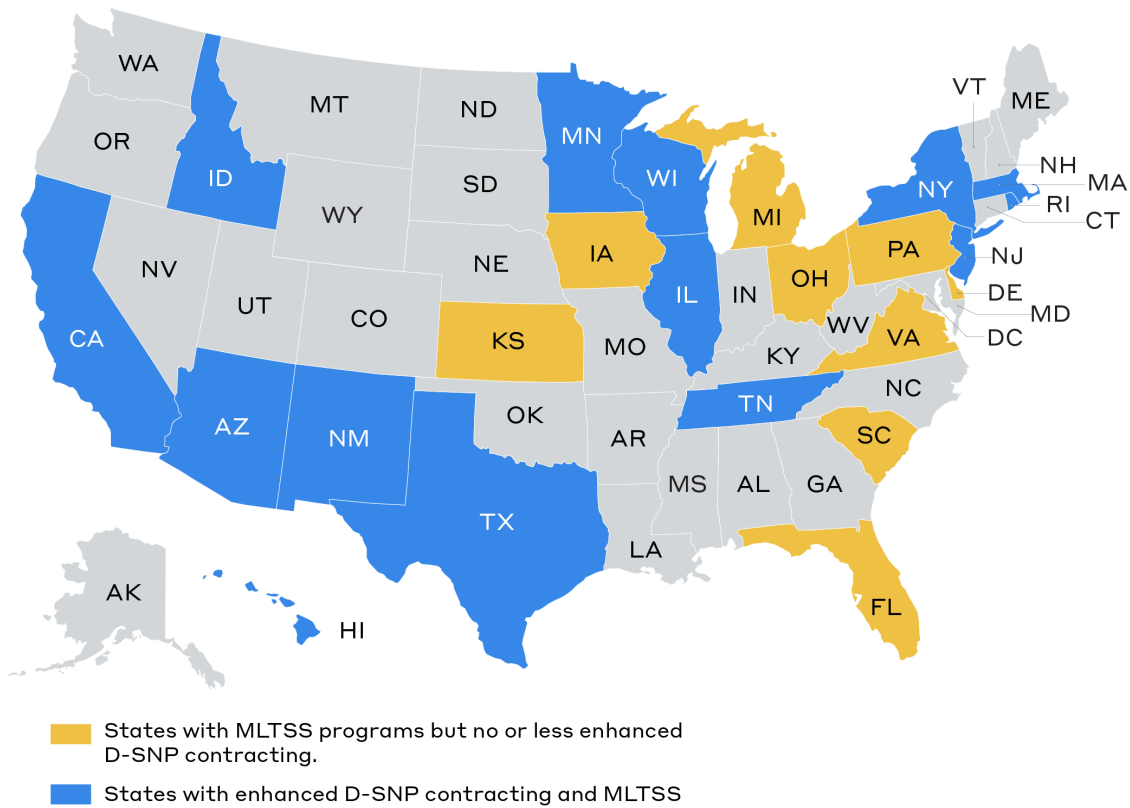
Enrollment in D-SNPs, which have the highest number of participants compared to other integrated plans, varies significantly by state, and includes both rural and urban populations. Texas, Arizona, and New Mexico – states with the largest populations residing in frontier counties – have relatively high D-SNP enrollment.⁵⁷ Yet other rural states such as North Dakota, South Dakota, and Iowa have virtually no dual-eligible individuals enrolled in D-SNPs.⁵⁸ States with significant urban areas, including Florida, California, New York, and Massachusetts, have higher percentages of eligible individuals enrolled in D-SNPs.⁵⁹

Information on health outcome and cost measures for dual-eligible individuals is insufficient in states with low enrollment in integrated care models, making comparisons difficult.⁶⁰ Overall, Medicaid outcomes by state may be skewed by this discrepancy as well. Even states such as Texas, which have robust integrated care models, have numerous counties that lack data, presenting an issue for researchers and policymakers, especially when it comes to examining disparities within counties and states.⁶¹

The Affordable Care Act required D-SNPs to either have contracts with states to provide Medicaid benefits or arrange for them to be provided to dual-eligible enrollees. Fourteen states, highlighted in blue in Figure 3, require D-SNPs to align with Medicaid managed long-term services and supports, or MLTSS, programs. Similarly, other states have developed Medicaid MLTSS programs with the potential to align D-SNP and MLTSS programs.^{62 63}

v Exclusively aligned enrollment occurs when the state limits enrollment into a D-SNP to full-benefit dual-eligible individuals who are also enrolled in a Medicaid MCO that is offered by the D-SNP's MA organization, the D-SNP's parent organization, or by another entity that is owned and controlled by the D-SNP's parent organization.

Figure 3: States with Aligned D-SNPs and Managed Long-Term Services and Supports Programs, 2017



Source: ASPE Report: U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, *Integrating Care through Dual Eligible Special Needs Plans D-SNPs: Opportunities and Challenges*, April 2019, 9.

Financial Alignment Initiative

Under the FAI, states may test any of three integrated care models: (1) a capitated managed care model; (2) a managed FFS model; or (3) a state-specific model.⁶⁴ Under the capitated managed care model, states enter into a single three-way contract with CMS and health plans.⁶⁵ Most states participating in the demonstration chose to implement the capitated managed care option. Plans operating under this contract, known as Medicare-Medicaid Plans, receive a blended capitated rate for all Medicaid and Medicare benefits.⁶⁶ Using this model, a plan provides all Medicare-covered and all or most Medicaid-covered services with a high level of care coordination.⁶⁷ As of December 2019, nine states are participating in the capitated managed care model.^{vi 68}

vi California, Illinois, Massachusetts, Michigan, New York, Ohio, Rhode Island, South Carolina, and Texas are participating in the capitated managed care model under the financial

In the managed FFS model, CMS and a state enter into an agreement that allows the state to provide coordinated care by building on the existing FFS delivery system.⁶⁹ Specifically, states have built on the Medicaid Health Homes model and Accountable Care Organizations.⁷⁰ Under this model, the state invests in care coordination and receives a retrospective performance payment if certain quality thresholds are met and Medicare achieves target savings levels.⁷¹ Only Washington State and Colorado have implemented this model.⁷² Colorado has ended its demonstration; Washington's demonstration is ongoing.⁷³

The state-specific model allows states to implement innovative models that may include elements of demonstrations under the FAI or other types of delivery system reforms, such as alternative payment methodologies, value-based purchasing, or episode-based bundled payments.⁷⁴ As of December 2019, Minnesota is the only state participating in the state-specific model under the FAI with a focus on administrative alignment.⁷⁵

PACE

PACE is a permanently authorized program that offers comprehensive medical and social services, including those beyond Medicare and Medicaid – if deemed necessary – to those above age 55 who need nursing home-level care. Almost all PACE enrollees are dual-eligible individuals and the care model is centered on adult day care centers with each patient taken care of by an interdisciplinary team.⁷⁶ While PACE represents a high-degree of Medicare-Medicaid integration, it is not widely available and less than 50,000 people are enrolled given the eligibility limitations and start-up costs associated with establishing adult day care centers.

Program Evaluations

Dual-eligible individuals enrolled in integrated models in some areas generally experience some reductions in health care utilization compared to their counterparts not in integrated models, according to a July 2019 MACPAC report – although evaluations of specific integrated models make it difficult to generalize about the effects of integrated care broadly.⁷⁷ According to the report, individuals in integrated models generally experienced decreases in hospitalizations and hospital readmissions.⁷⁸ That is consistent with other studies, which have reported higher beneficiary satisfaction in integrated models than in non-integrated Medicaid FFS arrangements.⁷⁹

At the same time, findings are mixed for use of emergency department services, LTSS, other services, and beneficiary experience related to communicating with health plans and understanding benefits.⁸⁰ Care coordination between Medicare and Medicaid services can be difficult due to lack of access each program has to the other program's data,⁸¹ but recent demonstrations under MMCO and CMMI have emphasized the

alignment initiative. Virginia participated in the capitated managed care model, but ended its demonstration in December 2017.

incorporation of care coordination into integrated models and, as mentioned earlier, CMS has issued new rules for D-SNPs that require further coordination and unification.

Early cost results are also promising but limited. Lower per-person Medicare spending was associated with some integrated care models, but few evaluations have been able to review changes in associated Medicaid spending due to lack of recent Medicaid data.⁸² The new Transformed Medicaid Statistical Information System, or T-MSIS, is expected to provide more information in the near future on Medicaid spending and service use in integrated models.

The MMCO has reported increased access to care coordination within the capitated model demonstrations under its FAI through metrics including increases in completion of health risk assessments and care plans.⁸³ Many of the states participating in FAI faced declines in enrollment that meant participation was lower than expected.⁸⁴ Washington State did see savings, with the caveat that the savings were in Medicare and did not include the effect of the demonstration on Medicaid.⁸⁵

Studies evaluating D-SNPs have demonstrated evidence of reductions in hospitalizations and hospital readmissions. One study compared individuals in California's SCAN plan with Medicare FFS individuals in the state, and found 14% lower rates of preventable hospitalizations and 25% lower rates of hospital readmissions.⁸⁶ Another study found a 54% decrease in hospitalizations and a 24% decrease in hospital readmissions in the Visiting Nurse Service of New York's Choice health plans.⁸⁷ D-SNPs have also been associated with reductions in long-stay and end-of-life care nursing facility entries⁸⁸ and reductions in per-person Medicare spending, such that a 1% increase in D-SNPs penetration was associated with a 0.2% reduction in Medicare spending per beneficiary.⁸⁹

Because traditional fee-for-service providers in Medicare and Medicaid have no reporting requirements, comparing D-SNPs to FFS is not possible. However, D-SNPs consistently performed higher than MA plans. In a study conducted by the Government Accountability Office, D-SNP performed better on process of care and health outcomes with similar utilization compared to traditional Medicare Advantage Plans.⁹⁰ Specifically, they performed better on the majority of process measures and performed better on all outcomes measures.⁹¹

Studies evaluating PACE have demonstrated reductions in inpatient hospital use,^{92, 93, 94} hospitalizations,⁹⁵ and length of stay.⁹⁶ Specifically, PACE participants compared to a matched group in one study experienced reduced hospitalization rates over a two-year period and a shorter length of stay when hospitalized, with an average reduction of 0.6 hospital days per month, even though they had higher levels of hospitalization six months prior.⁹⁷ The Assistant Secretary for Planning and Evaluation did note that limitations of PACE, like the reliance on adult day care centers, have led to slow growth in enrollment and more-scalable and permanent options were necessary for the integration of care.⁹⁸

Conclusion

While the evidence is still outstanding on the potential for long-term savings for demonstration projects that fully integrate care for dual-eligible enrollees, it is clear this population must have a better coordinated and more seamless system of care. Even those without serious medical or functional impairment should not be asked to navigate two separate programs for services without full accountability on the programs for coordination of care. The current bifurcated system should not continue. BPC health care leaders believe states are in the best position to integrate Medicare and Medicaid services and these options encourage states to move forward with integration. Over the long-term, better integration and care coordination will lead to a better enrollee experience, improve quality of care, eliminate inefficiencies, and result in long-term savings.

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APPENDIX 30

WASHINGTONIANS ARE LESS RELIGIOUS THAN EVER: GALLUP POLL FINDS

Gene Balk / FYI Guy

Washingtonians are less religious than ever, Gallup poll finds

Originally published April 20, 2018 at 6:00 am Updated April 20, 2018 at 7:31 pm

Since Gallup began tracking religiosity at the state level, Washington has been among the least religious in the union. Forty-seven percent of adults in the state say they are not religious, and seldom or never attend services.

Share story

By

[Gene Balk / FYI Guy](#)

Seattle Times columnist

Ever since pollsters began asking Americans about their faith, Washington has ranked among the less-religious states in the country. But Washington has never been as secular as it is right now.

A record number of state residents didn't identify with any religion in 2017, according to polling giant [Gallup](#). Forty-seven percent of adults in the state say they are not religious, and seldom or never attend services.

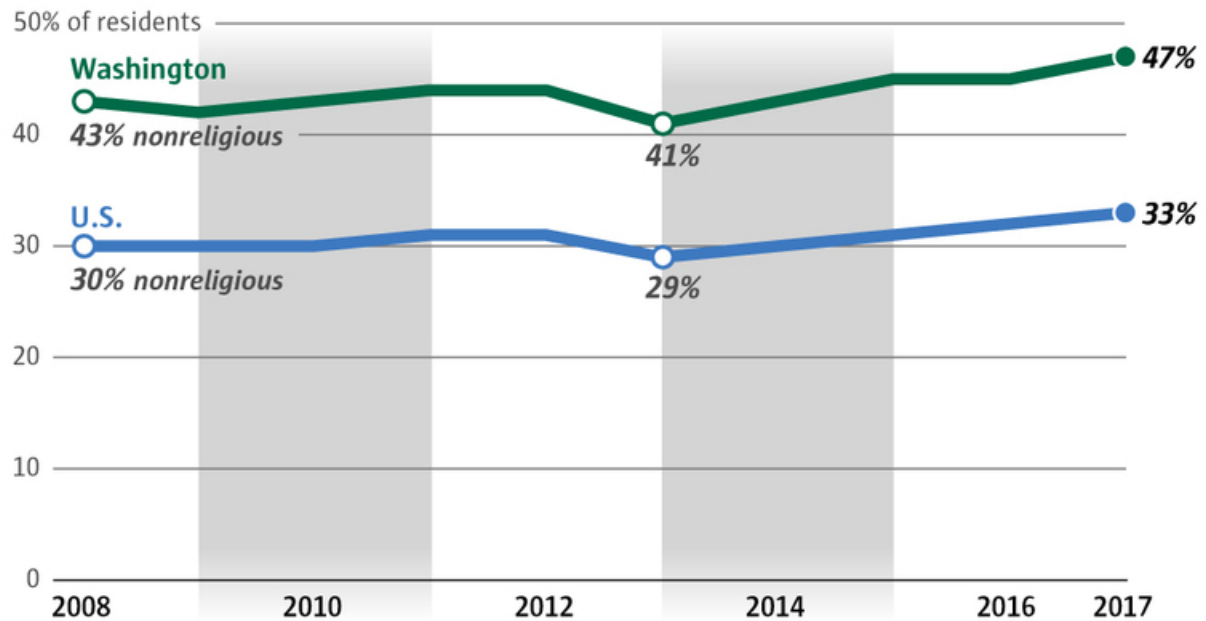
When Gallup began polling about religious belief at the state level in 2008, 43 percent of Washingtonians identified as nonreligious. That

number didn't change much year-to-year, except for a hard-to-explain dip to 41 percent in 2013 (the nation as a whole also saw the percentage of nonreligious drop that year).

After that, the number started to rise. That's true for many other states as well. In fact, the U.S. as a whole is also at a record high, with 33 percent saying they are not religious.

New high for nonreligious residents

Forty-seven percent of Washington adults are not religious, the highest number since Gallup first began polling the state in 2008.



Source: Gallup

EMILY M. ENG / THE SEATTLE TIMES

It's primarily young people who are beefing up the numbers of the nonreligious in the U.S. The poll data show that just 28 percent of those younger than 30 are very religious, compared with 47 percent of those aged 65 and older. And it's possible that the influx of young newcomers to the Seattle area is the driving force behind the change in Washington's numbers.

Washington ranks as the sixth-least-religious state, in a tie with Alaska. Oregon has tended to poll just slightly less religious than Washington, and that held true in 2017. Forty-eight percent in the Beaver State have no religion.

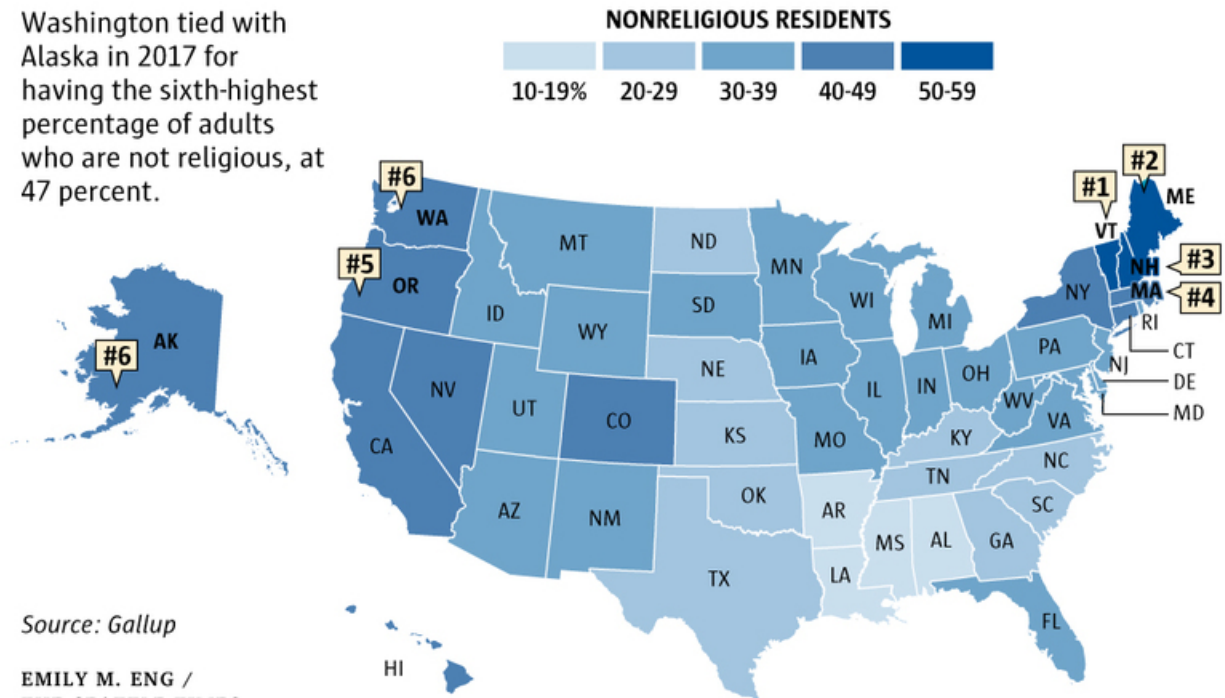
Washington is one of 19 states, plus the District of Columbia, where the plurality of adults are nonreligious (as opposed to very religious or moderately religious). Just 28 percent of adults in Washington identify as highly religious, and say they attend services weekly — 19 percentage points lower than those who are nonreligious.

In fact, in all the other Western states — Oregon, California, Alaska and Hawaii — the percentage of adults who are not religious also outweighs the percentage who are very religious by double digits.

The most- and least-religious states are, perennially, Mississippi and Vermont — and I'm sure you can guess which one is which without me telling you. In 2017, 59 percent of Vermonters had no religion, while only 12 percent of Mississippians did.

Washington ranks as sixth-least-religious state

Washington tied with Alaska in 2017 for having the sixth-highest percentage of adults who are not religious, at 47 percent.



New England is the least-religious part of the country, claiming the top four states, but the Western U.S. is right behind. The Southern “Bible Belt” states are the most religious, although Utah ranks up there too. It’s one of just four states where the majority of residents identify as highly religious.

That make sense because the polling shows that Mormons are the most devout religious group in the U.S., with 73 percent identifying as very religious. They’re followed by Protestants (50 percent), Muslims (45 percent) and Catholics (40 percent). Jews are far and away the least devout group, with just 18 percent saying they’re very religious.

In terms of race and ethnicity, blacks are a more likely group to be very religious (48 percent)

compared with whites and Hispanics (both at 36 percent).

The data comes from Gallup's daily tracking poll, which is conducted throughout the year. In 2017, about 129,000 U.S. adults were interviewed, including nearly 3,400 in Washington. The margin of error is +/- 2 from 2013 to 2017, and +/- 1 from 2008 to 2012.

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APPENDIX 31

MAINTAINING DIGNITY

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and Medicaid Eligible Hospice Agency**

APPENDIX 32

**HEALTH STATUS OF
LGBTQ POPULATION**

The facts on LGBT aging

Caregiving

Caregiving can be a rewarding but sometimes challenging experience. LGBT caregivers face unique obstacles, from healthcare laws that privilege biological families to a lack of resources for LGBT-specific needs. Because LGBT people are twice as likely to age alone and four times less likely to have children, LGBT elders become caregivers more often than their heterosexual counterparts.

- More than half (54 percent) of LGBT elder care recipients receive care from their partner; a quarter (24 percent) receive care from a friend
- 21 percent of older LGBT adults have provided care to friends, compared to only 6 percent of their heterosexual counterparts
- LGBT caregivers are more likely to be doing so in isolation and tend to have poorer mental and physical health

Cultural competency

Due to a lifetime of discrimination, harassment, and violence, LGBT elders are more likely to become ill at an earlier age than their straight peers. In some instances, an LGBT elder might only seek assistance for emergency care, which can be costly not only to their health but also their financial security.

- About 20 percent of LGBT people avoid medical care out of fear of discrimination
- 88 percent of LGBT older adults want long-term care facilities that are culturally competent
- 50 percent of transgender individuals have taught their medical providers about transgender care

Discrimination

LGBT elders can be targets of discriminatory acts ranging from hiring and salary discrimination to neglectful health care providers. LGBT older adults often experience victimization based on their perceived or actual sexual orientation and gender identity. Discrimination can lead to negative

consequences for LGBT elders:

- About two-thirds of LGBT older adults have experienced victimization at least three times in their lives
- Victims of discrimination have a higher likelihood of poor health outcomes
- It's been reported that LGBT older adults have received inferior, neglectful healthcare or have denied healthcare altogether

Health care

LGBT older adults are less likely than their heterosexual peers to reach out to providers, senior centers, meal programs, and other entitlement programs because they fear sexual orientation- or gender-based discrimination and harassment. LGBT older adults experience mental and physical illness more frequently than their heterosexual counterparts:

- Nearly one-third of transgender people do not have a regular doctor and report poor general health
- LGBT older adults have higher rates of poor physical health and mental distress
- 41 percent of LGBT older adults report having a disability, compared to 35 percent of heterosexual older adults
- 9 percent of lesbian, gay, bisexual and queer people report that a doctor or other health care provider used harsh or abusive language while treating them; among transgender people, the number was 21 percent

HIV/AIDS

HIV disproportionately impacts the LGBT community, and the number of LGBT older adults with HIV is increasing. Thirty years ago, the idea that someone with HIV

The facts on LGBT aging

would live decades was unimaginable. Now people with HIV are living well into their golden years.

- Half of all HIV-infected Americans are over 50 years old
- Adults 50 and older account for 15 percent of all new HIV/AIDS diagnoses, and 29 percent of all persons living with AIDS
- Researchers estimate more than 50 percent of patients with HIV have an HIV-associated neurocognitive disorder

Housing

Older LGBT couples often experience discrimination when seeking rental housing and senior housing. If when they are admitted into a senior housing development or facility, they are frequently discriminated against by property managers, staff, other residents, or service providers, making the experience of living there miserable or even life-threatening.

- 48 percent of LGB couples experience adverse treatment when seeking senior housing; trans individuals experience adverse treatment at even higher rates
- Half the LGBT population lives in states with no laws prohibiting housing discrimination against them
- 34 percent of LGBT older adults fear having to re-closet themselves when seeking senior housing

Legal and financial

A host of variables—gender, generation, ethnicity, state of residence, and marital status—make financial decisions especially challenging for LGBT older adults. Ongoing legal discrimination, compounded with a lifetime of challenges, make it harder for LGBT older adults to be financially secure.

- **In general, LGBT people are poorer and have fewer financial resources than their heterosexual counterparts**
- LGBT people are likelier to be subject to hiring or salary discrimination, making their earnings—and their Social Security payments—lower

- Transgender older adults are more likely to experience financial barriers than non-transgender older adults, regardless of age, income, and education.

LGBT aging

LGBT older people are living vibrant, full lives across the U.S. and around the world. While the U.S. census has never measured how many LGBT people live in America, reports estimate that there are currently around 3 million LGBT adults over age 50. That number is expected to grow to around 7 million by 2030. LGBT older people face unique challenges as we age. LGBT elders are:

- Twice as likely to be single and live alone
- Four times less likely to have children
- Far more likely than our heterosexual peers to have faced discrimination, social stigma, and the effects of prejudice
- More likely, therefore, to face poverty and homelessness, and to have poor physical and mental health

But LGBT older adults are resilient. They were the pioneers who stood up and pushed back at the Stonewall uprising. On the whole, we have gained acceptance and rights that were unimaginable in the dark days when we were labeled criminals, sinners, or mentally ill. We have seen gains in federal rights in the areas of marriage and adoption, and nearly half of states have passed legislation to eradicate discrimination in employment and housing.

Social isolation

Accessing safe, friendly services can be difficult for LGBT older adults who do not

The facts on LGBT aging

live in major cities. Social connectedness keeps older adults healthy and helps them live longer. LGBT older adults are twice as likely to live alone, making them vulnerable to social isolation. LGBT older adults living with HIV also face high rates of isolation, which has been shown to have a negative impact on health and well-being, particularly cognitive function.

- Nearly 60 percent of LGBT older adults report feeling a lack of companionship; over 50 percent reported feeling isolated from others
- The health risks of prolonged isolation have been equated with smoking 15 cigarettes daily
- 41 percent of transgender people are reported to have attempted suicide

Wellness

Wellness affects health outcomes and encompasses positive habits such as physical activity, abstaining from cigarettes and alcohol, and receiving regular check-ups from a physician. LGBT older adults have experienced decades of bullying, discrimination, and verbal and physical abuse.

Self-care is frequently more difficult for LGBT elders because they are much more likely to live on their own, have fewer financial resources, and don't necessarily trust their health care providers to treat them from a place of cultural competency.

- LGBT people smoke cigarettes at rates 68 percent higher than the general population
- LGB older adults are significantly more likely to consume alcohol than heterosexual older adults
- LB women sit an average of four to five more hours per week than heterosexuals

The logo for SAGE, featuring the word "sage" in a blue, lowercase, serif font.

- Helps LGBT older people age with the respect and dignity they deserve
- Established in 1978 to support for LGBT elders in New York City
- Advocates at the federal and state levels with and on behalf of LGBT older people
- Nationwide network of affiliates working with LGBT elders across the country
- Five senior centers in New York City with robust calendars of events and activities

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 Advocacy &
Services for
LGBT Elders

We refuse to be invisible

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APPENDIX 33

CENTRAL PUGET SOUND DEMOGRAPHIC PROFILE

Central Puget Sound Demographic Profile

October 2018



Puget Sound Regional Council

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INTRODUCTION

Since the mid-1990s, a renewed emphasis on environmental justice has become an integral part of the transportation planning process for urban regions in the United States. The concept of “environmental justice” is derived from Title VI of the Civil Rights Act of 1964¹ and other civil rights statutes, and was first put forth as a national policy goal by presidential Executive Order 12898, issued in 1994, which directs “each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”²

The U.S. Department of Transportation (DOT) responded to the directive with its DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations in 1997.³ The order laid out the following environmental justice principles to be integrated into federal transportation programs, policies, and activities:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The DOT issued an updated internal Order in May 2012. DOT Order 5610.2(a) continues to be a key component of the Department’s strategy to promote the principles of environmental justice in all Departmental programs, policies, and activities.

With this guidance, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) renewed their commitments to ensure that environmental justice is carried out in the programs and strategies they fund including the activities of metropolitan planning organizations (MPOs).⁴ The FHWA has specifically directed MPOs to:

- Enhance their analytical capabilities to ensure that their long-range transportation plan and their transportation improvement program comply with Title VI.
- Identify residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed.

¹ “Title VI of the Civil Rights Act of 1964 states that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

² Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 1994.

³ DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations, April 1997.

⁴ FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, June 2012; and FHWA and FTA Memorandum Implementing Title VI Requirements in Metropolitan and Statewide Planning, October 1999.

- Evaluate and – where necessary – improve their public involvement processes to eliminate participation barriers and engage minority and low-income populations in transportation decision-making.

The Puget Sound Regional Council (PSRC) is the federally designated metropolitan planning organization, as well as the state-designated regional transportation planning organization, for the central Puget Sound region. Under these mandates, PSRC is responsible for developing and regularly updating the region’s long-range transportation plan, the Regional Transportation Plan 2018,⁵ as well as distributing federal transportation funds to local projects through its transportation improvement program. In 2003, PSRC developed the baseline demographic profile as an initial step toward better integrating environmental justice into its transportation work program.⁶ That profile has now been updated to present current demographic data describing the central Puget Sound region to identify population groups and communities to be considered for subsequent environmental justice analyses and activities.

OBJECTIVES

PSRC set out to meet two primary objectives in preparing this environmental justice demographic profile:

- Compile key demographic data on minority and low-income populations in the central Puget Sound region, as well as other populations of interest, for environmental justice consideration in conducting regional transportation, economic development, and growth management planning and program activities and public outreach.
- Identify the locations of communities within the region with significant minority and low-income populations to facilitate and enhance environmental justice analyses, outreach, and other planning activities.

DEFINITIONS

Executive Order 12898, and the DOT, FHWA, and FTA orders on environmental justice address persons belonging to any of the following groups:

Minority Populations

- Black - a person having origins in any of the black racial groups of Africa.
- American Indian and Alaskan Native - a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
- Asian - a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- Native Hawaiian and Other Pacific Islander – a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

⁵ *The Regional Transportation Plan -- 2018*, Puget Sound Regional Council, Seattle WA, May 2010, <https://www.psrc.org/our-work/rtp> .

⁶ *Transportation 2040 Update, Appendix G: Environmental Justice*, Puget Sound Regional Council, Seattle WA, May 2014, https://www.psrc.org/sites/default/files/t2040update2014appendixg_0.pdf .

- Hispanic - a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

Low-Income Population

- Low-Income - a person whose household income (or in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. States and localities may, however, adopt a higher threshold for low-income as long as the higher threshold is not selectively implemented and is inclusive of all persons at or below the HHS poverty guidelines.

Other Populations

While the various orders on environmental justice require consideration of only minority and low-income populations as defined above, discussions of other populations protected by Title VI and related nondiscrimination statutes – such as the elderly, disabled, etc. – are encouraged in addressing environmental justice and Title VI in federally sponsored transportation programs, policies, and activities.

REGIONAL DATA PROFILE TABLES

Drawing from the American Community Survey, PSRC compiled data tables of key demographic statistics on the region’s minority and low-income populations and other populations and characteristics of interest for environmental justice consideration. The data tables report statistics for the central Puget Sound region as a whole as well as each of its four counties – King, Kitsap, Pierce and Snohomish.

Table 1. Population by Race and Hispanic/Latino Origin: 2016

Table 2. Poverty Statistics: 2016

Table 3. Poverty Rates by Race and Hispanic/Latino Origin: 2012-2016

Table 4. Median Household Income by Race and Hispanic/Latino Origin of Householder: 2016

Table 5. Poverty Rate for the Population Age 65 and Over: 2016

Table 6: Poverty Rate for the Population Under 18: 2016

Table 7. Poverty Rate for Persons with a Disability: 2016

Table 8. Households with No Vehicle: 2016

Table 9. Persons with Limited English Proficiency: 2016

Table 10. Language Spoken at Home by Ability to Speak English: 2012-2016

Table 11. Common Languages Other Than English Spoken in the Central Puget Sound: 2016

Observations

Tables 1 and 2 provide essential statistics on the region's minority and low-income populations. Minorities, or non-White persons including White persons of Hispanic/Latino origin, comprised 34.7 percent of the region's total population in 2016. Minorities comprised the largest share of the population in King County (39.1 percent), followed by Pierce County (32.5 percent), Snohomish County (29.4 percent), and Kitsap County (23.0 percent). All groups except White alone (down 3.3 percent) and American Indian and Alaska Native (no change) increased their share of the population since the 2014 update, with percent of total minority growing by 3.5 percent in two years.

In 2016, the regionwide poverty rate was 9.6 percent. The poverty rate was highest in Pierce County (12.1 percent) and lowest in Snohomish County (7.9 percent). Table 2 also reports statistics for the percentage of the region's population below 150 percent and 200 percent of the federal poverty level in 2016. These statistics indicate that there are substantial numbers of families and individuals in the region whose incomes are above the federal poverty level, but within a range that may still be considered lower income, particularly when taking into account the cost of living in the central Puget Sound region. Federal poverty thresholds are not adjusted for regional, state, and local variations in the cost of living, which is higher in the central Puget Sound region relative to most other areas of the United States on average because of higher local housing and transportation costs.

Tables 3 and 4 illustrate the relationship between minority and low-income populations. Poverty rates are higher, and median household incomes generally lower, for minority populations compared to the White population or total population overall. While the poverty rate for the Asian population is very similar to that of the total population, for other racial and ethnic groups it can be more than double. (The total population for whom poverty is determined and the poverty rate are different between this table and Table 2 because the data are drawn from different ACS series: 5-year versus 1-year, respectively. See Appendix B. Data Notes for more details.)

Table 4 shows the median household income by race and ethnicity as well as the ratio of those median incomes to that of all households. Asians have the highest median income for the region as well as in King County, but there is wide variation by both county and race/ethnicity. Most groups saw significant increases in median income between 2014 and 2016. The largest increases in income are found among American Indians (24 percent), Some Other Race (26 percent) and those of Hispanic ethnicity (14 percent).

Tables 5-7 present demographic statistics, including poverty rates, for the region's elderly, youth, and disabled populations. The disabled population is shown to have significantly higher rates of poverty than the total population overall, whereas poverty rates for the elderly population are significantly lower. The rate for children under 18 is less than that for those with disabilities, generally about 2 percentage points higher than for the general population, although the difference in Pierce County is twice that in the other counties and of the region overall.

Table 8 compares vehicle non-availability among household types. Households with a minority householder, low-income households, households with an elderly householder,

and households with one or more disabled persons are more likely to have no vehicle available than the average household in the region. These data indicate that the transportation, and especially public transit, needs of such households are significantly different from the average household.

Tables 9 and 10 present statistics on persons with limited English proficiency and common languages other than English spoken in the central Puget Sound region. This information is intended to support the development of the public outreach and involvement component of PSRC's environmental justice program.

Finally, Table 11 lists the most commonly spoken languages at home other than English, for the region and for each county.

GIS MAP PROFILES

In addition to compiling the regional data profile tables described above, PSRC mapped the distributions of minority and low-income populations across the region to identify geographic areas and communities with substantial minority and low-income populations.

Map 1. Minority Population, Central Puget Sound: 2012-2016

Map 2. Black/African American Population, Central Puget Sound: 2012-2016

Map 3. American Indian/Alaskan Native Population, Central Puget Sound: 2012-2016

Map 4. Asian/Pacific Islander Population, Central Puget Sound: 2012-2016

Map 5. Hispanic/Latino Population, Central Puget Sound: 2012-2016

Map 6. Low-Income Population, Central Puget Sound: 2012-2016

Census Data and Regional Thresholds

PSRC drew from American Community Survey data to develop its environmental justice GIS map profiles. The minority population profile maps utilized census tract-level race and Hispanic/Latino origin data from the 2012-2016 American Community Survey 5-year data set, and the low-income population profile map utilized census tract-level poverty status data from the same data set (see Appendix A).

PSRC established a set of regional thresholds to determine whether a census tract had a regionally significant minority or low-income population concentration. For example, in Map 1 –Minority Population, census tracts with a minority population share equal to or greater than the regional threshold – 34.7 percent of total population – are shaded green to blue, whereas census tracts with a minority population share less than the regional threshold are shaded taupe to gray.

| Regional Minority and Low-Income Population Thresholds | |
|--|----------------------------------|
| Population group | Regional threshold |
| Total minority | 34.7 percent of total population |
| Black/African American | 10.0 percent of total population |
| American Indian/Alaskan Native | 10.0 percent of total population |
| Asian/Pacific Islander | 10.0 percent of total population |
| Hispanic/Latino | 10.0 percent of total population |
| Low-income | 10.8 percent of total population |

The total minority and low-income regional thresholds were calculated based on the percentage of the region’s total population comprised by, respectively, minorities and persons below the federal poverty level based on the ACS 5-year dataset (see Tables 1 and 3).

The regional thresholds for the Black/African American, American Indian/Alaskan Native, Asian/Pacific Islander, and Hispanic/Latino population groups were set across the board at 10 percent. The PSRC determined that the 10 percent threshold level allowed for effective identification of and differentiation between the residential patterns of each minority population group across the region. The use of a consistent threshold level across minority groups further facilitates comparison of the relative size of each population.

Observations

Minority populations (Map 1) can be seen to be concentrated in the more urban areas of the region, particularly along the Interstate 5 and Interstate 405 corridors, with an especially strong presence in south Seattle, south King County, and central/south Tacoma.

Each minority group is seen to have a uniquely different residential pattern of settlement across the region. The Black/African American population, constituting 5.4 percent of the region’s total population, has a strong presence in south Seattle, the Renton-Tukwila area, and in parts of Tacoma. The American Indian/Alaskan Native population, while constituting less than 1 percent of the region’s total population, can be identified on and near the various tribal lands in the central Puget Sound. The Asian/Pacific Islander population, the region’s largest minority group at 13.3 percent of total population, is widely dispersed throughout the central Puget Sound, with a much greater presence in east and south King County and in southwest Snohomish County than other minority groups. Asian/Pacific Islanders have an especially strong presence in south and southwest Seattle. The Hispanic/Latino population, which comprises 9.7 percent of the region’s total population, has a strong presence in south Everett, south King County, and Tacoma.

Concentrations of poverty can be seen throughout the region’s urban core, particularly along the Interstate 5 corridor in Snohomish County and in central and south Seattle and the University District, south King County, Bremerton, and central and south Tacoma.

Table 1. Population by Race and Hispanic/Latino Origin: 2016

| | Total population* | Race (all categories) | | | | | | | | | | Hispanic or Latino (of any race)* | Total minority (non-White including White/Hispanic) | |
|----------------------------|-------------------|-----------------------|--------------|---------------------------|--------------|-----------------------------------|--------------|----------------------------|--------------|---------------------------------|---------------|-----------------------------------|---|--------------|
| | | White | | Black or African American | | American Indian and Alaska Native | | Asian and Pacific Islander | | Other race or two or more races | | | | |
| | | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | | | |
| Central Puget Sound | 4,063,700 | 2,834,800 | 9,129 | 217,600 | 6,720 | 33,100 | 3,296 | 541,700 | 7,787 | 436,600 | 15,447 | 394,300 | 1,412,100 | 1,606 |
| King County | 2,150,000 | 1,393,500 | 7,098 | 130,800 | 5,248 | 11,300 | 1,961 | 378,300 | 6,767 | 236,200 | 12,280 | 204,900 | 840,300 | 1,138 |
| Kitsap County | 264,800 | 213,300 | 1,654 | 6,600 | 1,225 | 3,000 | 838 | 13,500 | 1,933 | 28,400 | 3,482 | 20,000 | 60,900 | 158 |
| Pierce County | 861,300 | 629,800 | 5,497 | 55,900 | 4,015 | 10,800 | 2,513 | 65,000 | 3,334 | 99,700 | 8,699 | 91,200 | 279,700 | 440 |
| Snohomish County | 787,600 | 598,200 | 5,306 | 24,300 | 2,058 | 7,900 | 1,853 | 84,900 | 2,720 | 72,300 | 6,865 | 78,100 | 231,300 | 1,033 |
| Central Puget Sound | 4,063,700 | 69.8% | 0.2% | 5.4% | 0.2% | 0.8% | 0.1% | 13.3% | 0.2% | 10.7% | 0.4% | 9.7% | 34.7% | 0.0% |
| King County | 2,150,000 | 64.8% | 0.3% | 6.1% | 0.2% | 0.5% | 0.1% | 17.6% | 0.3% | 11.0% | 0.6% | 9.5% | 39.1% | 0.1% |
| Kitsap County | 264,800 | 80.6% | 0.6% | 2.5% | 0.5% | 1.1% | 0.3% | 5.1% | 0.7% | 10.7% | 1.3% | 7.6% | 23.0% | 0.1% |
| Pierce County | 861,300 | 73.1% | 0.6% | 6.5% | 0.5% | 1.3% | 0.3% | 7.6% | 0.4% | 11.6% | 1.0% | 10.6% | 32.5% | 0.1% |
| Snohomish County | 787,600 | 75.9% | 0.7% | 3.1% | 0.3% | 1.0% | 0.2% | 10.8% | 0.3% | 9.2% | 0.9% | 9.9% | 29.4% | 0.1% |

Source: 2016 American Community Survey 1-Year Estimates

* The estimate is controlled. A statistical test for sampling variability is not applicable.

Table 2. Poverty Statistics: 2016

| | Population for whom poverty status is determined | | Income | | | | | |
|----------------------------|--|--------------|-----------------------------|---------------|-----------------------------|---------------|-----------------------------|---------------|
| | | | Below 100% of poverty level | | Below 150% of poverty level | | Below 200% of poverty level | |
| | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE |
| Central Puget Sound | 4,002,100 | 3,461 | 385,900 | 17,943 | 618,300 | 24,581 | 883,100 | 29,833 |
| King County | 2,121,400 | 2,566 | 196,400 | 12,350 | 306,000 | 16,403 | 437,900 | 20,711 |
| Kitsap County | 257,800 | 1,541 | 25,800 | 4,181 | 43,600 | 5,967 | 61,700 | 7,040 |
| Pierce County | 846,000 | 2,030 | 102,500 | 9,210 | 156,700 | 12,141 | 230,100 | 14,694 |
| Snohomish County | 776,900 | 2,244 | 61,200 | 6,573 | 112,000 | 9,984 | 153,400 | 11,486 |
| Central Puget Sound | 100.0% | n/a | 9.6% | 0.4% | 15.4% | 0.6% | 22.1% | 0.7% |
| King County | 100.0% | n/a | 9.3% | 0.6% | 14.4% | 0.8% | 20.6% | 1.0% |
| Kitsap County | 100.0% | n/a | 10.0% | 1.6% | 16.9% | 2.3% | 23.9% | 2.7% |
| Pierce County | 100.0% | n/a | 12.1% | 1.1% | 18.5% | 1.4% | 27.2% | 1.7% |
| Snohomish County | 100.0% | n/a | 7.9% | 0.8% | 14.4% | 1.3% | 19.7% | 1.5% |

Source: 2016 American Community Survey 1-Year Estimates

Table 3. Poverty Statistics by Race and Hispanic/Latino Origin: 2012-2016

| | | Central Puget Sound | | King County | | Kitsap County | | Pierce County | | Snohomish County | | |
|---|-------------------------------|--|--------------|-------------|-------|---------------|-------|---------------|-------|------------------|-------|------|
| | | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | |
| Population for whom poverty status is determined | | 3,865,000 | 2,478 | 2,050,300 | 1,164 | 250,100 | 1,596 | 816,200 | 1,203 | 748,400 | 776 | |
| Poverty rate | All persons | 10.8% | 0.2% | 10.7% | 0.2% | 10.4% | 0.6% | 12.7% | 0.5% | 9.3% | 0.4% | |
| | Race of householder | White | 8.9% | 0.1% | 8.0% | 0.2% | 9.8% | 0.5% | 11.0% | 0.4% | 8.6% | 0.3% |
| | | Black or African American | 23.9% | 0.1% | 28.0% | 0.1% | 26.2% | 0.1% | 17.2% | 0.1% | 15.5% | 0.1% |
| | | American Indian/Alaska Native | 22.6% | 0.0% | 23.2% | 0.0% | 26.7% | 0.2% | 25.3% | 0.1% | 16.1% | 0.0% |
| | | Asian | 10.9% | 0.1% | 11.2% | 0.1% | 6.1% | 0.1% | 13.4% | 0.1% | 8.5% | 0.1% |
| | | Native Hawaiian/Other Pacific Islander | 17.0% | 0.0% | 21.7% | 0.0% | 12.8% | 0.1% | 15.9% | 0.1% | 1.9% | 0.0% |
| | | Some other race | 20.4% | 0.1% | 18.7% | 0.1% | 12.7% | 0.1% | 27.1% | 0.1% | 19.8% | 0.1% |
| | | Two or more races | 14.9% | 0.1% | 15.1% | 0.1% | 12.7% | 0.2% | 16.5% | 0.1% | 12.6% | 0.1% |
| | White, not Hispanic or Latino | 8.1% | 0.1% | 7.1% | 0.1% | 9.6% | 0.5% | 10.1% | 0.3% | 7.9% | 0.3% | |
| | Hispanic or Latino | 19.6% | 0.1% | 19.1% | 0.1% | 12.8% | 0.2% | 23.7% | 0.2% | 17.8% | 0.2% | |
| Total minority (non-White including White Hispanic) | 16.2% | 0.2% | 16.6% | 0.3% | 13.3% | 0.8% | 18.4% | 0.6% | 12.9% | 0.5% | | |

Source: 2012-2016 American Community Survey 5-Year Estimates

Table 4. Median Household Income by Race and Hispanic/Latino Origin of Householder: 2016

| | | Seattle-Tacoma-Bellevue WA Metro Area * | | King County | | Kitsap County | | Pierce County | | Snohomish County | | |
|--|-------------------------------|---|-----------------|-----------------|----------|---------------|-----------|---------------|----------|------------------|----------|----------|
| | | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | |
| Median household income in past 12 months | All households | \$78,600 | \$1,063 | \$86,100 | \$1,584 | \$69,200 | \$3,935 | \$64,400 | \$1,873 | \$78,700 | \$1,676 | |
| | Race of householder | White | \$81,800 | \$962 | \$91,500 | \$1,379 | \$70,600 | \$4,097 | \$68,300 | \$1,941 | \$79,500 | \$1,748 |
| | | Black or African American | \$47,300 | \$2,823 | \$45,800 | \$6,297 | \$35,500 | \$25,698 | \$46,500 | \$4,388 | \$59,300 | \$8,342 |
| | | American Indian/Alaska Native | \$51,100 | \$8,296 | \$43,200 | \$19,937 | \$74,200 | \$25,171 | \$56,900 | \$18,086 | \$56,500 | \$11,375 |
| | | Asian | \$91,000 | \$3,199 | \$95,900 | \$4,716 | \$77,100 | \$11,886 | \$60,700 | \$8,610 | \$98,100 | \$13,505 |
| | | Native Hawaiian/Other Pacific Islander | \$63,100 | \$14,346 | \$60,500 | \$28,024 | \$108,200 | \$70,220 | \$80,500 | \$35,941 | \$58,000 | \$14,429 |
| | | Some other race | \$57,600 | \$5,388 | \$60,500 | \$3,626 | \$46,000 | \$8,277 | \$47,900 | \$9,954 | \$61,900 | \$9,931 |
| | | Two or more races | \$61,200 | \$3,669 | \$63,900 | \$8,627 | \$66,600 | \$11,576 | \$49,500 | \$6,307 | \$70,100 | \$10,500 |
| | White, not Hispanic or Latino | \$82,900 | \$1,392 | \$92,400 | \$1,804 | \$70,700 | \$4,125 | \$69,700 | \$1,912 | \$80,300 | \$1,743 | |
| Hispanic or Latino | \$59,100 | \$3,238 | \$62,500 | \$3,389 | \$60,100 | \$22,415 | \$50,100 | \$2,628 | \$60,700 | \$6,765 | | |
| Median household income in past 12 months as % of median household income for all households | All households | 100.0% | 1.4% | 100.0% | 1.8% | 100.0% | 5.7% | 100.0% | 2.9% | 100.0% | 2.1% | |
| | Race of householder | White | 104.1% | 1.9% | 106.3% | 2.5% | 102.0% | 8.3% | 106.0% | 4.3% | 101.0% | 3.1% |
| | | Black or African American | 60.1% | 3.7% | 53.2% | 7.4% | 51.4% | 37.3% | 72.2% | 7.1% | 75.4% | 10.7% |
| | | American Indian/Alaska Native | 65.0% | 10.6% | 50.2% | 23.2% | 107.3% | 36.9% | 88.3% | 28.2% | 71.7% | 14.5% |
| | | Asian | 115.8% | 4.4% | 111.3% | 5.8% | 111.4% | 18.3% | 94.3% | 13.6% | 124.6% | 17.4% |
| | | Native Hawaiian/Other Pacific Islander | 80.2% | 18.3% | 70.3% | 32.6% | 156.4% | 101.9% | 124.9% | 55.9% | 73.6% | 18.4% |
| | | Some other race | 73.3% | 6.9% | 70.2% | 4.4% | 66.4% | 12.5% | 74.3% | 15.6% | 78.6% | 12.7% |
| | | Two or more races | 77.9% | 4.8% | 74.3% | 10.1% | 96.3% | 17.6% | 76.8% | 10.0% | 89.0% | 13.5% |
| | White, not Hispanic or Latino | 105.5% | 2.3% | 107.4% | 2.9% | 102.2% | 8.3% | 108.1% | 4.3% | 102.0% | 3.1% | |
| Hispanic or Latino | 75.1% | 4.2% | 72.6% | 4.2% | 86.9% | 32.8% | 77.8% | 4.7% | 77.1% | 8.7% | | |

Source: 2016 American Community Survey 1-Year Estimates

* Includes King, Pierce and Snohomish counties but not Kitsap County

Table 5. Poverty Rate for the Population Age 65 and Over: 2016

| | Population for whom poverty status is determined | | Age 65 years and over | | | | | |
|----------------------------|--|--------------|-----------------------|--------------|--|--------------|--------------|-------------|
| | | | All persons | | Income in past 12 months below poverty level | | Poverty rate | |
| | Estimate | MoE | Estimate | MoE | Estimate | MoE | Pct | MoE |
| Central Puget Sound | 4,002,100 | 3,461 | 523,600 | 1,190 | 38,000 | 3,610 | 7.3% | 0.7% |
| King County | 2,121,400 | 2,566 | 267,500 | 951 | 21,100 | 2,703 | 7.9% | 1.0% |
| Kitsap County | 257,800 | 1,541 | 43,900 | 504 | 2,400 | 781 | 5.4% | 1.8% |
| Pierce County | 846,000 | 2,030 | 112,900 | 632 | 6,700 | 1,243 | 5.9% | 1.1% |
| Snohomish County | 776,900 | 2,244 | 99,300 | 732 | 7,800 | 1,431 | 7.9% | 1.4% |

Source: 2016 American Community Survey 1-Year Estimates

Table 6. Poverty Rate for the Population Under 18: 2016

| | Population for whom poverty status is determined | | Age under 18 years | | | | | |
|----------------------------|--|--------------|--------------------|--------------|--|--------------|--------------|-------------|
| | | | All persons | | Income in past 12 months below poverty level | | Poverty rate | |
| | Estimate | MoE | Estimate | MoE | Estimate | MoE | Pct | MoE |
| Central Puget Sound | 4,002,100 | 3,461 | 872,100 | 1,735 | 103,700 | 8,921 | 11.9% | 1.0% |
| King County | 2,121,400 | 2,566 | 439,100 | 1,279 | 48,700 | 6,286 | 11.1% | 1.4% |
| Kitsap County | 257,800 | 1,541 | 53,700 | 555 | 6,400 | 1,827 | 11.9% | 3.4% |
| Pierce County | 846,000 | 2,030 | 201,900 | 952 | 32,600 | 4,581 | 16.2% | 2.3% |
| Snohomish County | 776,900 | 2,244 | 177,400 | 740 | 15,900 | 2,968 | 9.0% | 1.7% |

Source: 2016 American Community Survey 1-Year Estimates

Table 7. Poverty Rate for Persons with a Disability: 2016

| | Civilian noninstitutionalized population for whom poverty status is determined | | With one or more disabilities | | | | | |
|----------------------------|--|--------------|-------------------------------|---------------|--|--------------|--------------|-------------|
| | | | All persons | | Income in past 12 months below poverty level | | Poverty rate | |
| | Estimate | MoE | Estimate | MoE | Estimate | MoE | Pct | MoE |
| Central Puget Sound | 4,007,400 | 3,496 | 456,300 | 10,527 | 82,200 | 5,046 | 18.0% | 1.0% |
| King County | 2,137,700 | 1,937 | 205,900 | 7,133 | 38,700 | 3,224 | 18.8% | 1.4% |
| Kitsap County | 251,900 | 1,887 | 40,000 | 2,896 | 6,100 | 1,444 | 15.1% | 3.4% |
| Pierce County | 840,900 | 2,321 | 112,400 | 4,853 | 20,600 | 2,582 | 18.3% | 2.2% |
| Snohomish County | 776,800 | 2,204 | 98,000 | 4,905 | 16,900 | 2,463 | 17.2% | 2.4% |

Source: 2016 American Community Survey 1-Year Estimates

Table 8. Households with No Vehicle: 2016

| | | Central Puget Sound | | King County | | Kitsap County | | Pierce County | | Snohomish County | | |
|---------------------------|--------------------------------------|--|---------------|--------------|--------|---------------|-------|---------------|--------|------------------|-------|-------|
| | | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | |
| Total households | | 1,566,900 | 6,412 | 861,200 | 4,657 | 102,000 | 2,067 | 317,700 | 2,982 | 286,100 | 3,383 | |
| With no vehicle available | Households with no vehicle available | 126,900 | 6,413 | 87,300 | 5,226 | 4,900 | 1,223 | 19,700 | 2,587 | 15,000 | 2,471 | |
| | Percent with no vehicle available | 0.0% | 0.4% | 0.0% | 0.6% | 0.0% | 1.2% | 0.0% | 0.8% | 0.0% | 0.9% | |
| | Type of household | Minority householder (incl. White Hispanic) | 41,600 | 4,776 | 31,500 | 3,861 | 1,000 | 555 | 5,200 | 1,492 | 3,900 | 1,317 |
| | | Percent minority | 0.0% | 3.4% | 0.0% | 3.9% | 0.0% | 10.2% | 0.0% | 6.7% | 0.0% | 7.7% |
| | | Income in past 12 months below poverty level | 41,100 | 3,961 | 24,600 | 2,774 | 2,000 | 805 | 6,900 | 1,651 | 7,500 | 1,812 |
| | | Percent below poverty level | 0.0% | 2.7% | 0.0% | 2.7% | 0.0% | 12.9% | 0.0% | 7.0% | 0.0% | 8.8% |
| | | Householder age 65 years and over | 44,600 | 4,379 | 27,600 | 3,253 | 2,700 | 1,001 | 7,400 | 1,806 | 6,800 | 1,641 |
| | | Percent with age 65+ years householder | 0.0% | 3.0% | 0.0% | 3.2% | 0.0% | 15.0% | 0.0% | 7.7% | 0.0% | 8.0% |
| | | One or more persons with a disability | 56,100 | 5,359 | 31,500 | 4,020 | 4,000 | 1,327 | 10,700 | 1,698 | 9,900 | 2,188 |
| | | Percent with persons with a disability | 0.0% | 3.6% | 0.0% | 4.1% | 0.0% | 17.8% | 0.0% | 4.9% | 0.0% | 9.7% |

Source: 2016 ACS Public Use Microdata Sample

Table 9. Persons with Limited English Proficiency: 2016

| | Total population age 5 and over | | Limited English proficiency | | | | | | | | | |
|----------------------------|---------------------------------|------------|--|---------------|--|--------------|-------------------------------|--------------|------------------------------------|--------------|-----------------|--------------|
| | | | Persons with limited English proficiency | | Language spoken at home other than or in addition to English | | | | | | | |
| | | | | | Spanish | | Other Indo-European languages | | Asian and Pacific Island languages | | Other languages | |
| Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | |
| Central Puget Sound | 3,810,500 | 621 | 324,400 | 10,657 | 93,000 | 5,427 | 53,500 | 4,993 | 150,300 | 6,695 | 27,500 | 3,791 |
| King County | 2,020,700 | * | 221,200 | 8,275 | 55,800 | 4,029 | 36,500 | 3,913 | 108,300 | 5,243 | 20,600 | 3,072 |
| Kitsap County | 249,500 | 87 | 5,500 | 1,579 | 1,800 | 937 | 620 | 518 | 3,000 | 1,125 | 50 | 288 |
| Pierce County | 802,700 | 424 | 44,400 | 3,890 | 17,800 | 2,437 | 5,900 | 1,871 | 18,100 | 2,019 | 2,500 | 1,272 |
| Snohomish County | 737,700 | 367 | 53,300 | 4,483 | 17,600 | 2,452 | 10,500 | 2,210 | 20,800 | 2,641 | 4,400 | 1,491 |

Source: 2016 American Community Survey 1-Year Estimates

* The estimate is controlled. A statistical test for sampling variability is not applicable.

Table 10. Language Spoken at Home by Ability to Speak English: 2016

| | | Central Puget Sound | | King County | | Kitsap County | | Pierce County | | Snohomish County | | |
|---|-------------------------------------|--|----------------|--------------|---------|---------------|-------|---------------|--------|------------------|--------|-------|
| | | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | Estimate | MoE | |
| Total Population 5 years and over | | 3,681,600 | * | 1,952,500 | * | 242,600 | * | 775,800 | * | 710,600 | * | |
| Speak only English | | 2,895,900 | 7,971 | 1,435,100 | 5,890 | 225,500 | 900 | 663,000 | 2,795 | 572,500 | 3,325 | |
| Speak a language at home other than English | Speak English "very well" | 478,400 | 6,414 | 312,700 | 5,277 | 12,100 | 827 | 69,500 | 2,396 | 84,000 | 2,827 | |
| | Speak English less than "very well" | Total, Speak English less than "very well" | 307,200 | 5,162 | 204,800 | 4,223 | 5,000 | 593 | 43,300 | 1,836 | 54,100 | 2,247 |
| | | Spanish | 88,100 | 2,839 | 53,000 | 2,038 | 1,500 | 373 | 16,700 | 1,080 | 17,000 | 1,282 |
| | | Russian, Polish, or other Slavic languages | 25,100 | 1,677 | 15,700 | 1,380 | 180 | 96 | 3,400 | 575 | 5,800 | 723 |
| | | Other Indo-European languages | 27,200 | 1,745 | 19,100 | 1,539 | 450 | 177 | 3,500 | 525 | 4,200 | 585 |
| | | Korean | 21,600 | 1,157 | 10,500 | 935 | 140 | 74 | 5,500 | 558 | 5,500 | 698 |
| | | Chinese (incl. Mandarin, Cantonese) | 41,900 | 1,590 | 36,100 | 1,522 | 210 | 100 | 1,100 | 291 | 4,600 | 580 |
| | | Vietnamese | 29,300 | 1,697 | 19,400 | 1,225 | 260 | 127 | 4,500 | 695 | 5,200 | 751 |
| | | Tagalog (incl. Filipino) | 15,900 | 1,189 | 9,400 | 1,025 | 1,500 | 315 | 2,400 | 429 | 2,600 | 506 |
| | | Other Asian and Pacific Island languages | 34,900 | 1,572 | 23,500 | 1,336 | 650 | 174 | 5,100 | 650 | 5,800 | 706 |
| | | Other and unspecified languages | 23,200 | 1,449 | 18,200 | 1,371 | 150 | 104 | 1,200 | 336 | 3,600 | 629 |
| Speak only English | | 78.7% | 0.2% | 73.5% | 0.3% | 92.9% | 0.4% | 85.5% | 0.4% | 80.6% | 0.5% | |
| Speak a language at home other than English | Speak English "very well" | 13.0% | 0.2% | 16.0% | 0.3% | 5.0% | 0.3% | 9.0% | 0.3% | 11.8% | 0.4% | |
| | Speak English less than "very well" | Total, Speak English less than "very well" | 8.3% | 0.1% | 10.5% | 0.2% | 2.1% | 0.2% | 5.6% | 0.2% | 7.6% | 0.3% |
| | | Spanish | 2.4% | 0.1% | 2.7% | 0.1% | 0.6% | 0.2% | 2.1% | 0.1% | 2.4% | 0.2% |
| | | Russian, Polish, or other Slavic languages | 0.7% | 0.0% | 0.8% | 0.1% | 0.1% | 0.0% | 0.4% | 0.1% | 0.8% | 0.1% |
| | | Other Indo-European languages | 0.7% | 0.0% | 1.0% | 0.1% | 0.2% | 0.1% | 0.4% | 0.1% | 0.6% | 0.1% |
| | | Korean | 0.6% | 0.0% | 0.5% | 0.0% | 0.1% | 0.0% | 0.7% | 0.1% | 0.8% | 0.1% |
| | | Chinese (incl. Mandarin, Cantonese) | 1.1% | 0.0% | 1.8% | 0.1% | 0.1% | 0.0% | 0.1% | 0.0% | 0.6% | 0.1% |
| | | Vietnamese | 0.8% | 0.0% | 1.0% | 0.1% | 0.1% | 0.1% | 0.6% | 0.1% | 0.7% | 0.1% |
| | | Tagalog (incl. Filipino) | 0.4% | 0.0% | 0.5% | 0.1% | 0.6% | 0.1% | 0.3% | 0.1% | 0.4% | 0.1% |
| | | Other Asian and Pacific Island languages | 0.9% | 0.0% | 1.2% | 0.1% | 0.3% | 0.1% | 0.7% | 0.1% | 0.8% | 0.1% |
| | | Other and unspecified languages | 0.6% | 0.0% | 0.9% | 0.1% | 0.1% | 0.0% | 0.2% | 0.0% | 0.5% | 0.1% |

Source: 2012-2016 American Community Survey 5-Year Estimates

* The estimate is controlled. A statistical test for sampling variability is not applicable.

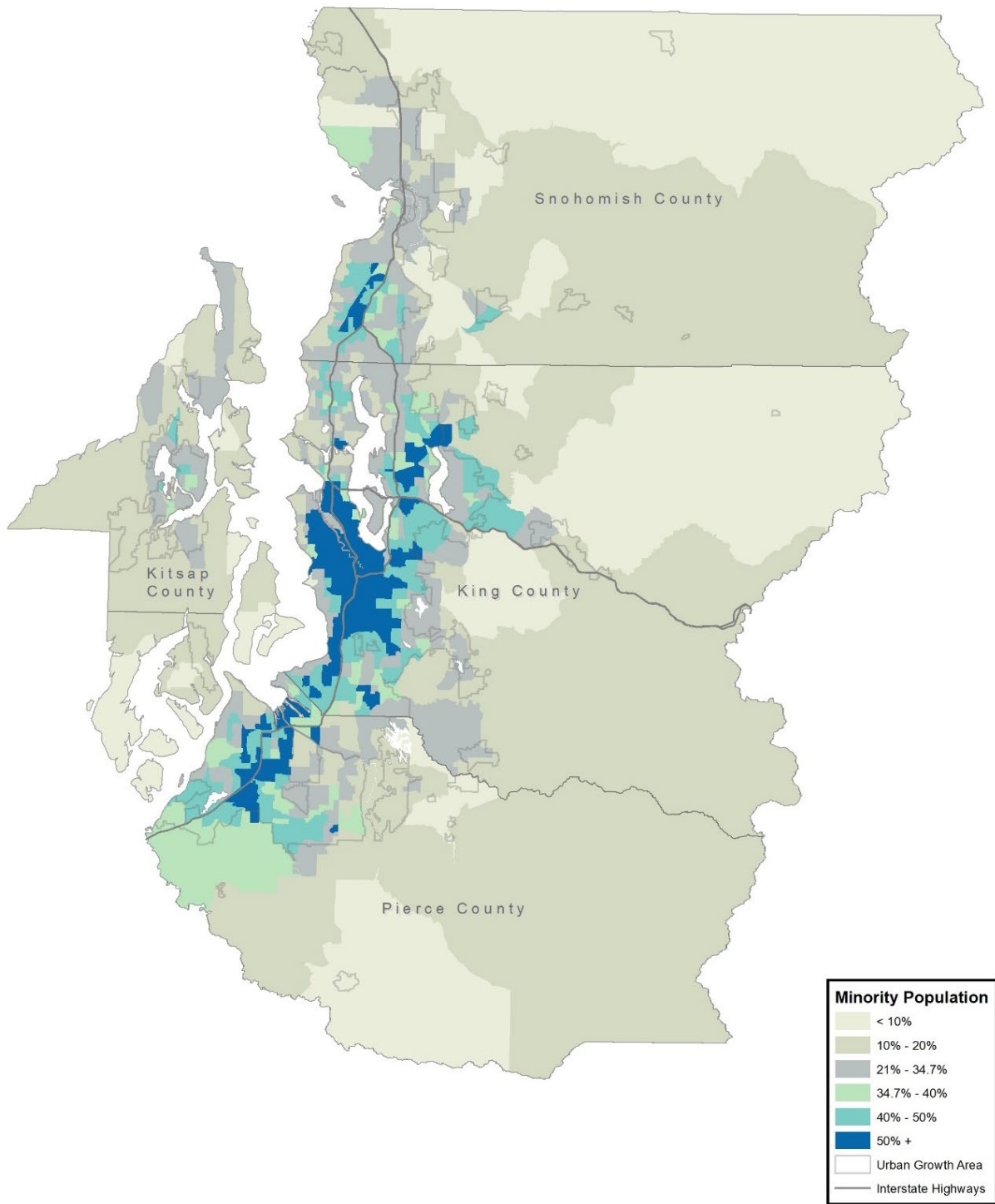
Table 11. Common Languages Other Than English Spoken in the Central Puget Sound: 2016

| Rank | Central Puget Sound Region | | | King County | | | Kitsap County | | |
|------|--|----------------|--------------|---------------------------------|----------|-------|---------------------------------|----------|-----|
| | | Estimate | MoE | | Estimate | MoE | | Estimate | MoE |
| 1 | Spanish | 224,200 | 3,803 | Spanish | 128,900 | 2,734 | Spanish | 5,500 | 667 |
| 2 | Other Asian | 97,300 | 2,878 | Chinese | 69,700 | 2,276 | Tagalog (incl. Filipino) | 4,900 | 519 |
| 3 | Other Indo-European languages | 84,700 | 2,978 | Other Asian | 66,300 | 2,383 | Other Asian | 2,000 | 389 |
| 4 | Chinese | 81,700 | 2,611 | Other Indo-European languages | 63,600 | 2,679 | German | 1,000 | 230 |
| 5 | Russian | 60,100 | 3,468 | Russian | 37,500 | 2,711 | Other Indo-European languages | 880 | 329 |
| 6 | Vietnamese | 49,300 | 2,357 | Other and unspecified languages | 37,200 | 2,270 | French, Haitian, or Cajun | 660 | 168 |
| 7 | Other and unspecified languages | 48,300 | 2,392 | Vietnamese | 33,100 | 1,839 | Chinese | 620 | 192 |
| 8 | Tagalog (incl. Filipino) | 48,000 | 2,116 | Tagalog (incl. Filipino) | 27,400 | 1,721 | Russian | 510 | 192 |
| 9 | Korean | 40,500 | 1,833 | Korean | 21,800 | 1,497 | Vietnamese | 430 | 182 |
| 10 | German | 21,700 | 1,128 | French, Haitian, or Cajun | 12,600 | 1,017 | Other and unspecified languages | 280 | 184 |
| 11 | French, Haitian, or Cajun | 17,700 | 1,110 | German | 11,400 | 943 | Korean | 280 | 106 |
| 12 | Arabic | 12,100 | 1,561 | Arabic | 8,000 | 1,309 | Arabic | 80 | 63 |

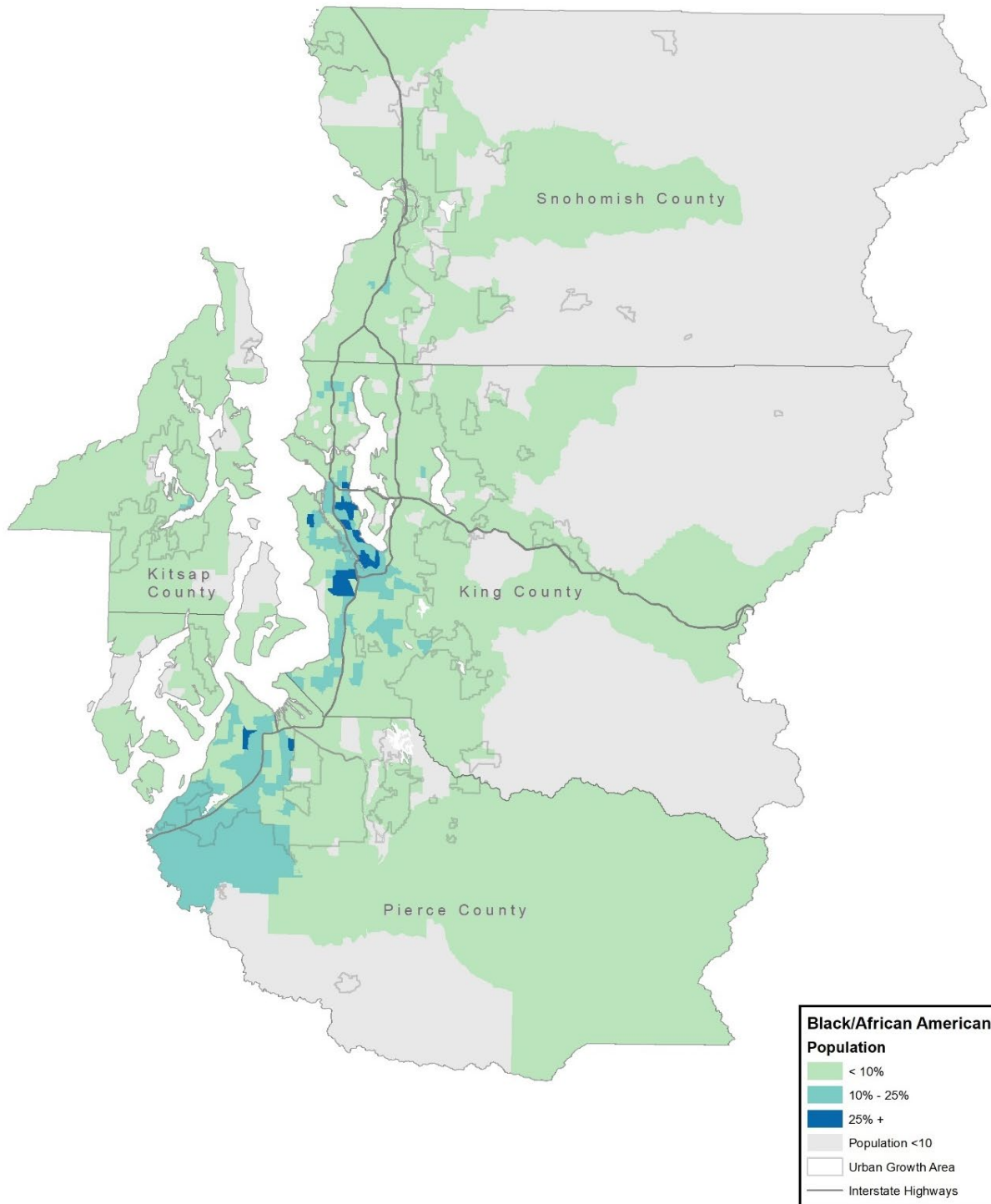
| Rank | Pierce County | | | Snohomish County | | |
|------|---------------------------------|----------|-------|---------------------------------|----------|-------|
| | | Estimate | MoE | | Estimate | MoE |
| 1 | Spanish | 45,400 | 1,618 | Spanish | 44,500 | 1,507 |
| 2 | Other Asian | 14,800 | 1,211 | Other Asian | 14,200 | 1,246 |
| 3 | Korean | 8,800 | 715 | Other Indo-European languages | 14,000 | 1,168 |
| 4 | Russian | 8,300 | 1,170 | Russian | 13,700 | 1,767 |
| 5 | Tagalog (incl. Filipino) | 7,800 | 756 | Korean | 9,500 | 1,095 |
| 6 | Vietnamese | 6,600 | 986 | Vietnamese | 9,200 | 1,143 |
| 7 | German | 6,300 | 643 | Chinese | 8,700 | 947 |
| 8 | Other Indo-European languages | 6,200 | 900 | Tagalog (incl. Filipino) | 7,900 | 1,038 |
| 9 | Other and unspecified languages | 3,200 | 707 | Other and unspecified languages | 7,700 | 1,021 |
| 10 | Chinese | 2,700 | 559 | Arabic | 3,200 | 787 |
| 11 | French, Haitian, or Cajun | 2,000 | 395 | German | 3,000 | 461 |
| 12 | Arabic | 800 | 303 | French, Haitian, or Cajun | 2,400 | 508 |

Source: 2012-2016 American Community Survey 5-Year Estimates

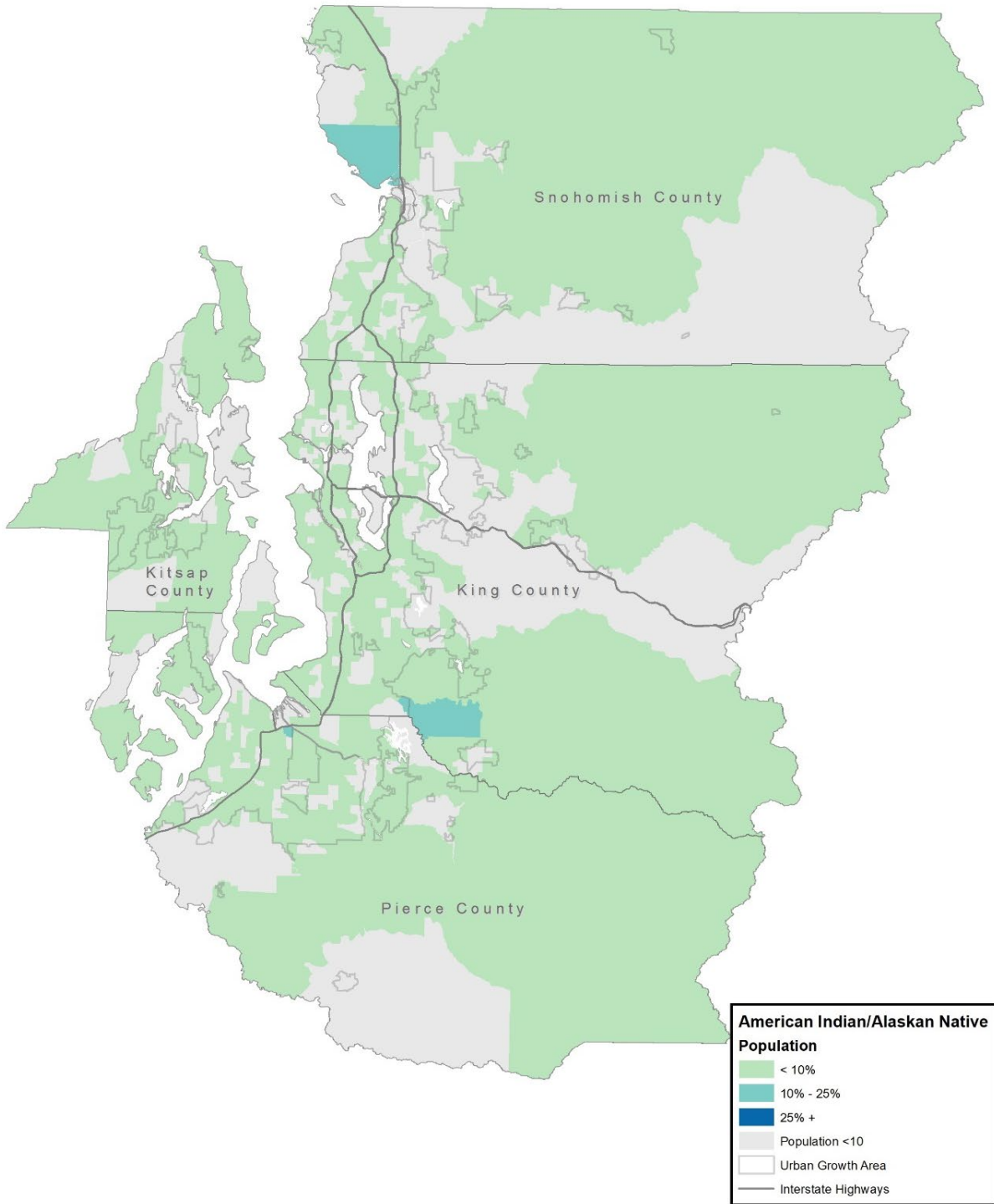
Map 1. Minority Population, Central Puget Sound: 2012-2016



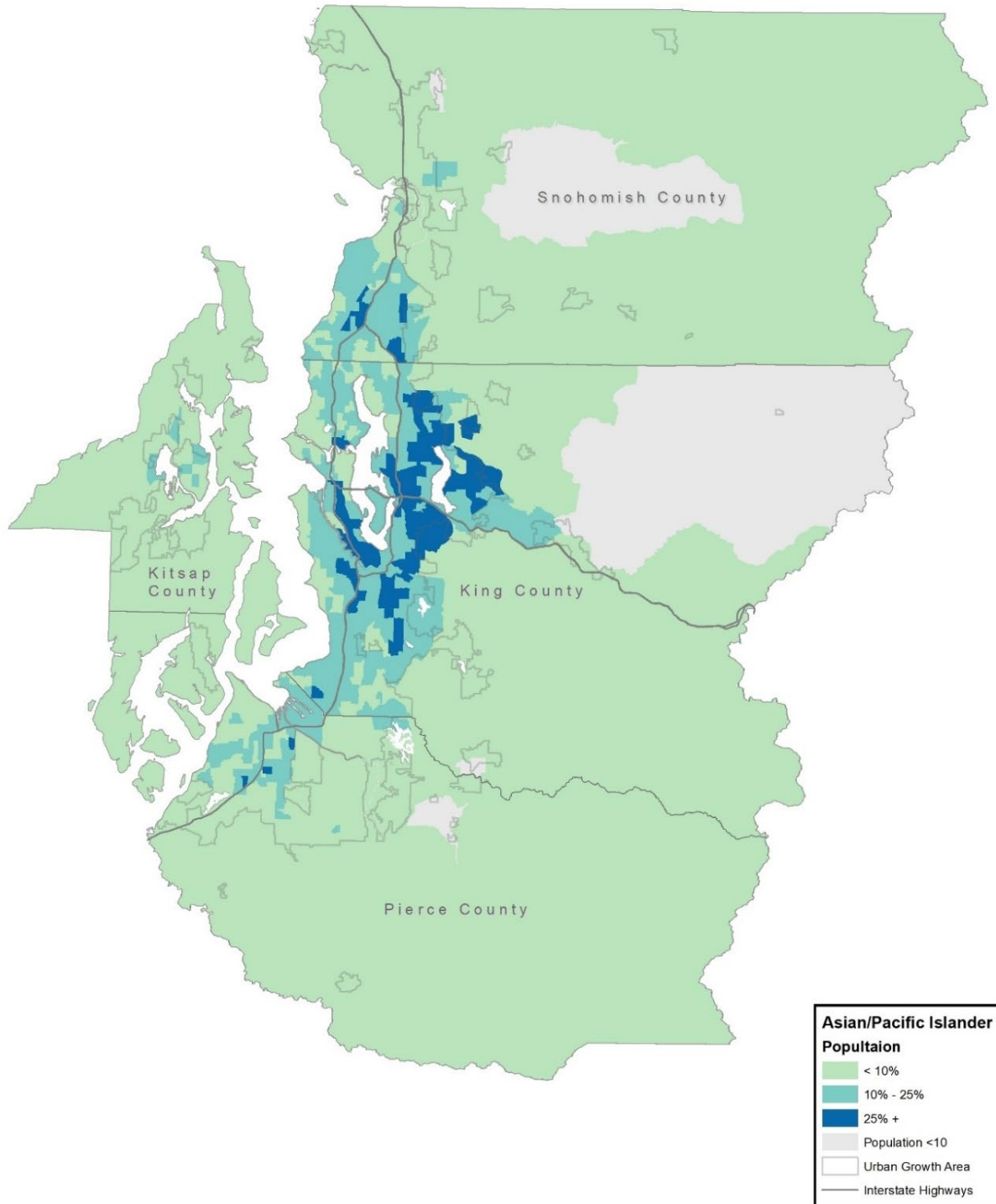
Map 2. Black/African American Population, Central Puget Sound: 2012-2016



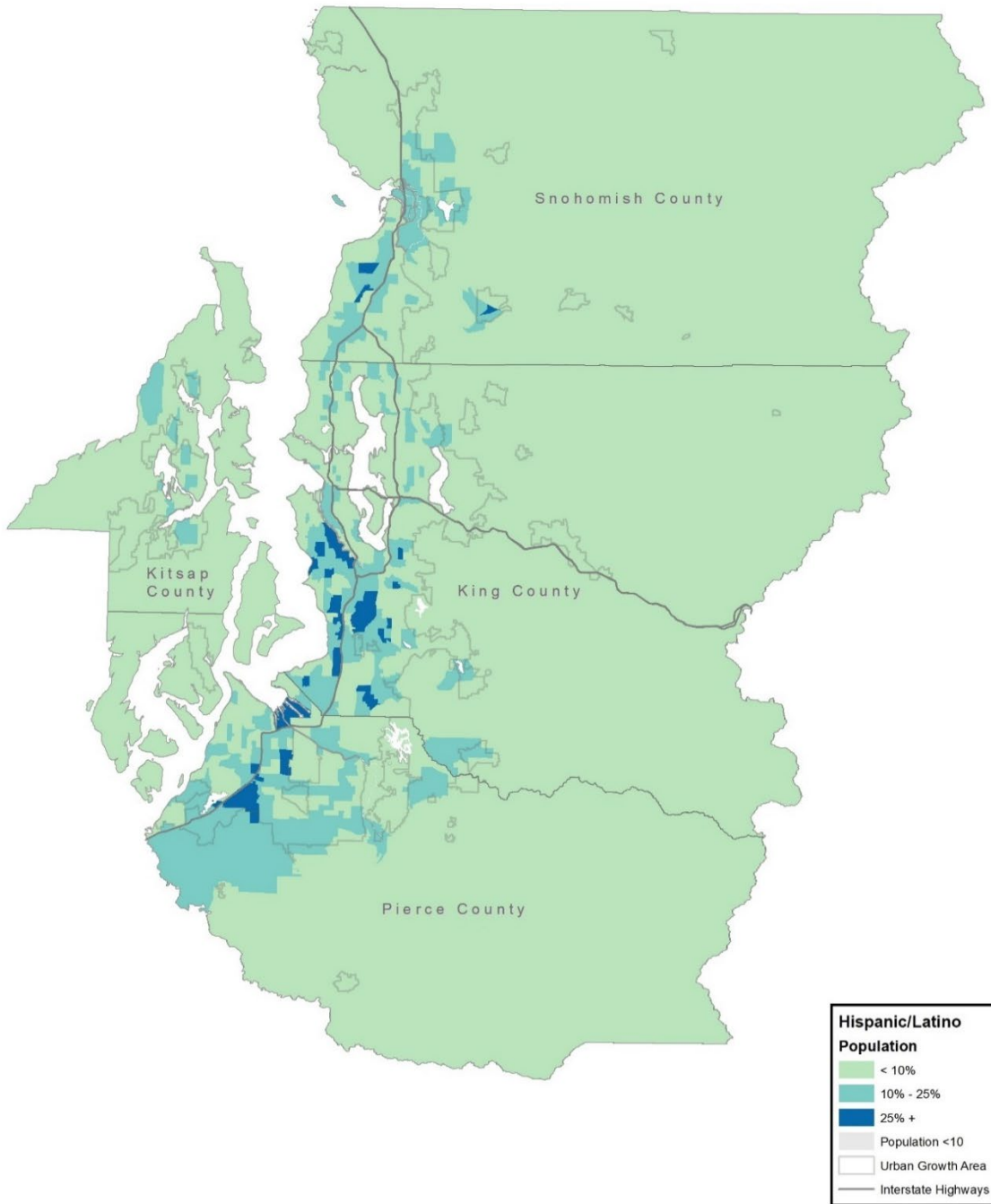
Map 3. American Indian/Alaskan Native Population, Central Puget Sound: 2012-2016



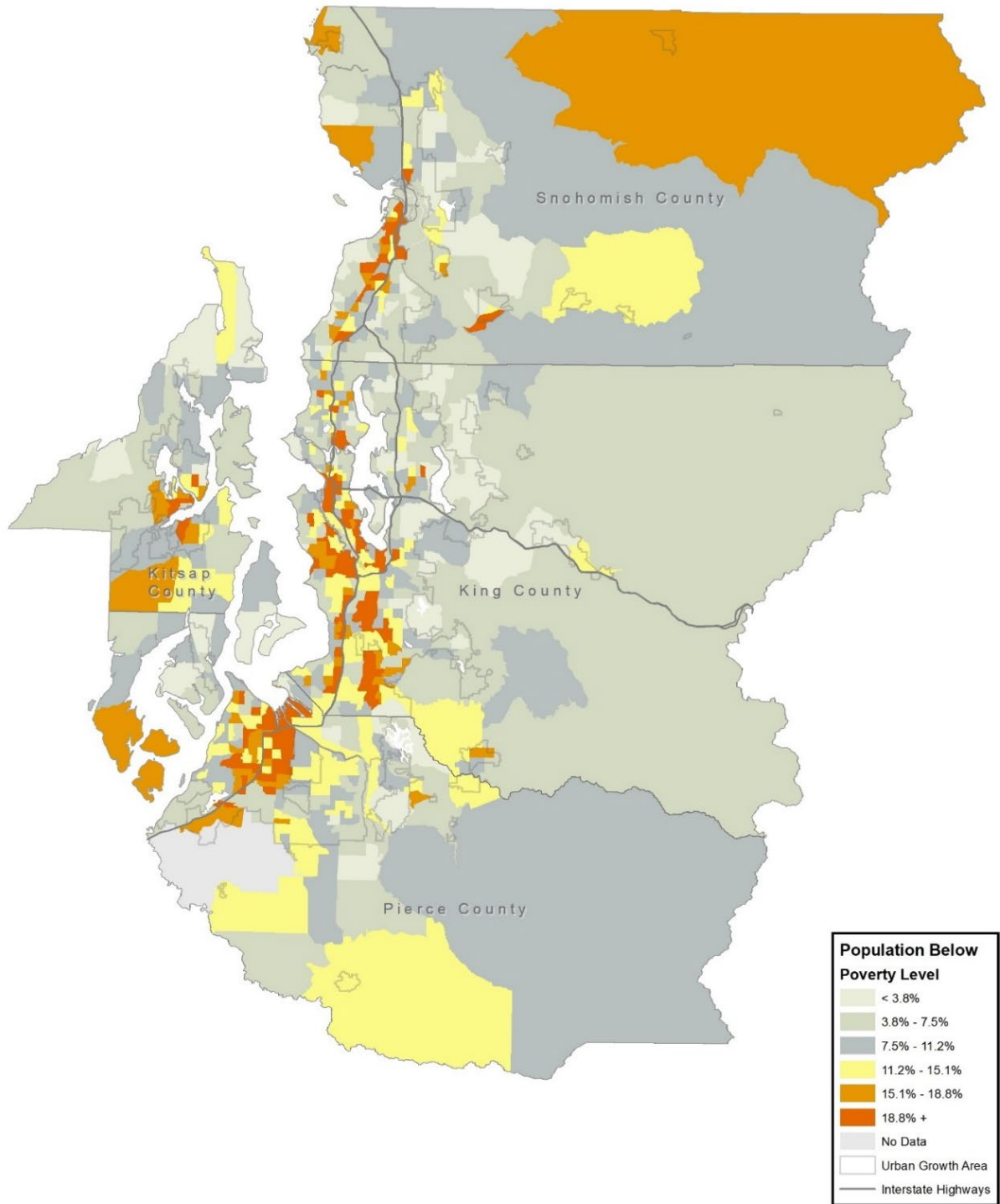
Map 4. Asian/Pacific Islander Population, Central Puget Sound: 2012-2016



Map 5. Hispanic/Latino Population, Central Puget Sound: 2012-2016



Map 6. Low-Income Population, Central Puget Sound: 2012-2016



Appendix A. DATA SOURCES

2016 American Community Survey 1-Year Tables

| | |
|----------------|---|
| Table B01001. | Sex by Age |
| Table B02001. | Race |
| Table B03002. | Hispanic or Latino by Race |
| Table C16001. | Language Spoken at Home for the Population 5 Years and Over |
| Table C16004. | Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over |
| Table C17001. | Poverty Status in the Past 12 Months by Sex by Age |
| Table C17002. | Ratio of Income to Poverty Level in the Past 12 Months |
| Table B18101. | Sex by Age by Disability Status |
| Table B18130. | Sex by Age by Disability Status by Employment Status for the Civilian Noninstitutionalized Population 5 Years and Over |
| Table B19013. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) |
| Table B25045. | Tenure by Vehicles Available by Age of Householder |
| Table B19013A. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (White Alone Householder) |
| Table B19013B. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (Black or African American Alone Householder) |
| Table B19013C. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (American Indian and Alaskan Native Alone Householder) |
| Table B19013D. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (Asian Alone Householder) |
| Table B19013E. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (Native Hawaiian and Other Pacific Islander Alone Householder) |
| Table B19013F. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (Some Other Race Householder) |
| Table B19013G. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (Two or More Races Householder) |
| Table B19013H. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (Hispanic or Latino Householder) |
| Table B19013I. | Median Household Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars) (White Alone, Not Hispanic or Latino Householder) |

2012-2016 American Community Survey 5-Year Tables

| | |
|----------------|---|
| Table B02001. | Race |
| Table B03002. | Hispanic or Latino by Race |
| Table B17001. | Poverty Status in the Past 12 Months by Sex by Age |
| Table B17001A. | Poverty Status in the Past 12 Months by Sex by Age (White Alone) |
| Table B17001B. | Poverty Status in the Past 12 Months by Sex by Age (Black or African American Alone) |
| Table B17001C. | Poverty Status in the Past 12 Months by Sex by Age (American Indian and Alaskan Native Alone) |
| Table B17001D. | Poverty Status in the Past 12 Months by Sex by Age (Asian Alone) |

- Table B17001E. Poverty Status in the Past 12 Months by Sex by Age (Native Hawaiian and Other Pacific Islander Alone)
- Table B17001F. Poverty Status in the Past 12 Months by Sex by Age (Some Other Race Alone)
- Table B17001G. Poverty Status in the Past 12 Months by Sex by Age (Two or More Races Alone)
- Table B17001H. Poverty Status in the Past 12 Months by Sex by Age (Hispanic or Latino)
- Table B17001I. Poverty Status in the Past 12 Months by Sex by Age (White Alone, Not Hispanic or Latino)

2016 American Community Survey Public Use Microdata Sample (PUMS) Data

Data derived from PUMS 2016 1-year data set:

- Vehicles available (zero, 1 or more) by poverty status (universe: occupied housing units)
- Vehicles available (zero, 1 or more) by presence of one or more household members with a disability (universe: occupied housing units)

Appendix B. DATA NOTES

Regional Data Profile Tables – Notes

Race – The federal race classification categories “Asian alone” and “Native Hawaiian and Other Pacific Islander alone” were sometimes combined in the regional profile data tables as “Asian/Pacific Islander alone.” In the American Community Survey, the “Some other race” category includes all responses to the race question other than “White,” “Black or African American,” “American Indian and Alaskan Native,” “Asian,” or “Native Hawaiian and Other Pacific Islander.” Write-in responses such as multiracial, mixed, or interracial (where the multiple races were not identified), or a Hispanic/Latino group such as Mexican, Puerto Rican, or Cuban, are included in the “Some other race” category. In the American Community Survey, the “Two or more races” category includes responses to the race question involving two or more combinations of “White,” “Black or African American,” “American Indian and Alaskan Native,” “Asian,” “Native Hawaiian and Other Pacific Islander,” and “Some other race,” including write-in responses.

Hispanic/Latino – The American Community Survey considers Hispanic/Latino origin as an ethnic characteristic, separate from race. A person who identified their origin as Spanish, Hispanic, or Latino may be of any race, including White.

Total Minority – The term “total minority” represents the union between – not the sum of – minority race populations and the Hispanic/Latino population and includes White persons of Hispanic/Latino origin.

| | | Race | |
|------------------|--|----------------------|--------------------------|
| Hispanic/ Latino | | White / Non-Hispanic | Non-White / Non-Hispanic |
| | | White / Hispanic | Non-White / Hispanic |

Poverty Status – There are two slightly different versions of the federal poverty measure: poverty thresholds and poverty guidelines. The poverty thresholds are the original version of the federal poverty measure, first developed by the Social Security Administration (SSA) and updated each year by the Census Bureau. The poverty guidelines are a simplified version of the poverty thresholds, issued each year in the Federal Register by the Department of Health and Human Services (HHS)⁷. The 2016 poverty data reported in the regional profile tables and utilized in the GIS map profile of the region’s low-income population were derived using the Census Bureau’s poverty thresholds.

Poverty thresholds for families and unrelated individuals are represented by a matrix of income thresholds based on the composition and size of a family unit cross-classified by the presence and number of family members under 18 years old. Because the income questions specify a period covering the last 12 months, the appropriate poverty thresholds are determined by multiplying the base-year poverty thresholds (1982) (see Appendix B) by the average of the monthly inflation factors for the 12 months preceding the data collection (see Appendix C). For example, the poverty threshold in 2016 for a family of

⁷ See “The 2016 HHS Poverty Guidelines” at <https://aspe.hhs.gov/computations-2016-poverty-guidelines>

four with two children, interviewed in January 2016, was \$24,026. All household members related by birth, marriage, or adoption are included in the determination of a family's poverty status. Unrelated individuals in the same household are considered separately. Unrelated individuals and 2-person families are further differentiated by whether the reference person is under 65 years or 65 years and over.

Poverty thresholds are revised annually to allow for changes in the cost of living as reflected in the Consumer Price Index (CPI-U). Poverty thresholds are the same for all parts of the country – they are not adjusted for regional, state, or local variations in the cost of living.

Individuals for Whom Poverty Status is Determined – Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups were excluded from the numerator and denominator when calculating poverty rates.

Median Household Income – The 2016 median household incomes reported for the central Puget Sound region (in Table 4) are for the Seattle-Tacoma-Bellevue Metro Area which does not include Kitsap County. There is no census entity that encompasses the four Central Puget Sound counties and those counties alone and thus no median figure is available.

Disability Status – In the 2016 American Community Survey, disability was defined as:

- The existence of the following long-lasting conditions:
 - a) Sensory disability - blindness, deafness, or a severe vision or hearing impairment
 - b) Physical disability – a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying; or
- The existence of a physical, mental, or emotional condition lasting 6 months or more that made it difficult to perform the following activities:
 - a) Mental disability - learning, remembering, or concentrating
 - b) Self-care disability - dressing, bathing, or getting around inside the home
 - c) Go outside home disability - going outside the home alone to shop or visit a doctor's office
 - d) Employment disability - working at a job or business

Individuals were classified as having a disability if they belonged to the civilian noninstitutionalized population and they were: 5 years and over and had a sensory, physical, mental, or self-care disability; they were 16 years and over and had a go outside home disability, and/or; they were 16 to 64 years old and had an employment disability.

Limited English Proficiency – In the 2016 American Community Survey, the English proficiency question was asked of a sample of the population who reported that they spoke a language other than, or in addition to, English at home. Respondents were asked to rate their ability to speak English in one of the following categories: "Very well," "Well," "Not well," or "Not at all." PSRC classified persons as being limited English proficient if they responded with any answer other than "Very well." Persons who spoke only English at home were assumed to be English proficient. Language proficiency was tabulated for the population age 5 and over.

GIS Map Profiles – Notes

Maps 1 to 5 do not depict values for census tracts with a population of less than 10 persons.

Map 1 illustrates the distribution of the minority population (non-White persons including White persons of Hispanic/Latino origin) across the central Puget Sound region and identifies geographic areas and communities with a regionally significant minority population. Census tracts with a minority population

share equal to or greater than the regional threshold – 34.7 percent of total population – are shaded in orange, whereas census blocks with a minority population share less than the regional threshold are shaded in blue. Gradations of orange and blue shading further illustrate the variation in minority population shares across the region.

Maps 2 to 5 illustrate the population distributions of the region’s various minority groups. Census tracts with a minority group population share equal to or greater than 10 percent of total population are shaded in orange and red.

Map 6 illustrates the distribution of the region’s low-income population and identifies poverty-impacted geographic areas and communities within the central Puget Sound. Census tracts with poverty rates equal to or higher than the regional threshold – 10.8 percent of persons below the federal poverty level – are shaded in red, whereas census tracts with poverty rates lower than the regional threshold are shaded in green. Gradations of red and green shading further illustrate the variation in concentration of poverty across the region.

Appendix C. POVERTY THRESHOLDS IN 1982

By Size of Family and Number of Related Children Under 18 Years Old (Dollars)

| Size of family unit | Related children under 18 years | | | | | | | | |
|------------------------------------|---------------------------------|--------|--------|--------|--------|--------|--------|--------|---------------|
| | None | One | Two | Three | Four | Five | Six | Seven | Eight or more |
| One person (unrelated individual): | | | | | | | | | |
| Under 65 years | 5,019 | | | | | | | | |
| 65 years and over | 4,626 | | | | | | | | |
| Two persons: | | | | | | | | | |
| Householder under 65 years | 6,459 | 6,649 | | | | | | | |
| Householder 65 years and over | 5,831 | 6,624 | | | | | | | |
| Three persons | 7,546 | 7,765 | 7,772 | | | | | | |
| Four persons | 9,950 | 10,112 | 9,783 | 9,817 | | | | | |
| Five persons | 11,999 | 12,173 | 11,801 | 11,512 | 11,336 | | | | |
| Six persons | 13,801 | 13,855 | 13,570 | 13,296 | 12,890 | 12,649 | | | |
| Seven persons | 15,879 | 15,979 | 15,637 | 15,399 | 14,955 | 14,437 | 13,869 | | |
| Eight persons or more | 17,760 | 17,917 | 17,594 | 17,312 | 16,911 | 16,403 | 15,872 | 15,738 | |
| Nine persons or more | 21,364 | 21,468 | 21,183 | 20,943 | 20,549 | 20,008 | 19,517 | 19,397 | 18,649 |

Source: U.S. Census Bureau

Appendix D. 2016 POVERTY FACTORS

| Interview Month | Poverty Factors |
|-----------------|-----------------|
| January | 2.45589 |
| February | 2.45866 |
| March | 2.46072 |
| April | 2.46246 |
| May | 2.46476 |
| June | 2.46685 |
| July | 2.46891 |
| August | 2.47061 |
| September | 2.4728 |
| October | 2.47581 |
| November | 2.47917 |
| December | 2.48263 |

Source: U.S. Census Bureau

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

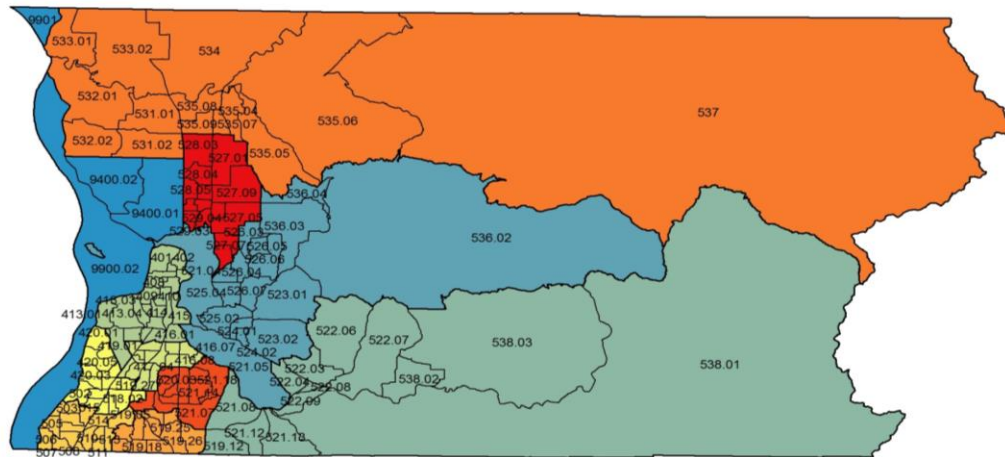
APPENDIX 34

2016 HEALTH PROFILES: COMPARING SNOHOMISH HEALTH REPORTING AREAS

2016 Health Profiles: Comparing Snohomish Health Reporting Areas



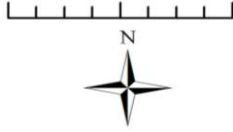
Snohomish Health Reporting Areas and census tracts



Snohomish Health Reporting Areas

- Arlington, Stanwood & Darrington
- Marysville
- Granite Falls, Lake Stevens & Snohomish
- Sultan, Skykomish & Monroe
- North Everett
- South Everett
- Mukilteo & North Lynnwood
- Edmonds, Mountlake Terrace & West Lynnwood
- Bothell, Brier
- Mill Creek & Silver Firs
- Tulalip Bay & the North Coast

0 4 8 16 Miles



Prepared by the Snohomish Health District

Note: See last page for a table displaying the census tracts included in each Snohomish Health Reporting Area

DEMOGRAPHICS

Total population, 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Fir | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|-------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 66,684 | 57,529 | 82,509 | 74,034 | 70,125 | 63,988 | 78,458 | 98,716 | 741,000 | 78,635 | 58,154 | 10,726 |

Source: Washington State Office of Financial Management, Forecasting Division, single year intercensal estimates 2001-2014, January 2015.

SOCIOECONOMIC CHARACTERISTICS

Average median household income, 2013

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Fir | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|-------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| \$66,397 | \$88,600 | \$66,096 | \$75,298 | \$70,698 | \$100,390 | \$76,548 | \$55,757 | \$68,381 | \$64,055 | \$81,659 | \$63,271 |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Unemployment rate among population age 16 years and older, 2013

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Fir | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|-------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 9.70% | 8.30% | 7.50% | 9.10% | 9.80% | 6.60% | 8.60% | 11.50% | 9.30% | 10.30% | 9.40% | 13.30% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Percent of single-parent households with children below 18 years of age, 2013

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Fir | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|-------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 25.40% | 19.80% | 33.90% | 22.80% | 26.20% | 16.30% | 30.60% | 36.10% | 26.80% | 36.50% | 21.30% | 39.90% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Percent of family that have an income below the poverty level, 2013

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 6.60% | 2.50% | 7.70% | 5.20% | 6.60% | 3.30% | 7.70% | 10.40% | 7.10% | 13% | 6.40% | 10.80% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

EDUCATION

Percent of residents 25 years and older with a high school degree or less, 2013

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 41% | 24.30% | 28.70% | 36.50% | 38.90% | 21% | 26.70% | 37.40% | 33.40% | 36.20% | 35.50% | 45.30% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Percent of residents 25 years and older with a bachelor's degree or more, 2013

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 18.80% | 42.80% | 37.80% | 23.20% | 18.60% | 45% | 35.20% | 23.70% | 28.90% | 25.10% | 26.40% | 16.50% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

HEALTH OUTCOMES

Life expectancy at birth (in years), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 78.8 | 82.7 | 82.3 | 79.7 | 80.4 | 82.2 | 81.2 | 78.7 | 80.3 | 79.8 | 82.1 | 73.3 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Age-adjusted mortality (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 782 | 593.8 | 586.2 | 757.6 | 689 | 604.6 | 691.6 | 755.7 | 690.6 | 715.6 | 599 | 969.5 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Total years of potential life lost relative to age 65 (years per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 3,922 | 2,219.60 | 3,136 | 2,907.80 | 3,057 | 2,178 | 2,470.90 | 4,360.60 | 3,259 | 3,649.60 | 2,629 | 8538.2 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Cardiovascular disease mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 216.8 | 156.9 | 166.7 | 211 | 185 | 162.8 | 195.6 | 189.2 | 190.5 | 217.6 | 192.1 | 259.3 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Cancer mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 148.6 | 146.4 | 138.4 | 172.2 | 154.7 | 195.1 | 168 | 161.2 | 157.8 | 155.5 | 130.6 | 241 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Unintentional injury mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 86.3 | 24.8 | 33.4 | 33.5 | 36.4 | 20.1 | 32.3 | 57.5 | 43.2 | 29.3 | 48.9 | 51.9 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Alzheimer's disease mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 52.8 | 64 | 43 | 42 | 38.4 | 54.1 | 60.7 | 35.5 | 45.4 | 42.9 | 26.9 | 30.3 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Chronic lower respiratory disease mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 48.4 | 24 | 32.2 | 37.8 | 43.9 | 37.5 | 29.3 | 56.1 | 40.6 | 40.6 | 41.2 | 65.1 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Diabetes mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 39.1 | 18.9 | 7.5 | 24.8 | 30.5 | 22.3 | 20 | 34.8 | 25.6 | 35.1 | 29 | 54 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Suicide mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 12.1 | 16.9 | 25.2 | 15.7 | 16.8 | 5.6 | 13.8 | 17.7 | 16.3 | 16.9 | 16.3 | 15.6 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Chronic liver disease and cirrhosis mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 8.2 | 2.8 | 8.6 | 10.4 | 15.9 | 6 | 8 | 9.6 | 9.8 | 12.9 | 8.2 | 31.6 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Pneumonitis due to solids and liquids mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 4.8 | 10.9 | 13.9 | 13.5 | 7.4 | 5.9 | 14.4 | 17.6 | 11.8 | 10.6 | 7.8 | 5.9 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

Influenza and pneumonia mortality rate (deaths per 100,000 residents), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 14.3 | 7.8 | 5.2 | 18.4 | 11 | 9.2 | 11.5 | 5.4 | 11.8 | 5 | 3.8 | 4.8 |

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

MATERNAL, INFANT AND CHILD HEALTH

Teen birth rate (live births to females ages 15 – 19 per 1,000 population), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 11.6 | 5.5 | 8.7 | 13.8 | 17.4 | 4.4 | 11.4 | 26.6 | 14.6 | 19.3 | 13.4 | 11.2 |

Source: Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

Percent of women receiving prenatal care in the first trimester, 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 77.90% | 86.60% | 79.10% | 81.70% | 80.90% | 85% | 79.60% | 75.30% | 79.60% | 77% | 80.20% | 60.70% |

Source: Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

Percent of births to women who reported smoking while pregnant, 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 12.50% | 2.80% | 6.00% | 7.90% | 9.50% | 2.10% | 6.90% | 11.20% | 7.80% | 5.80% | 9.20% | 30.30% |

Source: Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

Percent of live births occurring pre-term (less than 37 weeks), 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 9.40% | 6.80% | 8.80% | 9.50% | 9.90% | 8.10% | 8.70% | 11% | 9.20% | 8.80% | 9.50% | 16% |

Source: Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

Percent of births classified as low birthweight, 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 5.30% | 5.60% | 4.80% | 5.30% | 7.10% | 4.60% | 7.60% | 7.50% | 6.10% | 6.50% | 5.30% | 12.50% |

Source: Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

Percent of births classified as high birthweight, 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 12% | 12.70% | 12.30% | 13.40% | 13.60% | 12.10% | 9.70% | 11.20% | 12.10% | 12.40% | 14.60% | 9.20% |

Source: Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

Infant mortality rate per 1,000 live birth, 2014

| Arlington, Stanwood & Darrington | Bothell & Brier | Edmonds, Mountlake Terrace & West Lynnwood | Granite Falls, Lake Stevens & Snohomish | Marysville | Mill Creek & Silver Firs | Mukilteo & North Lynnwood | North Everett | Snohomish County | South Everett | Sultan, Skykomish & Monroe | Tulalip Bay & the North Coast |
|----------------------------------|-----------------|--|---|------------|--------------------------|---------------------------|---------------|------------------|---------------|----------------------------|-------------------------------|
| 1.3 | 1.3 | 6.2 | 1.2 | 6.6 | 4.3 | 0 | 6.1 | 3.6 | 5.2 | 1.5 | 8.3 |

Source: (1) Washington State Department of Health, Center for Health Statistics, Birth Certificate Data, 1990–2014, August 2015

(2) Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2014, August 2015.

CENSUS TRACTS

| | Census tracts |
|--|-----------------|
| Arlington, Stanwood & Darrington | 531.01 |
| | 531.02 |
| | 532.01 |
| | 532.02 |
| | 533.01 |
| | 533.02 |
| | 534 |
| | 535.04 |
| | 535.05 |
| | 535.06 |
| | 535.07 |
| | 535.08 |
| | 535.09 |
| | 537 |
| | Bothell & Brier |
| 519.14 | |
| 519.15 | |
| 519.16 | |
| 519.17 | |
| 519.18 | |
| 519.21 | |
| 519.22 | |
| 519.24 | |
| 519.25 | |
| 519.26 | |
| Edmonds, Mountlake Terrace & West Lynnwood | 503 |
| | 504.01 |
| | 504.02 |
| | 505 |
| | 506 |
| | 507 |
| | 508 |
| | 509 |
| | 510 |
| | 511 |
| | 512 |
| | 513 |
| | 514 |
| | 515 |
| 519.05 | |

| | Census tracts |
|---|---------------|
| Granite Falls, Lake Stevens & Snohomish | 536.02 |
| | 536.04 |
| | 536.03 |
| | 526.07 |
| | 526.06 |
| | 526.03 |
| | 526.04 |
| | 526.05 |
| | 521.04 |
| | 521.05 |
| | 523.01 |
| | 523.02 |
| | 524.01 |
| | 524.02 |
| | 525.02 |
| Marysville | 525.03 |
| | 525.04 |
| | 527.01 |
| | 527.05 |
| | 527.06 |
| | 527.07 |
| | 527.08 |
| | 527.09 |
| | 528.03 |
| | 528.04 |
| 528.05 | |
| Mill Creek & Silver Firs | 528.06 |
| | 529.03 |
| | 529.04 |
| | 529.05 |
| | 529.06 |
| | 519.23 |
| | 519.27 |
| | 520.03 |
| | 520.04 |
| | 520.05 |
| | 520.06 |
| | 521.07 |
| 521.14 | |
| 521.15 | |
| 521.18 | |
| 520.07 | |

| | Census tracts |
|---------------------------|---------------|
| Mukilteo & North Lynnwood | 420.01 |
| | 420.03 |
| | 420.04 |
| | 420.05 |
| | 420.06 |
| | 501.01 |
| | 501.02 |
| | 502 |
| | 516.01 |
| | 516.02 |
| | 517.01 |
| | 517.02 |
| North Everett | 518.02 |
| | 518.03 |
| | 518.04 |
| | 519.28 |
| | 401 |
| | 402 |
| | 403 |
| | 404 |
| | 405 |
| | 407 |
| | 408 |
| | 409 |
| | 410 |
| | 411 |
| | 412.01 |
| | 412.02 |
| 413.01 | |
| 413.03 | |
| 413.04 | |
| 414 | |
| 415 | |
| 416.01 | |
| 418.05 | |
| 419.01 | |
| 419.03 | |
| 419.04 | |

| | Census tracts |
|-------------------------------|---------------|
| South Everett | 416.05 |
| | 416.06 |
| | 416.07 |
| | 416.08 |
| | 417.01 |
| | 417.03 |
| | 417.04 |
| | 418.06 |
| | 418.08 |
| | 418.09 |
| | 418.1 |
| | 418.11 |
| 418.12 | |
| 419.05 | |
| Sultan, Skykomish & Monroe | 522.03 |
| | 522.04 |
| | 522.06 |
| | 522.07 |
| | 522.08 |
| | 522.09 |
| | 538.03 |
| | 538.01 |
| | 538.02 |
| | 519.12 |
| 521.08 | |
| 521.12 | |
| 521.13 | |
| Tulalip Bay & the North Coast | 9400.01 |
| | 9400.02 |
| | 9900.02 |
| | 9901 |

Eden Hospice at Snohomish County

**Application Operate a Medicare Certified
and Medicaid Eligible Hospice Agency**

APPENDIX 35

**WASHINGTON LTSS DUAL
ELIGIBILITY DEMONSTRATION
PROJECT STATUS REPORT**



Washington State's Fee-For-Service Dual Eligible Demonstration Quarterly Report

October 23, 2020



This report provides a month-by-month look at dual Medicare-Medicaid beneficiaries' eligibility, enrollment, and engagement in Washington State's Duals Demonstration and Health Home program. A few key things to note:

- Health Homes was implemented in 14 counties in July 2013, 23 additional counties were added in October 2013, and the remaining 2 counties (King and Snohomish) joined in April 2017.
- Beneficiaries identified as "already aligned" with another Medicare shared savings program are not included among those deemed "demonstration eligible", though they are still eligible for Health Home services.
- Health Home dual beneficiaries are enrolled with one of twelve Health Home Fee-for-Service Lead Entities.

The report was prepared by DSHS Research and Data Analysis Division in collaboration with Washington State's Health Care Authority.

Eligibility and Enrollment updated through September 2020

Engagement updated through June 2020

Health Home Team Review Date: October 23, 2020

DATA SOURCE: Washington State Health Care Authority, ProviderOne (Medicaid) database.

Washington State
Health Care Authority



Transforming lives

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Washington State's Fee-For-Service Dual Eligible Demonstration Quarterly Report

EXECUTIVE SUMMARY

Eligibility, Enrollment, and Engagement Trends

- The number of duals eligible for the program has dropped 8% from 31,084 in September 2019 to 28,714 in September 2020. There are three known issues contributing to this trend.
 - 1) There has been an increase in duals enrolled in Medicare Advantage (and thus excluded from Health Home eligibility).
 - 2) Clients who once met the criteria of a PRISM score of 1.5 or above but are now below a PRISM score of 1.0 for 9 months or longer and who have lost eligibility.
 - 3) There has been a slight decrease in overall dual Medicare-Medicaid eligibility.
- Note that in the Washington Fee-For-Service model, demonstration eligible beneficiaries are enrolled before indicating whether they are interested in participating.
- The percent of duals who are eligible but have chosen not to participate (or can't) has increased from 21% in September 2019 to 32% by September 2020. It is unlikely that the real proportion of those unwilling to participate has changed; it is more likely that we as a program are more effective in identifying and disenrolling those who are unwilling to participate.
- As of June 2020, 35% of enrolled duals were engaged in the month while 46% of those enrolled had been engaged in June 2020 or during a previous month. Overall engagement has remained fairly steady, even as eligibility and enrollment have fluctuated at times.

COVID-19

- Currently, we have not seen drastic changes to Eligibility, Enrollment, or Engagement levels for Dual Demonstration eligible beneficiaries since the beginning of the COVID-19 pandemic. We attribute some of the stability to the actions taken by Health Home program staff to support Leads and Care Coordinators in maintaining engagement with beneficiaries. These actions include, but are not limited to...
 - 1) A remote version of the required 2-day Health Home Care Coordinator Basic Training was created and began being provided to new Care Coordinators in mid-March.
 - 2) Additional free webinars and resources on COVID-19 and self-care have been made available to Care Coordinators, including webinars developed by a cross-agency workgroup between the Department of Health, the Health Care Authority, and the Department of Social and Health Services, created to support the community based workforce.
 - 3) Care Coordination services began to be allowed over the phone, and beneficiaries were provided with mobile phones when needed to maintain engagement.

Other Notes

- Rate increases for the three tiers of Health Home services went into effect on July 1st, 2020.
- At the end of 2019, Health Home program staff began a focused effort to develop a more robust outreach plan to try and engage more agencies to serve as Health Home Leads to increase capacity to serve more eligible clients, including assurance of adequate outreach efforts to eligible clients (i.e. 3 outreach attempts). Progress on this work will likely be delayed due to COVID-19 related workload.

HIGHLIGHTS

As of September 2020

- ELIGIBILITY** • 28,714 dual beneficiaries were eligible for the duals demonstration (including those who have chosen not to participate).
- ENROLLMENT** • 37% (10,731) of eligible dual beneficiaries were enrolled with a Health Home Lead Entity.
 - 32% (9,215) of eligible dual beneficiaries chose not to participate in the program.
 - The remaining 31% (8,768) of eligible dual beneficiaries have not yet been enrolled.
 - A total of 58,754 eligible dual beneficiaries have been enrolled at least one month at some point in the life of the program.
- ENGAGEMENT** • 46% (4,982) of dual beneficiaries enrolled in June 2020 (when engagement records are more complete) had received one or more Health Home services since their initial enrollment.

NOTES

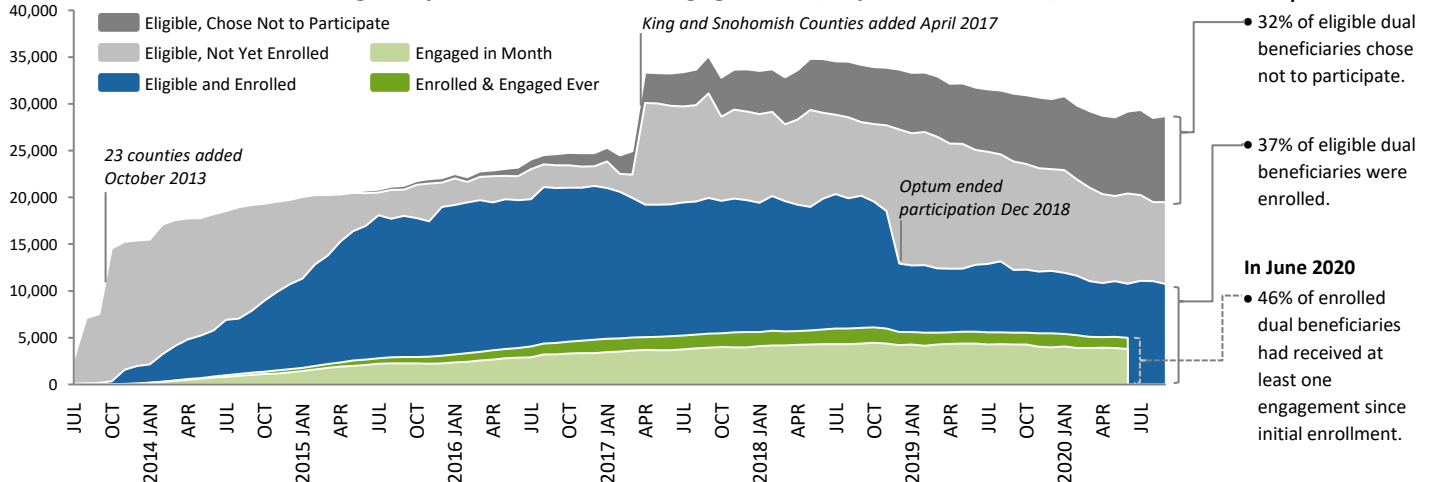
This report provides a month-by-month look at dual Medicare-Medicaid beneficiaries' eligibility, enrollment, and engagement in Washington State's Duals Demonstration and Health Home program. A few things to note:

- Dual beneficiaries identified as "already aligned" with another Medicare shared savings program have been removed.
- Health Home engagement is based on accepted encounters which can take 3 months to receive.
- Beginning in January 2017, enrolled beneficiaries who chose not to participate have been dropped from enrollment (a change in policy).
- Enrollment dropped beginning in October 2018 due to the withdrawal of Optum as a Health Home Lead. Most actively participating beneficiaries were moved to other Health Home Leads, keeping their Care Coordinator intact.

Overall Eligibility, Enrollment, and Engagement Detail (previous 15 Months)

| | | Eligible | | Chose Not to Participate | | Enrolled | | Engaged in Month | | | Engaged Ever | | |
|------|-----|----------|---------------|--------------------------|---------------|----------|---------------|------------------|----------------|----------------|-------------------|---------------|--------------------|
| | | NUMBER | % OF ELIGIBLE | NUMBER | % OF ELIGIBLE | NUMBER | % OF ELIGIBLE | NUMBER | % OF ENROLLED | NEWLY ENGAGED | ENROLLED IN MONTH | % OF ENROLLED | NO LONGER ENROLLED |
| | JUL | 31,542 | 21% | 6,684 | 21% | 12,879 | 41% | 4,280 | 33% | 122 | 5,582 | 43% | 7,955 |
| | AUG | 31,439 | 22% | 6,862 | 22% | 13,168 | 42% | 4,301 | 33% | 136 | 5,574 | 42% | 8,110 |
| | SEP | 31,084 | 23% | 7,254 | 23% | 12,242 | 39% | 4,288 | 35% | 123 | 5,533 | 45% | 8,281 |
| | OCT | 30,915 | 24% | 7,357 | 24% | 12,295 | 40% | 4,258 | 35% | 106 | 5,539 | 45% | 8,397 |
| | NOV | 30,668 | 25% | 7,539 | 25% | 12,087 | 39% | 4,030 | 33% | 70 | 5,469 | 45% | 8,550 |
| | DEC | 30,527 | 25% | 7,498 | 25% | 12,156 | 40% | 3,975 | 33% | 67 | 5,464 | 45% | 8,631 |
| 2020 | JAN | 30,829 | 26% | 7,920 | 26% | 11,942 | 39% | 4,067 | 34% | 98 | 5,416 | 45% | 8,782 |
| | FEB | 29,839 | 27% | 7,915 | 27% | 11,641 | 39% | 3,897 | 33% | 81 | 5,279 | 45% | 9,008 |
| | MAR | 29,208 | 28% | 8,166 | 28% | 11,043 | 38% | 3,899 | 35% | 75 | 5,104 | 46% | 9,269 |
| | APR | 28,734 | 29% | 8,393 | 29% | 10,831 | 38% | 3,925 | 36% | 88 | 5,064 | 47% | 9,410 |
| | MAY | 28,550 | 29% | 8,419 | 29% | 11,035 | 39% | 3,885 | 35% | 74 | 5,080 | 46% | 9,475 |
| | JUN | 29,184 | 30% | 8,753 | 30% | 10,760 | 37% | 3,793 | 35% | 85 | 4,982 | 46% | 9,663 |
| | JUL | 29,342 | 31% | 9,080 | 31% | 11,098 | 38% | <i>pending</i> | <i>pending</i> | <i>pending</i> | <i>pending</i> | - | <i>pending</i> |
| | AUG | 28,486 | 32% | 9,000 | 32% | 11,057 | 39% | <i>pending</i> | <i>pending</i> | <i>pending</i> | <i>pending</i> | - | <i>pending</i> |
| | SEP | 28,714 | 32% | 9,215 | 32% | 10,731 | 37% | <i>pending</i> | <i>pending</i> | <i>pending</i> | <i>pending</i> | - | <i>pending</i> |

Overall Eligibility, Enrollment, and Engagement (July 2013 - Present)



2. Additional Eligibility, Enrollment, and Engagement Details

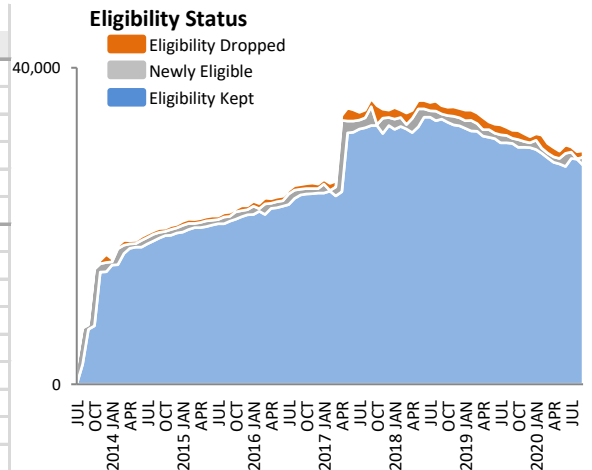
NOTES

As of September 2020

- 97% of eligible dual beneficiaries remained eligible from the prior month.
- 94% of enrolled dual beneficiaries remained enrolled from the prior month.
- Beneficiaries who drop Health Homes eligibility/enrollment may return as newly eligible/enrolled in a later month.
- 70% (3,466) of dual beneficiaries enrolled and ever engaged in June 2020 (when engagement records are more complete) had received 13 or more Health Home services since their initial enrollment.

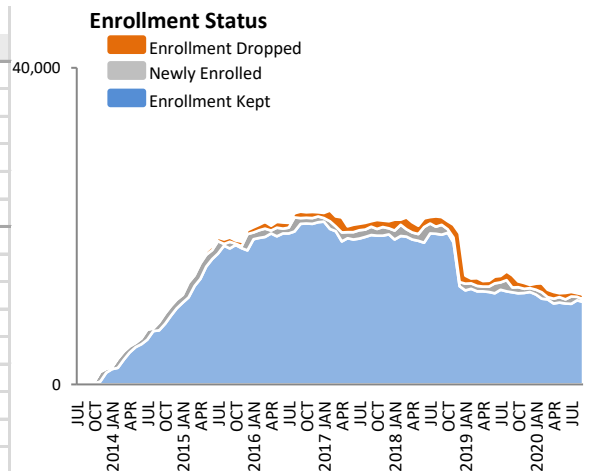
Health Home Dual Beneficiary Eligibility Status

| | Eligible | | Newly Eligible | | Eligibility Kept | | Eligibility Dropped | |
|----------|----------|----------------------|----------------|----------------------|------------------|----------------------|---------------------|----------------------|
| | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ² | NUMBER | PERCENT ² |
| JUL | 31,542 | | 1,044 | 3% | 30,498 | 96% | 1,241 | 4% |
| AUG | 31,439 | | 911 | 3% | 30,528 | 97% | 1,014 | 3% |
| SEP | 31,084 | | 640 | 2% | 30,444 | 97% | 995 | 3% |
| OCT | 30,915 | | 971 | 3% | 29,944 | 96% | 1,140 | 4% |
| NOV | 30,668 | | 728 | 2% | 29,940 | 97% | 975 | 3% |
| DEC | 30,527 | | 605 | 2% | 29,922 | 98% | 746 | 2% |
| 2020 JAN | 30,829 | | 1,142 | 4% | 29,687 | 97% | 840 | 3% |
| FEB | 29,839 | | 673 | 2% | 29,166 | 95% | 1,663 | 5% |
| MAR | 29,208 | | 600 | 2% | 28,608 | 96% | 1,231 | 4% |
| APR | 28,734 | | 703 | 2% | 28,031 | 96% | 1,177 | 4% |
| MAY | 28,550 | | 720 | 3% | 27,830 | 97% | 904 | 3% |
| JUN | 29,184 | | 1,675 | 6% | 27,509 | 96% | 1,041 | 4% |
| JUL | 29,342 | | 797 | 3% | 28,545 | 98% | 639 | 2% |
| AUG | 28,486 | | 48 | 0% | 28,438 | 97% | 904 | 3% |
| SEP | 28,714 | | 1,024 | 4% | 27,690 | 97% | 796 | 3% |



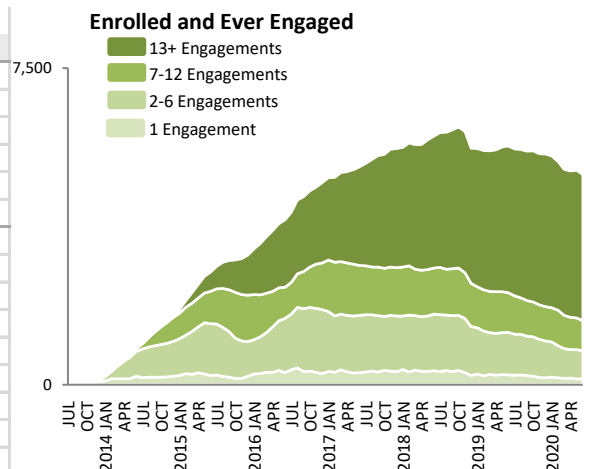
Health Home Dual Beneficiary Enrollment Status

| | Enrolled | | Newly Enrolled | | Enrollment Kept | | Enrollment Dropped | |
|----------|----------|----------------------|----------------|----------------------|-----------------|----------------------|--------------------|----------------------|
| | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ² | NUMBER | PERCENT ² |
| JUL | 12,879 | | 925 | 7% | 11,954 | 94% | 829 | 6% |
| AUG | 13,168 | | 1,395 | 11% | 11,773 | 91% | 1,106 | 9% |
| SEP | 12,242 | | 618 | 5% | 11,624 | 88% | 1,544 | 12% |
| OCT | 12,295 | | 789 | 6% | 11,506 | 94% | 736 | 6% |
| NOV | 12,087 | | 526 | 4% | 11,561 | 94% | 734 | 6% |
| DEC | 12,156 | | 492 | 4% | 11,664 | 97% | 423 | 3% |
| 2020 JAN | 11,942 | | 589 | 5% | 11,353 | 93% | 803 | 7% |
| FEB | 11,641 | | 819 | 7% | 10,822 | 91% | 1,120 | 9% |
| MAR | 11,043 | | 310 | 3% | 10,733 | 92% | 908 | 8% |
| APR | 10,831 | | 618 | 6% | 10,213 | 92% | 830 | 8% |
| MAY | 11,035 | | 699 | 6% | 10,336 | 95% | 495 | 5% |
| JUN | 10,760 | | 539 | 5% | 10,221 | 93% | 814 | 7% |
| JUL | 11,098 | | 930 | 8% | 10,168 | 94% | 592 | 6% |
| AUG | 11,057 | | 435 | 4% | 10,622 | 96% | 476 | 4% |
| SEP | 10,731 | | 316 | 3% | 10,415 | 94% | 642 | 6% |



Health Home Dual Beneficiary Engagement Counts

| | 1 Engagement | | 2-6 Engagements | | 7-12 Engagements | | 13+ Engagements | |
|----------|--------------|----------------------|-----------------|----------------------|------------------|----------------------|-----------------|----------------------|
| | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ |
| JUL | 223 | 4% | 971 | 17% | 912 | 16% | 3,476 | 62% |
| AUG | 233 | 4% | 964 | 17% | 866 | 16% | 3,511 | 63% |
| SEP | 220 | 4% | 934 | 17% | 842 | 15% | 3,537 | 64% |
| OCT | 206 | 4% | 933 | 17% | 823 | 15% | 3,577 | 65% |
| NOV | 170 | 3% | 902 | 16% | 822 | 15% | 3,575 | 65% |
| DEC | 164 | 3% | 870 | 16% | 818 | 15% | 3,612 | 66% |
| 2020 JAN | 180 | 3% | 836 | 15% | 813 | 15% | 3,587 | 66% |
| FEB | 166 | 3% | 755 | 14% | 842 | 16% | 3,516 | 67% |
| MAR | 147 | 3% | 710 | 14% | 784 | 15% | 3,463 | 68% |
| APR | 154 | 3% | 677 | 13% | 768 | 15% | 3,465 | 68% |
| MAY | 138 | 3% | 691 | 14% | 753 | 15% | 3,498 | 69% |
| JUN | 141 | 3% | 662 | 13% | 713 | 14% | 3,466 | 70% |
| JUL | pending | - | pending | - | pending | - | pending | - |
| AUG | pending | - | pending | - | pending | - | pending | - |
| SEP | pending | - | pending | - | pending | - | pending | - |



¹Denominator is the current month's Health Home eligible/enrolled dual beneficiaries. ²Denominator is the previous month's Health Home eligible/enrolled dual beneficiaries.

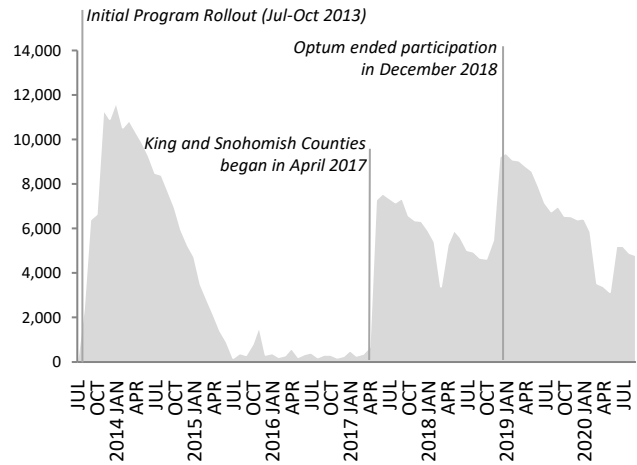
3. Identifying Target Population of Those Not Yet Enrolled

NOTES

- While a goal of the program is to increase enrollment and engagement, a particular subgroup of those not enrolled are the highest priority. This Target Population of Those Not Yet Enrolled excludes
 - Beneficiaries eligible for their first month (*a month enrollment lag is required to meet 30 day notification requirements*).
 - Beneficiaries with a PRISM Risk Score less than 1.5 (*an unofficial policy used to manage capacity*).
 - American Indian and Alaska Native Beneficiaries (*not passively enrolled per official policy*).
- Given the exclusions, the Target Population of Those Not Yet Enrolled has consistently been on a downward trend after each expansion noted in the plot below (initial program rollout, expansion to King/Snohomish Counties, end of Optum's participation in program).

Target Population of Those Not Yet Enrolled

| | Demonstration Eligible | | | Eligible, Not Yet Enrolled | | |
|----------|------------------------|--------|---------|----------------------------|--------|---------|
| | NUMBER | NUMBER | PERCENT | NUMBER | NUMBER | PERCENT |
| JUL | 31,542 | 7,156 | 23% | 11,979 | 7,156 | 60% |
| AUG | 31,439 | 6,761 | 22% | 11,409 | 6,761 | 59% |
| SEP | 31,084 | 7,013 | 23% | 11,588 | 7,013 | 61% |
| OCT | 30,915 | 6,572 | 21% | 11,263 | 6,572 | 58% |
| NOV | 30,668 | 6,545 | 21% | 11,042 | 6,545 | 59% |
| DEC | 30,527 | 6,414 | 21% | 10,873 | 6,414 | 59% |
| 2020 JAN | 30,829 | 6,450 | 21% | 10,967 | 6,450 | 59% |
| FEB | 29,839 | 5,860 | 20% | 10,283 | 5,860 | 57% |
| MAR | 29,208 | 3,530 | 12% | 9,999 | 3,530 | 35% |
| APR | 28,734 | 3,401 | 12% | 9,510 | 3,401 | 36% |
| MAY | 28,550 | 3,141 | 11% | 9,096 | 3,141 | 35% |
| JUN | 29,184 | 5,218 | 18% | 9,671 | 5,218 | 54% |
| JUL | 29,342 | 5,214 | 18% | 9,164 | 5,214 | 57% |
| AUG | 28,486 | 4,901 | 17% | 8,429 | 4,901 | 58% |
| SEP | 28,714 | 4,795 | 17% | 8,768 | 4,795 | 55% |



Target Population of Those Not Yet Enrolled

Target Population of Those Not Yet Enrolled, by Residential County

Total Count of Target Population of Those Not Yet Enrolled, September 2020



Top 10 Counties

| RANK | COUNTY | Count |
|------|--------------|-------|
| 1 | KING | 1,524 |
| 2 | THURSTON | 580 |
| 3 | KITSAP | 410 |
| 4 | GRAYS HARBOR | 407 |
| 5 | MASON | 258 |
| 6 | CLALLAM | 250 |
| 7 | LEWIS | 226 |
| 8 | PIERCE | 193 |
| 9 | SNOHOMISH | 143 |
| 10 | PACIFIC | 141 |

Target Population of Those Not Yet Enrolled as Percent of Demonstration Eligible Beneficiaries, September 2020



Top 10 Counties

| RANK | COUNTY | % OF ELIGIBLE |
|------|--------------|---------------|
| 1 | THURSTON | 63.0% |
| 2 | MASON | 62.3% |
| 3 | LEWIS | 60.1% |
| 4 | PACIFIC | 51.6% |
| 5 | KITSAP | 47.5% |
| 6 | GRAYS HARBOR | 39.0% |
| 7 | CLALLAM | 37.9% |
| 8 | JEFFERSON | 34.2% |
| 9 | GARFIELD | 30.0% |
| 10 | KING | 25.0% |

4. Geographic Detail

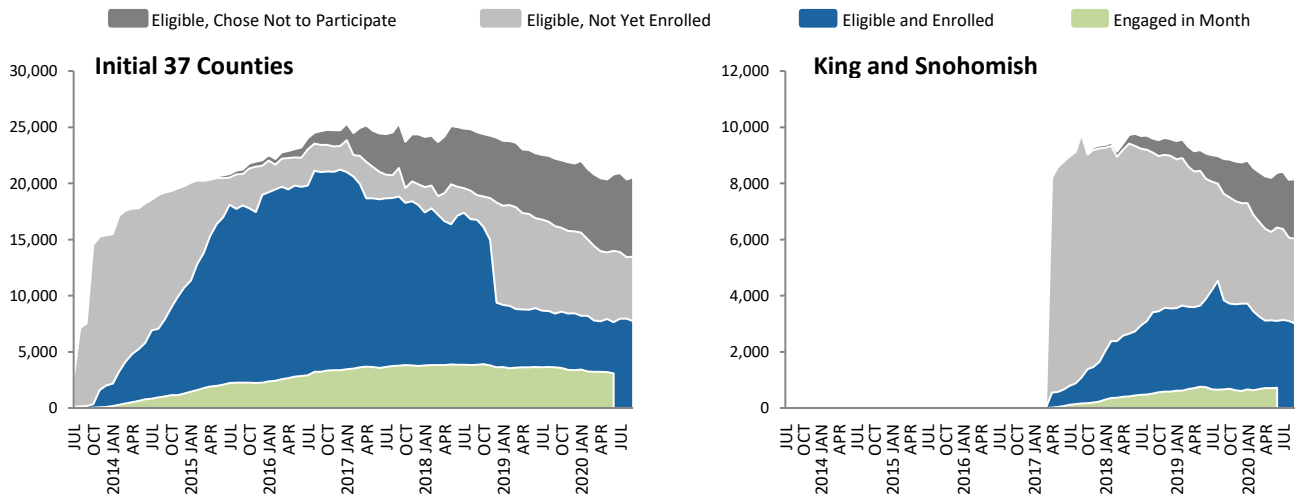
NOTES

- Health Homes was implemented in 14 counties in July 2013, 23 additional counties were added in October 2013.
- Health Homes was implemented in the remaining 2 counties (King and Snohomish) in April 2017.
- Due to 30 day notification requirements, newly eligible dual beneficiaries wait one month before passive enrollment.

Eligibility, Enrollment, and Engagement Detail (Initial 37 Counties vs. King and Snohomish Counties)

| | Initial 37 Counties | | | | | | | | King and Snohomish Counties | | | | | | | |
|------|---------------------|--------|--------------------------|--------|----------------------|--------|----------------------|--------|-----------------------------|--------|--------------------------|--------|----------------------|---------|----------------------|--|
| | Eligible | | Chose Not to Participate | | Enrolled | | Engaged | | Eligible | | Chose Not to Participate | | Enrolled | | Engaged | |
| | NUMBER | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ² | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ¹ | NUMBER | PERCENT ² | |
| | JUL | 22,535 | 5,743 | 25% | 8,666 | 38% | 3,615 | 42% | 9,002 | 940 | 10% | 4,210 | 47% | 664 | 16% | |
| | AUG | 22,463 | 5,882 | 26% | 8,639 | 38% | 3,654 | 42% | 8,972 | 979 | 11% | 4,527 | 50% | 646 | 14% | |
| | SEP | 22,210 | 6,012 | 27% | 8,412 | 38% | 3,628 | 43% | 8,870 | 1,241 | 14% | 3,828 | 43% | 659 | 17% | |
| | OCT | 22,065 | 6,017 | 27% | 8,574 | 39% | 3,573 | 42% | 8,845 | 1,339 | 15% | 3,718 | 42% | 684 | 18% | |
| | NOV | 21,881 | 6,122 | 28% | 8,395 | 38% | 3,405 | 41% | 8,783 | 1,416 | 16% | 3,689 | 42% | 624 | 17% | |
| | DEC | 21,785 | 6,055 | 28% | 8,438 | 39% | 3,373 | 40% | 8,738 | 1,441 | 16% | 3,716 | 43% | 601 | 16% | |
| 2020 | JAN | 22,012 | 6,406 | 29% | 8,221 | 37% | 3,407 | 41% | 8,813 | 1,512 | 17% | 3,719 | 42% | 659 | 18% | |
| | FEB | 21,285 | 6,254 | 29% | 8,199 | 39% | 3,264 | 40% | 8,549 | 1,658 | 19% | 3,440 | 40% | 632 | 18% | |
| | MAR | 20,810 | 6,398 | 31% | 7,795 | 37% | 3,227 | 41% | 8,393 | 1,765 | 21% | 3,246 | 39% | 672 | 21% | |
| | APR | 20,470 | 6,514 | 32% | 7,717 | 38% | 3,220 | 42% | 8,258 | 1,876 | 23% | 3,112 | 38% | 704 | 23% | |
| | MAY | 20,352 | 6,496 | 32% | 7,912 | 39% | 3,180 | 40% | 8,192 | 1,920 | 23% | 3,120 | 38% | 704 | 23% | |
| | JUN | 20,794 | 6,795 | 33% | 7,651 | 37% | 3,069 | 40% | 8,384 | 1,955 | 23% | 3,106 | 37% | 724 | 23% | |
| | JUL | 20,928 | 7,040 | 34% | 7,957 | 38% | pending | - | 8,408 | 2,037 | 24% | 3,138 | 37% | pending | - | |
| | AUG | 20,351 | 6,931 | 34% | 7,955 | 39% | pending | - | 8,130 | 2,067 | 25% | 3,099 | 38% | pending | - | |
| | SEP | 20,561 | 7,091 | 34% | 7,718 | 38% | pending | - | 8,148 | 2,122 | 26% | 3,010 | 37% | pending | - | |

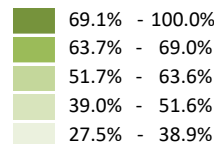
¹Denominator is Health Home eligible dual beneficiaries. ²Denominator is the Health Home enrolled dual beneficiaries.



Enrolled Health Home Dual Beneficiaries Ever Engaged by Residential County



Percent of Enrolled Dual Beneficiaries who were Ever Engaged June 2020



Top 10 Counties

| RANK | COUNTY | % EVER ENGAGED |
|------|-----------|----------------|
| 1 | WAHKIAKUM | 87.5% |
| 2 | COWLITZ | 83.8% |
| 3 | COLUMBIA | 83.3% |
| 4 | KITTITAS | 81.0% |
| 5 | CLARK | 73.9% |
| 6 | PACIFIC | 73.7% |
| 7 | SKAGIT | 69.6% |
| 8 | WHATCOM | 69.2% |
| 9 | FRANKLIN | 68.8% |
| 10 | CHELAN | 67.5% |

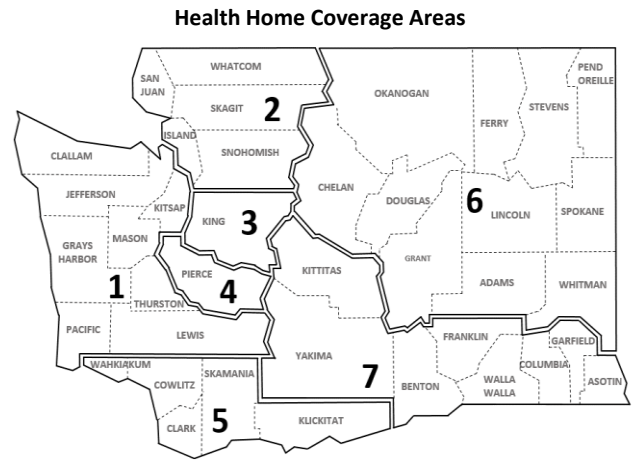
5. Lead Entity Detail

NOTES

- Health Home dual beneficiaries are enrolled with one of the twelve Health Home Lead Entities.
- There are three types of Health Home Lead Entities.
 - Area Agencies on Aging (AAA)
 - Community-Based Organizations (CBO)
 - Managed Care Organizations (MCO)
- Optum stopped participation in the Health Home program in December 2018.

Health Home Lead Entity Coverage Area Map for Dual Beneficiaries

| Type | Lead Entity | HH Start Date | HH Coverage Area | | | | | | | |
|------|-------------------------------------|---------------|------------------|---|---|---|---|---|---|--|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| AAA | Northwest Regional Council AAA | OCT 2013 | | | | | | | | |
| | Olympic AAA | FEB 2019 | * | | | | | | | |
| | Pierce County AAA | DEC 2018 | | | | | | | | |
| | Southeast WA Aging and LTC AAA | JUL 2013 | | | | | | | | |
| | Southwest AAA | DEC 2018 | | | | | | | | |
| CBO | Community Choice | OCT 2013 | | | | | | | | |
| | Full Life Care | APR 2017 | | | | | | | | |
| | Elevate Health | Aug 2019 | | | | | | | | |
| MCO | Community Health Plan of Washington | JUL 2013 | | | | | | | | |
| | Coordinated Care | JAN 2018 | | | | | | | | |
| | Molina | JUL 2016 | | | | | | | | |
| | United Health Care Community Plan | JUL 2013 | | | | | | | | |

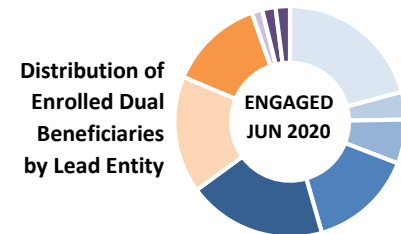
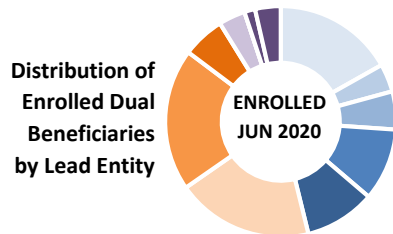


*partial coverage area

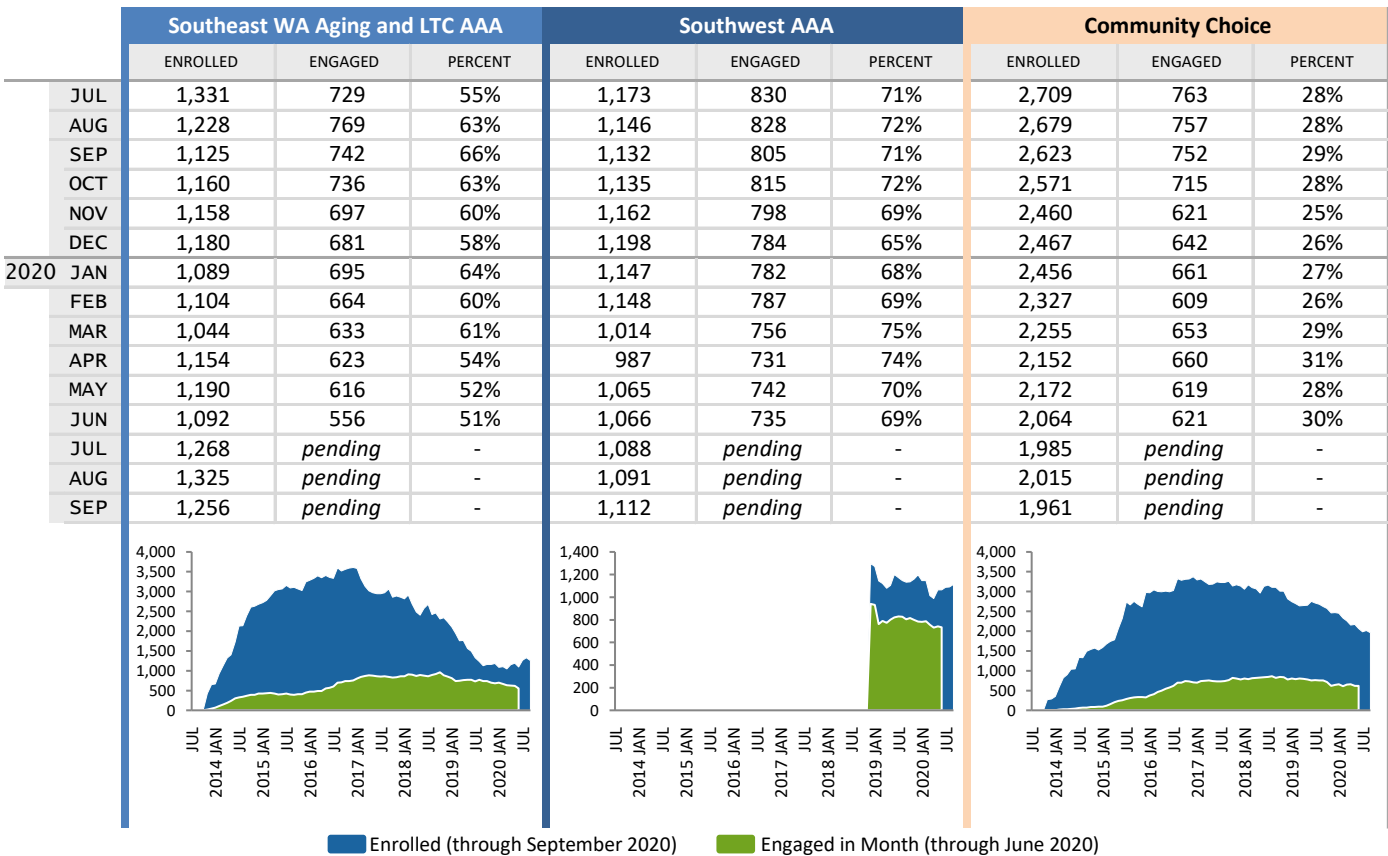
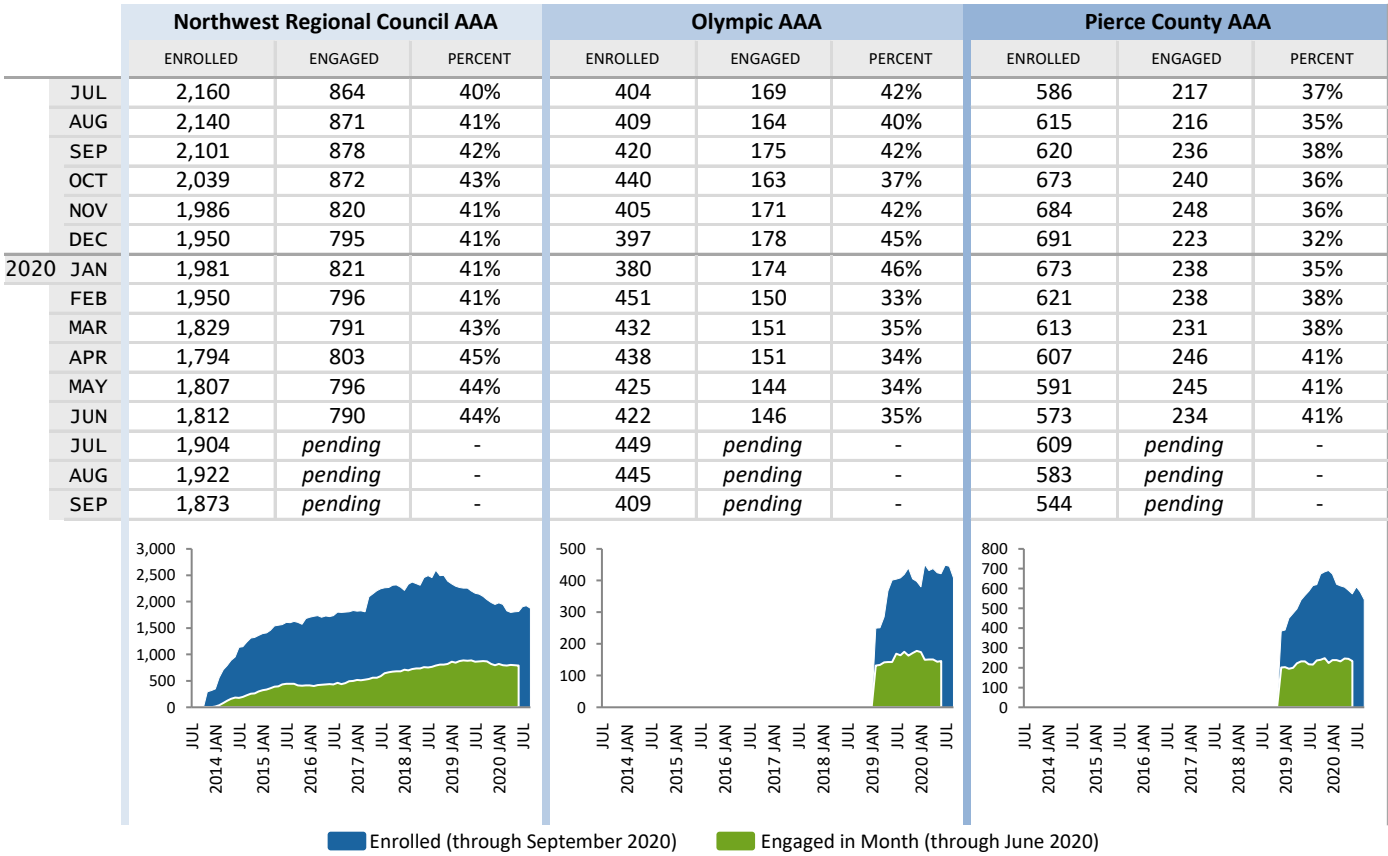
Health Home Dual Beneficiary Enrollment and Engagement Summary by Lead Entity

| Type | Lead Entity | Enrollment Summary June 2020 | | | Engagement Summary June 2020 | | | |
|------|-------------------------------------|---------------------------------|-----------------------------|------|---------------------------------|--------------------------------|----------------------------|------|
| | | ENROLLED | % OF TOTAL ENROLLED BY LEAD | RANK | ENGAGED | % OF ENROLLED ENGAGED IN MONTH | % OF TOTAL ENGAGED BY LEAD | RANK |
| AAA | Northwest Regional Council AAA | 1,812 | 17% | 3 | 790 | 44% | 21% | 1 |
| | Olympic AAA | 422 | 4% | 8 | 146 | 35% | 4% | 7 |
| | Pierce County AAA | 573 | 5% | 7 | 234 | 41% | 6% | 6 |
| | Southeast WA Aging and LTC AAA | 1,092 | 10% | 4 | 556 | 51% | 15% | 4 |
| | Southwest AAA | 1,066 | 10% | 5 | 735 | 69% | 19% | 2 |
| CBO | Community Choice | 2,064 | 19% | 2 | 621 | 30% | 16% | 3 |
| | Full Life Care | 2,143 | 20% | 1 | 504 | 24% | 13% | 5 |
| | Elevate Health | 638 | 6% | 6 | 0 | 0% | 0% | - |
| MCO | Community Health Plan of Washington | 401 | 4% | 9 | 56 | 14% | 1% | 10 |
| | Coordinated Care ¹ | <11 | - | 11 | 0 | - | 0% | - |
| | Molina | 162 | 2% | 11 | 71 | 44% | 2% | 9 |
| | United Health Care Community Plan | 385 | 4% | 10 | 76 | 20% | 2% | 8 |

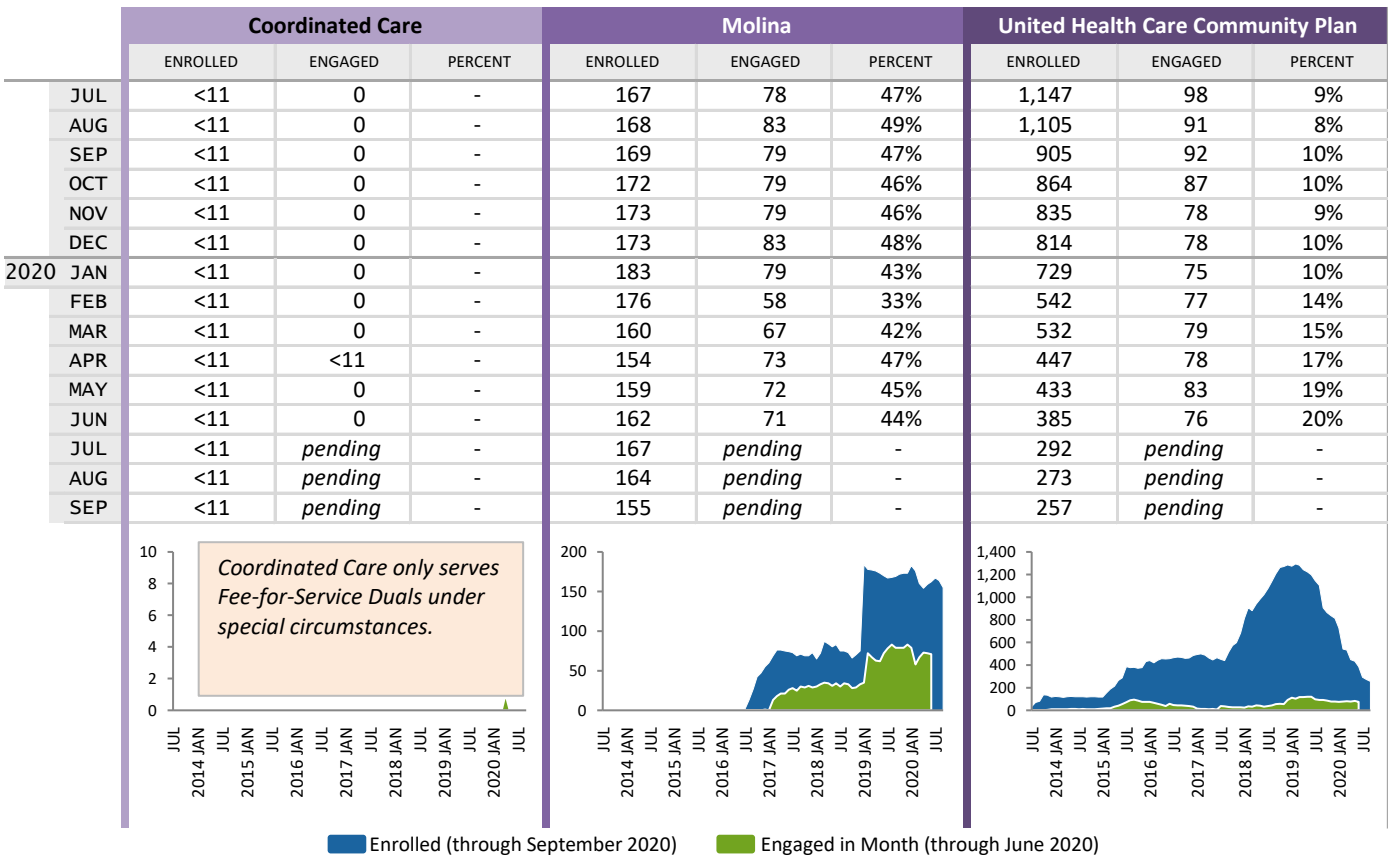
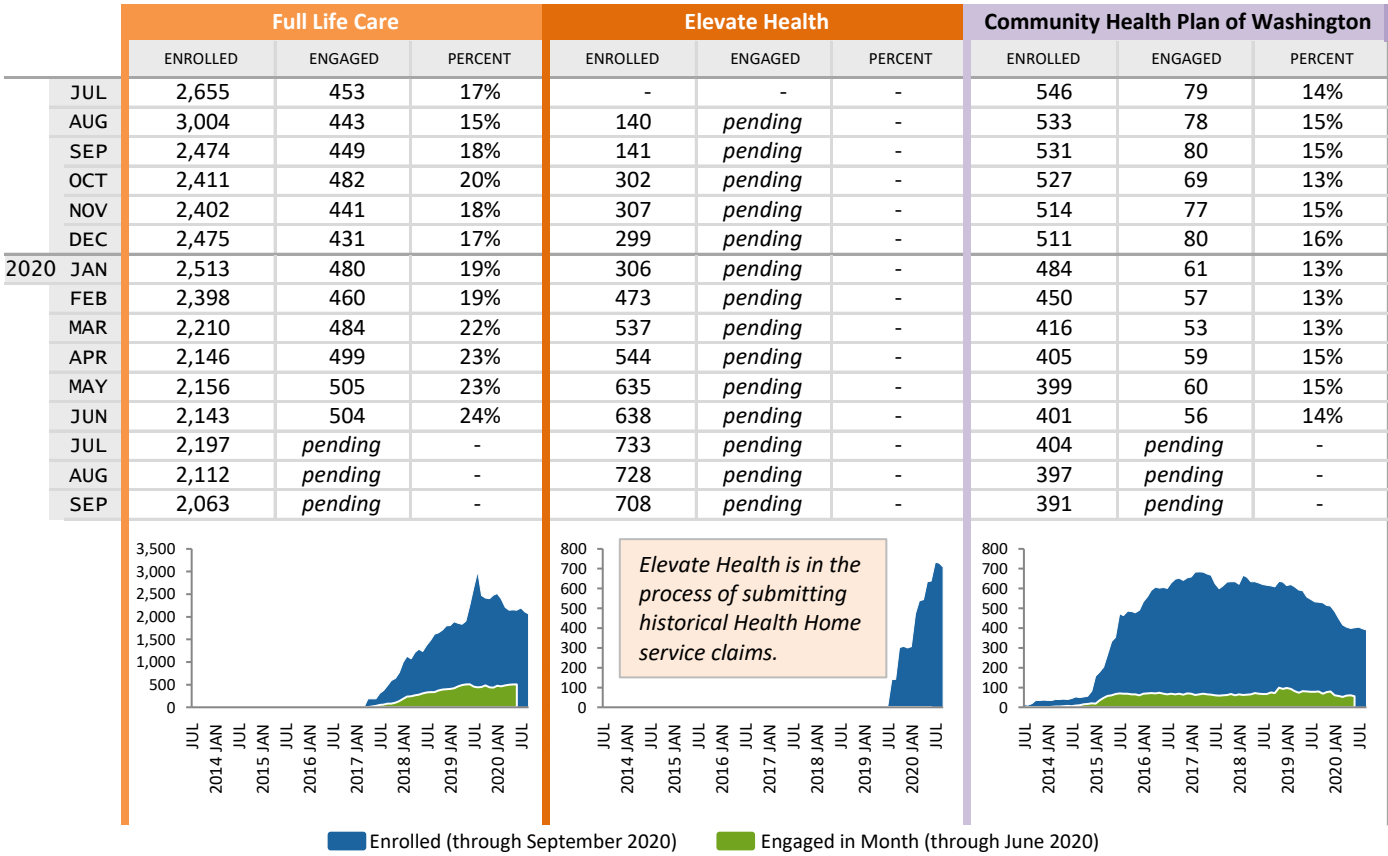
¹Coordinated Care only serves Fee-for-Service Duals under special circumstances.



Health Home Dual Beneficiary Enrollment and Engagement by Lead Entity



Health Home Dual Beneficiary Enrollment and Engagement by Lead Entity (cont.)



6. Government Accountability Office (GAO) Measure Tracking and Results

- NOTES**
- The tracking grid below reflects the status of the GAO Measure Collection Lists returned by each Health Home Lead.
 - The Measure Results reflect GAO Measure 4 as calculated on the Final GAO Results Lists distributed to the Health Home Leads.
 - For Demonstration Year 5 (the period of November 2017 through October 2018), the state is deemed to pass the quality performance goal if all Health Home Leads report their GAO measure. For Demonstration Year 6, the benchmark for GAO Measures is 63% for Assessment Completed, and 44% for Care Plan Completed.

Health Home Lead Entity GAO Measure Collection List Tracking

| Type | Lead Entity | Demonstration Year 6 2019 | | | | | Demonstration Year 7 2020 | | | | | | | |
|------|-------------------------------------|------------------------------|-----|-----|-----|-----|------------------------------|-----|-----|-----|-----|-----|-----|-----|
| | | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN |
| AAA | Northwest Regional Council AAA | | | | | | | | | | | | | |
| | Olympic AAA | | | | | | | | | | | | | |
| | Pierce County AAA | | | | | | | | | | | | | |
| | Southeast WA Aging and LTC AAA | | | | | | | | | | | | | |
| | Southwest AAA | | | | | | | | | | | | | |
| CBO | Community Choice | | | | | | | | | | | | | |
| | Full Life Care | | | | | | | | | | | | | |
| | Pierce County ACH | | | | | | | | | | | | | |
| MCO | Community Health Plan of Washington | | | | | | | | | | | | | |
| | Coordinated Care | | | | | | | | | | | | | |
| | Molina | | | | | | | | | | | | | |
| | United Health Care Community Plan | | | | | | | | | | | | | |

N/A - No Collection List sent to HH Lead Entity (no new enrollees/not yet created)
 Collection List Completed and Returned
 Collection List Not Yet Returned

Health Home Lead Entity GAO Measure Results (Demonstration Year 5, and *Partial Year 6 Results)

GAO Measure 4: The percentage of Demonstration eligible Medicare-Medicaid enrollees who are willing to participate and could be reached, or who had fewer than 3 documented outreach attempts within 90 days, who had a health action plan completed within 90 days of initial enrollment.

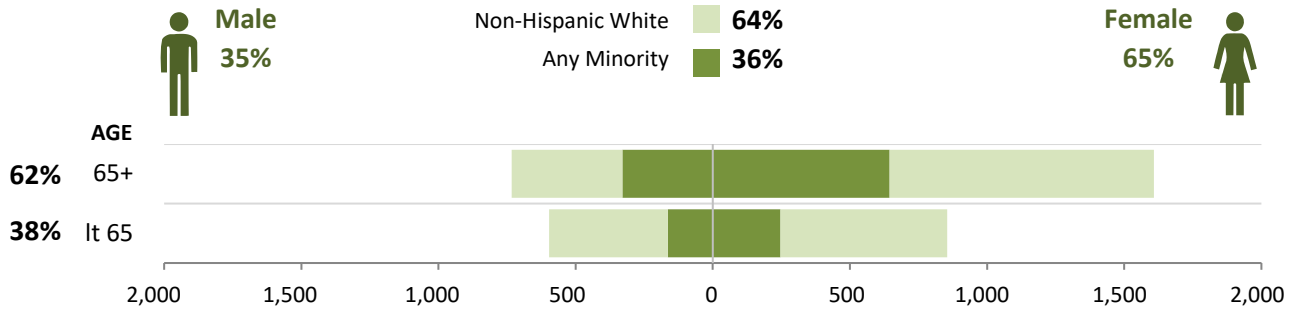
| Type | Lead Entity | Demonstration Year 5 (Nov 2017 - Oct 2018) | | | Demonstration Year 6 (Nov 2018 - Jul 2019*) | | |
|--------------|---------------------------------------|--|--------------|--------------|---|--------------|--------------|
| | | NUMERATOR | DENOMINATOR | RATE | NUMERATOR | DENOMINATOR | RATE |
| AAA | Northwest Regional Council AAA | 126 | 622 | 20.3% | 113 | 289 | 39.1% |
| | Olympic AAA | - | - | - | <11 | 33 | - |
| | Pierce County AAA | - | - | - | 19 | 67 | 28.4% |
| | Southeast WA Aging and LTC AAA | 180 | 525 | 34.3% | 58 | 94 | 61.7% |
| | Southwest AAA | - | - | - | 76 | 99 | 76.8% |
| CBO | Community Choice | 141 | 543 | 26.0% | 45 | 297 | 15.2% |
| | Full Life Care | 227 | 1,047 | 21.7% | 149 | 363 | 41.0% |
| | Elevate Health | - | - | - | - | - | - |
| | Optum (ended participation in Dec 18) | 119 | 1,658 | 7.2% | - | - | - |
| MCO | Community Health Plan of Washington | <11 | 69 | - | 0 | <11 | - |
| | Coordinated Care | 0 | 0 | - | 0 | 0 | - |
| | Molina | 0 | <11 | - | 0 | 0 | - |
| | United Health Care Community Plan | 33 | 489 | 6.7% | <11 | 100 | - |
| TOTAL | | 832 | 4,957 | 16.8% | 474 | 1,346 | 35.2% |

* The GAO Measure Results Period will expand as the Final GAO Results Lists are distributed to the Leads

7. Demographic Details and Serious Mental Illness

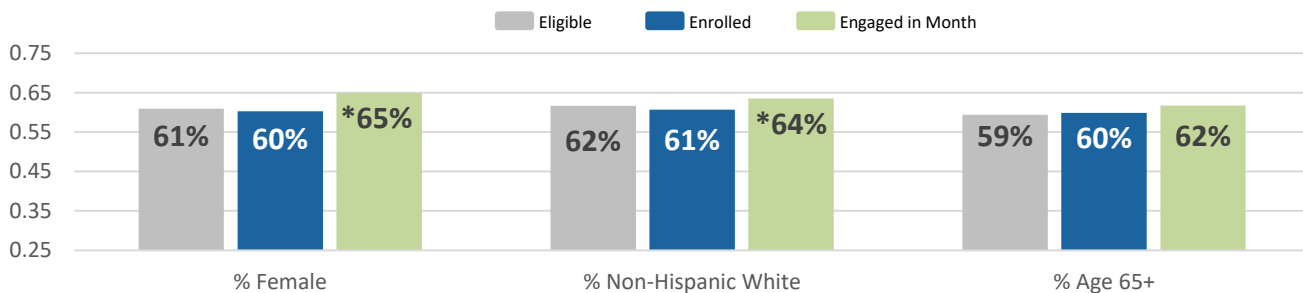
- NOTES**
- A Minority Engagement Workgroup made up of staff from the Health Care Authority, the Department of Social and Health Services, and the Health Home Leads has been created to address engaging clients from underserved communities (including those with Serious Mental Illness).
 - Demographic information is obtained from the ProviderOne (Medicaid) database.
 - Any Minority includes any category besides Non-Hispanic White (including Hispanic, Other, and Unknown/Not Provided).

Demographic Breakdown of Engaged Dual Beneficiaries, June 2020



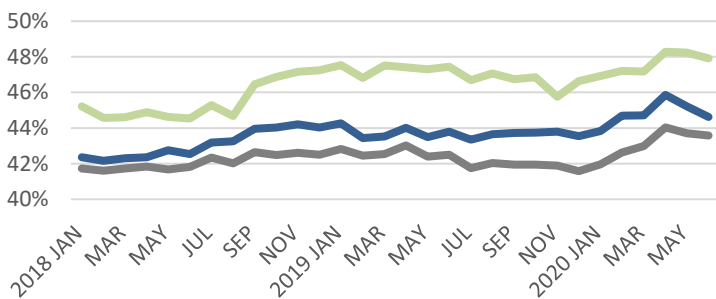
The percentage of Female, and of Non-Hispanic White Dual Beneficiaries are higher* in the Engaged population than in the Eligible, or Enrolled populations in June 2020 (*p<0.001).

The percentage of Age 65+ is more consistent between these populations, and none of the percentages have fluctuated much over time.



The percentage of Dual Beneficiaries with an indication of Serious Mental Illness in the last 15 months are higher* in the Engaged population than in the Eligible, or Enrolled populations in June 2020 (*p<0.001).

This trend has held since January 2018 when Serious Mental Illness Indication was first tracked.



- NOTES**
- Serious Mental Illness is indicated by a diagnosis in the CDPS psychiatric risk groups characterized by the following representative conditions: schizophrenia and related psychotic disorders; mania and bipolar disorders; major recurrent depression.
 - The indication of SMI is based on Medicaid and Medicare data, and has been extracted from PRISM beginning in 2018.

Eden Hospice at Snohomish County

Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 36

CURRENT EDEN VENDOR LIST

Eden Hospice Vendor Listing

1. Medical Supplies – Medline
2. Quality and Outcomes Vendor – Strategic Healthcare Partners (SHP)
3. CAHPS – Strategic Healthcare Partners (SHP)
4. Electronic Health Record – Homecare Homebase
5. Referral Management – Allscripts, NaviHealth
6. Clearing House – Zirmed/E-Solutions
7. Telephone/Internet Services – Verizon Wireless and Comcast
8. Shredding – Iron Mountain
9. Answering Service (after-hours) – TeleMed
10. Virtual Care Technology/Telehealth – Healthcare Recovery Services (HRS)
11. Learning Management System – Relias
12. Online Patient Education – Krames
13. Shipping/Postage – FedEx
14. HR/Payroll System – Kronos
15. Hazardous Waste Disposal – Stericycle
16. Interpretation – Language Line Services
17. Recruiting – Indeed, Social Media Platforms (Facebook, LinkedIn, etc.)
18. Applicant Tracking System – Newton/Paycor
19. Background Checks – Assure Hire, WSP
20. OIG Searches – Certiphino Screening
21. Office Supplies/Promotional Products – Office Depot, Millennium, DocuMart
22. Pharmacy – Enclara Pharmacia

Eden Hospice at Snohomish County

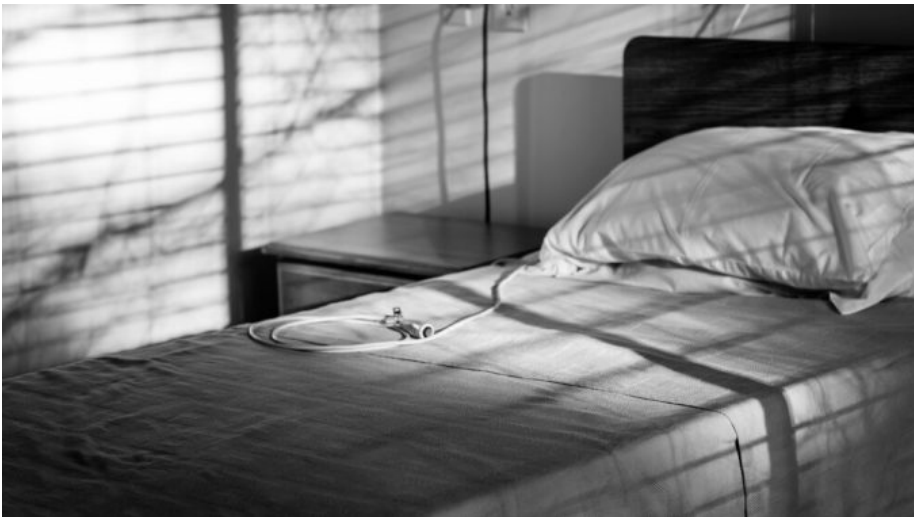
Application Operate a Medicare Certified and Medicaid Eligible Hospice Agency

APPENDIX 37

WHY AFRICAN AMERICANS ARE LESS LIKELY TO CHOOSE HOSPICE

5 Reasons Why African Americans Are Less Likely To Choose Hospice

Home » Hospice Blog » 5 Reasons Why African...



5 Reasons Why African Americans Are Less Likely To Choose Hospice

🕒 May 12, 2017 👤 Christophe Adrien 📁 end of life care

Americans are bad at death. While it is undeniable that part of this stems from our [death denying culture](#), there are other forces at work that make end of life care more complicated than it needs to be. A recent body of research on end of life care has brought to light an issue that needs to be more readily discussed. According to research, African Americans tend to have less access to palliative care and tend not to

choose hospice in end of life situations. In fact, they are the most likely ethnic group to choose life support over palliative care and hospice, and the most likely to die in the hospital. Some of the causes for this trend are cultural, but others are institutional. Thus this question: why are African Americans less likely to use hospice?

African Americans Have A Historical Distrust Of The Healthcare System

America's history with race has been fraught with challenges and upheaval. Many issues remain unresolved. This has led to a cultural environment in which African Americans tend to have a general distrust of the healthcare system because of past disrespectful and inadequate treatment by the (predominantly white) medical community. This history makes for a fraught relationship between African American communities and the medical communities that serve them, hospice included. Coupled with the nationwide trend to stigmatize hospice as a "place to go die", it is clear that African Americans have a definite incentive not to choose hospice.

Lower Economic Status And Resources

The unfortunate truth is that America's race relations have left many African American communities at an economic disadvantage. In regards to healthcare, this has a definite effect on the breadth and scope of care available to them. Poorer communities tend to have less access to healthcare, including palliative care and hospice, and this trend disproportionately affects African American Communities. Particularly in regards to access to palliative care, studies suggest that socioeconomic disparities are a top reason for why African Americans tend to have less access to this type of care than other groups.

A Greater Willingness To Spend Everything To Stay Alive

While the cultural differences at the root of this trend are not well researched or documented, [a recent study found](#) that African Americans are more willing to spend the resources they have to extend their lives. In fact, 8 out of 10 African Americans reported a willingness to spend everything they had to stay alive, compared with only half of whites.

According to the study, this trend may be directly attributable to cultural differences, as well as socioeconomic disparities.

Lower Care Satisfaction Among Family Members

Studies have shown that hospice and palliative care [help improve satisfaction in end of life care](#). For African Americans, this is not the case. Family members of African American families consistently reported [lower satisfaction](#) in end of life care. Most widely reported was absent or problematic communication with physicians, and a higher tendency for patients to not have written advance care planning documents. And herein lies the problem: choosing hospice care requires clear communication between patients and their families and physicians. Additionally, people talk. Lower satisfaction in care means palliative care and hospice are earning a bad reputation in African American communities, which means fewer will choose such services in the future.

End Of Life Care Is In Disarray

To make matters worse, end of life care services are inconsistently offered across the country. Quality and availability of such services varies state to state, county to county, and even city to city. [A national survey](#) recently revealed that across the country, end of life care programs did not meet the national staffing recommendations. This

means that such services are generally light on availability. This problem adds to and compounds the issue of racial disparity in end of life care.

An Untenable Situation

It is clear from the breadth of studies on why fewer African Americans choose hospice that our healthcare system needs to rethink its relationship with minority populations. Particularly in regards to end of life care, the medical community needs to improve trust. They need better communication and to work to educate and inform the general public about the benefits of services such as palliative care and hospice. The current situation is untenable. Part of the philosophy of hospice is to provide equal and compassionate care to all who are in need. In the current environment, and particularly in regards to African Americans, our medical community is failing to uphold hospice's principles.

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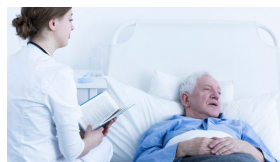
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