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Financial Alignment Initiative Annual Report: Washington Health Homes MFFS Demonstration

First Annual Report

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FINANCIAL ALIGNMENT INITIATIVE ANNUAL REPORT: WASHINGTON HEALTH HOMES MFFS DEMONSTRATION

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Introduction

The Centers for Medicare & Medicaid Services (CMS) has created the Financial Alignment Initiative to test integrated care models for Medicare-Medicaid enrollees. The goal of these demonstrations is to develop person-centered care delivery models that integrate the full range of medical, behavioral health, and long-term services and supports (LTSS) for Medicare-Medicaid enrollees. CMS is testing two demonstration models, capitated and managed fee-for-service (MFFS), to better align the financing of these two programs and integrate services for their Medicare-Medicaid enrollees. Under MFFS model demonstrations such as the Washington Health Homes MFFS demonstration, a State and CMS enter into an agreement by which the State would be eligible to benefit from Medicare savings resulting from initiatives designed to improve quality and reduce costs within fee-for-service Medicare and Medicaid. The State has decided to extend the demonstration for 2 additional years through December 31, 2018.

CMS contracted with RTI International to monitor the implementation of all demonstrations under the Financial Alignment Initiative and to evaluate their impact over time on beneficiary experience, quality, utilization, and cost. This first Annual Report analyzes implementation of the Washington Health Homes MFFS demonstration from its initiation on July 1, 2013, through the conclusion of the first demonstration year on December 31, 2014. In order to capture relevant qualitative information obtained at the conclusion of the demonstration year or immediately afterward, this report includes updated qualitative information through June 30, 2015.

Specifically, this report addresses the demonstration's approach to integrating the Medicare and Medicaid programs; providing care coordination to enrollees; enrolling beneficiaries into the demonstration; and engaging stakeholders in the oversight of the demonstration. Then, after summarizing findings regarding Medicare savings, results on service utilization, quality of care, and costs through December 2014 are presented. Finally we present results of targeted analyses related to enrollees, health home service users, LTSS users, users of behavioral health services and special populations.

Model Description

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, LTSS, and behavioral health delivery systems, health home care coordinators are charged with conducting assessments, engaging enrollees to develop Health Action Plans (HAPs), and increase self-management skills to achieve optimal physical and cognitive health.

The State's existing delivery systems for primary, acute, behavioral, and LTSS are 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 of all enrollees were in 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 passive enrollment into the demonstration and began planning for termination.

In late October 2015, new information became available about projected savings for the demonstration.[1] 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. Passive enrollment was reinstated effective December 2015. Budget deliberations over the continuation of health home services beyond June 2016 were ongoing at the time of this report. [2]

Integration of Medicare and Medicaid

Health home care coordinators complement the roles of case managers embedded in specific delivery systems, such as those for LTSS and behavioral health. State officials note that

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[1] See Appendix A at https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/WAEvalResults.pdf

[2] Budget deliberations over the continuation of health home services beyond June 2016 were approved by the legislature and signed by the governor during the Spring of 2016, along with approval to add King and Snohomish counties to the program. This decision is not reflected or discussed in detail in this Annual Report, but it will be covered in the second Annual Report.

case managers for Medicaid home and community-based services (HCBS) focus on determining eligibility, authorizing program services, and overseeing service provision. They do not have the time or ability to intensively address the full range of an individual's needs, nor do they focus on health risks, medical conditions, or health outcomes. Behavioral health case managers perform similar functions and have similar limitations. To facilitate integration across delivery systems, health homes are required to execute Memoranda of Understanding with the organizations that authorize Medicaid services, including LTSS, mental health services, and chemical dependency treatment.

For an individual enrollee, integration of Medicare and Medicaid services is initiated through the development of a HAP. Washington's web-based clinical support tool, Predictive Risk Intelligence SysteM (PRISM), integrates individual-level information from payment and assessment data systems covering primary, acute, LTSS, behavioral health, and social services. In working with an enrollee to develop a HAP, care coordinators access detailed information through PRISM about an enrollee's utilization of Medicare- and Medicaid-financed services, including hospitalizations, emergency department (ED) visits, and specific medication usage. The health home care coordinator discusses this information with the enrollee, who prioritizes health action goals and identifies personal actions to take to achieve the goals, and needed interventions and supports.

Further integration of the delivery of Medicare- and Medicaid-funded services occurs through the health home role in supporting transitions of enrollees from inpatient settings to home or a nursing facility; helping enrollees to access a range of Medicare and Medicaid services; and accompanying enrollees to primary care or specialty care physician visits.

Successes, Challenges and Preliminary Findings

State officials report that their adoption of a new form of integration that bridges existing delivery systems and focuses on previously neglected health risks and outcomes has been well received by providers and care coordinators because it fills a recognized need. Had they instead built a delivery system that reorganized the roles of existing care coordinators, State officials noted, the reaction might have been quite different.

The State selected a diverse group of organizations to be health homes, including area agencies on aging, a behavioral health organization, a provider consortium, and managed care organizations.

Some State officials indicated that it has been challenging at times to use health homes as a platform for the care coordination provided through the demonstration. They cited the need to reconcile various policies, such as eligibility criteria and enrollment policies, grounded either in health homes or the demonstration. Particularly problematic was the length of time it took for approval of its submitted health home State Plan Amendments, which affected initial enrollment processes and other demonstration start-up activities. Yet, they noted that because State funds were unavailable to support intensive care coordination services, the 90% enhanced Federal financing available for the first eight quarters of Medicaid health home services made the development of their delivery system possible.

Washington's purposeful targeting of a high-cost, high-risk population as participants in health homes that integrate care for that population and the focus on patient engagement are key demonstration features. Previous state research has found that these factors correlate with improved beneficiary outcomes and lower costs.

To comprise their care coordination organization (CCO) networks, health homes contracted with a wide range of community organizations that collectively have experience working with multiple populations with chronic conditions.

Eligibility and Enrollment

Participation in the demonstration is open to Medicare-Medicaid enrollees of all ages who live in any county except King and Snohomish counties; do not have other comprehensive health insurance; are not enrolled in Medicare Advantage, Program of All-Inclusive Care for the Elderly (PACE), or receiving hospice services; are not enrolled in other Medicare shared savings programs; and meet the State's health home eligibility requirement of having one chronic condition and being at risk of developing another.

Washington identifies individuals who are "at risk of developing another chronic condition" through use of PRISM, which generates risk scores using Medicare and Medicaid claims data. This tool was originally developed for use in the State's Medicaid chronic care management program. To make PRISM an effective tool for predicting costs for Medicare-Medicaid enrollees, the State has incorporated Medicare Parts A, B, and D claims. This addition was made possible when CMS provided States with Medicare data in 2011.

A minimum PRISM score of 1.5 is required for an enrollee to be considered "at risk." Individuals with this score are predicted to have medical expenditures over the next 12 months that are 50 percent greater than average for the base reference group, which is the Washington Supplemental Security Income (SSI) disability population. This criteria targets high-risk, high cost beneficiaries for enrollment into the demonstration.

Medicare-Medicaid beneficiaries who are eligible for the demonstration are auto-enrolled in a health home by HCA. Enrollment is voluntary; beneficiaries may opt out or select a different health home prior to enrollment and may disenroll at any time after enrollment, effective the first day of the following month. Enrollment in a health home enrolls a Medicare-Medicaid beneficiary in the Washington MFFS Demonstration. As of June 30, 2015, there were 16,772 beneficiaries enrolled in the demonstration, out of a total of 20,541 eligible beneficiaries.

Beneficiaries are enrolled in a specific health home in their geographic area based on several criteria; the most important is whether a health home has the capacity to provide outreach, screenings, and beneficiary engagement for new enrollees. State officials assess a health home's capacity based on (1) performance: whether it is submitting timely encounters and enrollee HAPs; and (2) network capacity: the number of contracts with care coordination organizations and the number of their qualified care coordinators. If the State determines that a health home does not have sufficient capacity in a given month, the beneficiary is enrolled in a subsequent month. Eligible beneficiaries with the highest PRISM scores in any given month were selected for enrollment over those with lower scores. Thus beneficiaries initially enrolled into the demonstration had more complex needs than subsequent enrollees.

Successes, Challenges and Preliminary Findings

The use of PRISM facilitated the State's ability to target demonstration enrollment to high-cost, high-risk beneficiaries.

Multiple technical issues arose during the first quarter that prevented enrollment and diverted State staff from activities to support demonstration implementation. Incorrect contact information for health home enrollees made it difficult for health homes to locate them. As a result, health home staff had to focus on outreach instead of enrollee engagement.

Once initial technical systems issues were resolved, the demonstration enrollment process proceeded without problems and was straightforward for both enrollees and the State. Unlike enrollment systems in capitated demonstrations under the Financial Alignment Initiative, integration with Medicare's enrollment system was not required because beneficiaries were enrolled in a Medicaid Health Home without enrollment in a new Medicare benefit. Thus Medicare involvement was not required.

Determining a health home's capacity to serve new enrollees enables the demonstration to align enrollment with the growth of health home care coordination resources.

Care Coordination

Washington's health home care coordinators complement the roles of existing case managers and serve as a bridge connecting individual service delivery systems. Health home care coordinators are employed by care coordination organizations (CCOs), under contract with a health home, or by the health home itself. They conduct outreach to enrollees, engaging them in their homes, assessing their needs, and developing person-centered HAPs. Health home care coordinators identify unmet needs, arrange services, coordinate across delivery systems, and assist with transitions and referrals.

Washington's care coordination system is unique because of its focus on engaging enrollees to set health action goals and increase self-management skills to achieve optimal physical and cognitive functioning. The State's prior experience with a Medicaid coordinated care program as well as research on patient engagement has shaped its approach to care coordination provided through the demonstration. State officials believe this approach improves the health status of enrollees and reduces use of high cost health services, such as repeated hospital and ED admissions.

During the RTI evaluation team's site visits, State officials consistently noted that increased engagement of enrollees in managing their health risks and achieving self-identified outcomes would be among the most important results of the demonstration. In multiple ways, the State has established policies to reinforce that goal. It developed requirements for delivering health home services that extensively focus on roles that health homes must perform to engage enrollees in improving their own heath. Health homes cannot provide care coordination to an enrollee until an individual HAP is finalized. Also, the State continues to conduct training sessions for health homes on motivational interviewing so they can improve their skills to promote self-action by enrollees.

The biggest challenge facing the demonstration since its inception has been building a cadre of care coordinators sufficient to enroll all eligible individuals into the demonstration and work with them to develop HAPs. Some one-time circumstances limited the ability of health homes and CCOs to establish adequate care coordination capacity. For example, State enrollment systems were faced with many challenges during the first 3 months of the demonstration, including a broad array of computer programming and coding problems. Without demonstration enrollees, health homes and CCOs had no other source to pay care coordinators and were therefore reluctant to hire new staff.

It was challenging for care coordinators to locate enrollees, because many enrollee addresses on file with HCA were out of date. This has two implications for the ability of health homes and CCOs to build care coordination capacity. First, care coordinators' time is being diverted away from engaging with enrollees to locating new enrollees. Second, health homes are not paid for outreach activities and cannot begin providing care coordination services unless an enrollee develops a HAP.

Successes, Challenges, and Preliminary Findings

The demonstration has established a new culture for providing care coordination services based on enrollee empowerment and engagement. The results of the enrollee focus groups reported in ***Section 5*** provide examples of beneficiary health activation that has been achieved through the demonstration.

The biggest challenge facing the demonstration since its inception has been building a supply of care coordinators sufficient to enroll all eligible individuals into the demonstration. Without an adequate supply of care coordinators, the demonstration cannot work with enrollees to develop HAPs and provide care coordination to support achievement of enrollee goals.

The nature and scope of health home services provided by care coordinators to enrollees varies significantly based on individual goals as articulated in a HAP. There is no standardized expectation of care coordinators' duties, except to tailor their functions to each person's needs.

There appears to be widespread consensus among State officials, health homes, and stakeholders, as well as anecdotal evidence from beneficiaries themselves, that this model of care coordination is yielding positive results. However, the vision of this new system has not been fully realized at this time because a high proportion of enrollees are not yet engaged through the development of a HAP and the care coordination its completion initiates.

Beneficiary Experience

The RTI evaluation team conducted focus groups to gain insight directly from beneficiaries about their experience with the demonstration. Four focus groups were conducted in September 2015, with a total of 32 demonstration enrollees. The focus group participants were similar in demographic and health conditions to the enrollee population overall. The following issues were highlighted by multiple participants.

Overall satisfaction with the demonstration: More than half of the participants reported they had experienced a significant improvement in their health or quality of life as a result of the health home services. Many of the changes resulted from participants setting goals and taking responsibility for their own health, working with health home care coordinators. The achievement of personal health-related goals often had benefits such as decreased use of EDs, reduced medication use, increased physical activity, and weight loss.

Relationships with health home coordinators: Participants view their care coordinators as particularly helpful with setting goals and developing plans to achieve them. Many participants also noted that care coordinators helped them access services, health information, and other resources. Most participants who had had a hospital admission or ED visit in the past year said their primary care provider (PCP) had been notified.

Access to and quality of services: All participants reported having a PCP. Participants typically see specialists in addition to their PCPs. Some reported difficulties with access or limited choice of specialists who accept Medicare or Medicaid, a long-standing problem that pre-dates the demonstration. Some participants reported improved access to assistive devices and home modifications, although obtaining wheelchairs or other equipment was a challenge for others.

Importance of patient-centered care and patient engagement: Participants indicated they wanted to be involved in their health care, and emphasized the need to advocate for themselves. Having providers who listened to them, offered choices, and included them in decision-making was valued.

Impact of demonstration services on health, well-being, and quality of life: Approximately half of all participants said they had achieved a goal or experienced an improvement in their health or quality of life in the past year. Most participants achieved goals by changing their own behavior rather than accessing additional services.

Successes, Challenges, and Preliminary Findings

Health home services have helped enrollees achieve a wide range of improvements in their lives, from securing housing to managing chronic conditions and increasing community engagement. Care coordinators were most likely to report successes achieved by helping enrollees access services, whereas many focus group participants described changing their own behavior with support from their health home.

Health homes may have also had an impact on the level of patient engagement by encouraging enrollees to set goals, change their behavior, and participate in managing their own health care. Nearly all of the focus group participants were engaged in their own health care to some degree, and many were highly engaged.

Some focus group participants had trouble differentiating their care coordinators from service-specific case managers who have more limited responsibilities. Many focus group participants looked to their care coordinators for assistance setting and achieving goals, and utilized their HCBS case managers and providers for assistance accessing and coordinating services or resolving issues.

Some focus group participants said that they are accustomed to calling familiar agencies for assistance or advocating for themselves. Although focus group participants provided numerous examples of ways they received support from their care coordinators, in some instances they appeared unaware of the range of supports available through their care coordinators.

Stakeholder Engagement

Washington conducts a robust stakeholder engagement process for input on the development and implementation of demonstration policies. The State established the Health Home Advisory Team to foster a meaningful role for ongoing stakeholder input regarding the demonstration. Members include consumer advocacy organizations, provider associations, State and county agencies, and the union representing most home care workers. Examples of Health Home Advisory Team activities include providing input on the Health Home Provider Toolkit, the Medicaid policy to provide enrollees with non-emergency medical transportation to support care coordination activities, and contingency plans for the demonstration's potential shutdown.

Successes, Challenges, and Preliminary Findings

Washington has conducted both broad-based stakeholder engagement activities and tailored outreach targeted at specific interest groups such as nursing facilities and tribal organizations. In particular, the Health Home Advisory Team has a meaningful role in shaping the development of demonstration policy.

One challenge the State continues to face in engaging stakeholders is the difficulty of clearly articulating the concept of health home services and what they are designed to achieve. To increase awareness of the demonstration among enrollees, the State conducted regional forums of enrollees across the State.

Results of Preliminary Medicare Cost Savings Calculation

RTI International previously developed a preliminary Medicare savings calculation for the first demonstration period for Washington State using an actuarial methodology. States implementing an MFFS model demonstration under the Medicare-Medicaid Financial Alignment Initiative are eligible for performance payments from CMS based on achieving statistically significant savings and meeting or exceeding established quality requirements. The actuarial savings calculations will be performed annually and provide CMS with the resulting Medicare and Medicaid savings for each MFFS State.

As a preliminary estimate, RTI determined that Washington State achieved $21.6 million (6.1 percent) in Medicare savings during the first demonstration period. Medicaid savings analyses will be conducted once data become available. Detailed results and a more detailed description of the actuarial methodology are available in the Preliminary Findings from the Washington MFFS Demonstration.[3]

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[3] See https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/WAEvalResults.pdf.

These results should not be viewed as final for two reasons. First, the calculations cover Medicare expenditures only, because the data needed to perform the calculations on Medicaid expenditures were not yet available. Final calculations will include both Medicare and Medicaid data. Second, only 7 of the 9 desired months of claims run-out were available for this calculation.

An important distinction between the actuarial methodology and the methodology used in the remaining sections of this Annual Report is that in the actuarial methodology, the same beneficiaries appear in both the baseline and the demonstration periods, and an individual beneficiary must have 3 months of baseline period experience before being included for the savings calculation. This means that the beneficiary must have been dually eligible for at least 3 months during the applicable baseline period. Because the savings calculation methodology relies on determining the trend in per member per month (PMPM) expenditures between the baseline period and the demonstration period, it is important that each beneficiary have relevant experience in both of these periods.

Conversely, experience in the baseline period is not a requirement for analyses presented in the remaining sections of this Annual Report, because baseline period eligibility is determined using all beneficiaries who met demonstration eligibility sometime in the baseline period, regardless of whether they lost demonstration eligibility later in the demonstration period because of death or the loss of full Medicaid benefits or demonstration eligibility. The actuarial methodology therefore includes only a subset of the beneficiaries used in the remaining analyses. Therefore, the results of the actuarial savings calculations and the remaining analyses should not be compared to each other.

Purpose of Quantitative Analyses

The purpose of the remaining analyses is to provide insight into the trends over time in the demonstration and comparison groups so that CMS, the State, and stakeholders can understand the composition of these groups and their utilization patterns and costs before direct group comparisons are made in future analyses that will provide the results of impact analyses.[4] As will be discussed in these quantitative analyses using a different population and methods from the previous Issue Brief, there is limited evidence of the demonstration's effect during the first demonstration year. As noted in ***Section 3.2.2*** on enrollment processes, enrollment into health homes began slowly and increased gradually, and engagement with health home care coordination services lagged even after large numbers of beneficiaries had been enrolled. Thus, while the results in this report cover the full 18 month demonstration period (July 1, 2013 through the conclusion of the first demonstration year on December 31, 2014), the care model's coordination strategies were only sparsely deployed during the first half of the first demonstration period.

The populations analyzed in the report include all demonstration eligible beneficiaries, as well as the following subpopulations: demonstration enrollees; health home service users; those receiving any LTSS; those with any behavioral health service use in the last 2 years for a serious and persistent mental illness (SPMI); and nine demographic and health condition groups (age,

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[4] The report has been updated to correct the descriptive measures concerning users of specific services. The previous version of this report presented several measures as counts per user months for users. This updated document corrects the description of those measures to counts per eligible months among users.

gender, race, urban/rural status, any disability, presence of Alzheimer's disease or other dementias, Hierarchical Condition Category Score category, higher vs. lower cost, and whether one died).

Highlights of Quantitative Analyses of Medicare Cost and Utilization on the Demonstration Eligible Population

- During the demonstration period, there were notable differences in utilization and spending patterns between Washington demonstration eligible beneficiaries and the subgroup who were enrolled in health homes. Enrollees were more frequent users of most services, including inpatient hospitals, EDs, skilled nursing facilities (SNFs), and ambulatory care. Washington enrolled the demonstration eligibles with the highest PRISM scores first (e.g., relatively more expensive beneficiaries), which was reflected in high levels of service utilization in these analyses. Exceptions were in the use of inpatient psychiatric, substance abuse care and hospice services, where enrollees used fewer services than the larger eligible population.

- Similarly, enrollees contacted by their assigned care coordinator and who had begun receiving health home services were more frequent users of various services than those enrollees had yet to be contacted by the end of the first demonstration year. This suggests that health homes were prioritizing those enrollees who were likely to use services more intensively.

- While the percentage of Washington eligible beneficiaries with an inpatient admission remained relatively constant between the baseline and demonstration periods (5.5 percent), the rate of admissions decreased slightly (61.3 admissions per 1,000 eligible months in the first baseline period to 60.9 admissions per 1,000 eligible months in the demonstration period). This trend was also observed in the comparison group. Among Washington eligible beneficiaries with any inpatient admissions, use declined from 186.0 to 160.6 admissions per 1,000 eligible months between the baseline period and demonstration periods. A similar trend was observed in the comparison group.

- The percentage of eligible beneficiaries with a specialist visit slightly increased between the baseline and demonstration periods for both the demonstration (5.8 to 6.5 percent) and comparison groups (5.6 to 5.7 percent). Conversely, the number of specialist visits among those with any specialist visits greatly decreased in both the demonstration (151.8 to 135.7 visits per 1,000 eligible months) and comparison (151.8 to 120.6 visits) groups between the baseline and demonstration periods. Potentially, the increase in primary care visits may have resulted in fewer specialist visits among those with any specialist visits in both groups. It may also be the case that the newest users of specialty care use less than those who had been using such care in earlier years.

- In Washington, the percentage of eligible beneficiaries who were LTSS users and who had an ED visit appears to trend upwards, increasing from 8.4 to 9.8 percent between the baseline and demonstration periods. At the same time, among those LTSS users with any ED visits, the average number of visits and expenditures declined over time, suggesting that the increased use rate was concentrated among lower intensity ED users. There was no increasing trend for LTSS users in the comparison group.

- The percentage of Washington eligible beneficiaries with any behavioral health visits decreased between the baseline and demonstration periods (5.9 percent to 3.1 percent) and the number of visits also decreased over this period (92.0 to 84.8 visits per 1,000 eligible months). However, the number of visits and level of expenditures among those with any visits increased substantially (538.5 to 844.6 visits), suggesting a shift in the composition of behavioral health services to a smaller group, selected on higher needs for those services. This shift predates the beginning of the demonstration, however, and to some extent is also observed in the comparison group.

- As expected, in both Washington and the comparison group, those with Hierarchical Condition Category (HCC) scores greater than 4 had a higher percentage with any inpatient admissions compared to those with HCC scores less than 1. For example, in Washington, 16.7 percent of those with HCC scores greater than 4 in baseline period 1 had an inpatient admission, compared to only 2.3 percent with scores less than 1. Among those with an HCC score greater than 4, the percentage of Washington eligible beneficiaries with any inpatient admissions declined from 16.7 to 10.9 percent between the baseline and demonstration periods. This trend was observable in the comparison group as well. HCC scores are correlated with the PRISM scores used by Washington State.

- Regarding the quality of care measures identified for the evaluation, Washington eligible beneficiaries experienced a dramatic increase in the number of pneumococcal vaccinations between the baseline and demonstration periods (1.8 to 25.9 per 1,000 eligible months). The rate also rose in the comparison group, albeit less dramatically (1.1 to 4.4). Ambulatory care sensitive admissions fell between the baseline and demonstration periods in both Washington and the comparison group. However, preventable ED visits appeared to increase between the baseline and demonstration periods in both Washington and the comparison group.

Conclusion

Washington’s targeting of a high-cost, high-risk population and focus on patient engagement have the potential to support improved beneficiary outcomes at lower cost. Previous State research has found that these factors correlate with improved beneficiary outcomes and lower costs. The Washington MFFS demonstration uses multiple policy levers, such as contract provisions, payment methodology, and capacity building, to direct health home care coordinators to engage enrollees into taking actions to self-manage their health. The State’s contracts with health homes specify a wide range of required activities designed to advance patient engagement. The State believes that these patient engagement activities will achieve the greatest benefits for the population it had decided to target in this demonstration: high-cost, high-risk beneficiaries.

Stakeholders and State officials perceive that the State's care coordination model adds value to existing service delivery systems.

Care coordinators in Washington's health homes have no authority to authorize services, and they are not associated with a primary care practice, which means they have less direct influence over the services received by enrollees. However, they perform two functions that existing case managers embedded in service delivery systems have acknowledged they cannot do. First, they work across delivery systems to identify gaps in care and maintain communication with all of an enrollee's providers and service-specific case managers. Second, they focus on enrollees' health needs, risks, and goals, which were not being addressed in a systematic way before the demonstration by any of the existing delivery systems. State officials responsible for service-specific delivery systems reported that their case managers are supportive of the health home care coordinators' roles and see them as complementing their functions.

Successes, Challenges, and Lessons Learned

As described previously in this Executive Summary, the State faced delays in enrolling beneficiaries with health homes, and experienced further delays in engaging beneficiaries with health home providers and creating HAPs. While the limited reach of the health home intervention made it unlikely that any successes would be observed during the first demonstration year, some patterns are worth noting. First, the State targeted beneficiaries to enroll and engage in health homes who, on average, were using services more intensively than the average demonstration eligible beneficiary. This focus is reflected across multiple types of services and in the quality of care measures for health home service users, for example, with beneficiaries with SPMI. This prioritization makes sense if program administrators are looking for the largest opportunities for health care improvement, or alternatively, beneficiaries with the greatest health care or LTSS or behavioral health needs. Future Annual Reports as well as the Final Report on the demonstration will help identify whether these strategies are successful as the demonstration matures.

Second, health and long term care systems in Washington rely less on institutional settings for delivering services than do their counterparts in the comparison states. As more beneficiaries become engaged in the health home model, if the model is successful, we may see even more divergence between beneficiaries in Washington and those in the comparison group. Although State officials did not suggest the demonstration would affect the balance of LTSS institutional and community-based services, there is the potential that persons who do use institutional services may have higher frailty than before the demonstration; this may occur if health home services help LTSS beneficiaries remain in the community longer than might have been possible before the demonstration (beneficiaries may be able to delay the need for institutional care and therefore be more frail when they actually enter the nursing facility).

Preliminary Findings

Compared to nonenrollees, enrollees were more frequent users of most services, including inpatient hospitals, EDs, skilled nursing facilities, and ambulatory care. Prior research has shown that Medicare-Medicaid enrollees tend to have poorer access to care, and thus may be underserved. Exceptions were in the use of inpatient psychiatric, substance abuse care, and hospice services, where enrollees used fewer services than the larger eligible population. Fewer inpatient psychiatric admissions may be the result of higher use of behavioral health outpatient services for enrollees and health home users. Lower use of substance abuse care services potentially may be due to lack of care coordination for enrollees. Beneficiaries who entered hospice during the demonstration were disenrolled; thus, the engaged population had fewer hospice services than the enrolled but not engaged population.

Similarly, enrollees contacted by their assigned care coordinator and who had begun receiving health home services were more frequent users of various services than those enrollees who had yet to be contacted by the end of the first demonstration year. This suggests that health homes were prioritizing those enrollees who were likely to use services more intensively.

Next Steps

The RTI evaluation team will continue to collect information on a quarterly basis from Washington State officials through the online State Data Reporting System, covering enrollment statistics and updates on key aspects of implementation. The RTI evaluation team will continue conducting quarterly calls with the Washington demonstration State staff and request the results of any evaluation activities conducted by the State or other entities, such as results from the MFFS Consumer Assessment of Healthcare Providers and Systems (CAHPS) and the demonstration measures the State is required to report to CMS. During the demonstration, additional site visits and focus groups will take place.

The purpose of the quantitative analyses is to understand the characteristics of the Washington demonstration group, and separately, the comparison group for the evaluation conducted by the RTI evaluation team. Quantitative results are presented for each group for each of the two baseline period years, and for the 18-month demonstration period, in order to understand the service use and cost patterns of these two groups before they are directly compared in future analyses. This report also provides results for important sub-populations of interest, including demonstration enrollees, those with any health home service use in Washington, those with any LTSS, and those with SPMI. These analyses in this report focus on the time trend within each group, and the demonstration was slow to begin; therefore, differences over time were generally not large.

As noted previously, the State has decided to extend the demonstration for 2 additional years, which will provide further opportunities to evaluate the demonstration's performance. The second Annual Report on the Washington Health Homes MFFS demonstration will include information about the State's decision to extend the duration of the demonstration and add two more counties. In addition, the next report will include qualitative information on the status of the demonstration and analyses of quality, utilization, and cost measures for those eligible for the demonstration and an out-of-state comparison group. The quantitative analyses will cover the time period from January 2015 through December 2015. Qualitative information will be updated through June 30, 2016.

1. Overview

1.1 Introduction

1.1.1 Purpose

The Centers for Medicare & Medicaid Services (CMS) has created the Financial Alignment Initiative to test integrated care models for Medicare-Medicaid enrollees. The goal of these demonstrations is to develop person-centered care delivery models integrating the full range of medical, behavioral health, and long-term services and supports (LTSS) for Medicare-Medicaid enrollees, with the expectation that integrated delivery models would address the current challenges associated with the lack of coordination of Medicare and Medicaid benefits, financing, and incentives.

This Annual Report on the Washington Managed Fee-for-Service (MFFS) model demonstration under the Medicare-Medicaid Financial Alignment Initiative, called Washington Health Homes MFFS demonstration, is one of several reports that will be prepared over the next several years to evaluate the demonstration. CMS contracted with RTI International to monitor the implementation of the demonstrations under the Financial Alignment Initiative, and to evaluate their impact on beneficiary experience, quality, utilization, and cost. The evaluation includes an aggregate evaluation and State-specific evaluations.[5]

The goals of the evaluation are to monitor demonstration implementation, evaluate the impact of the demonstration on the beneficiary experience, monitor unintended consequences, and monitor and evaluate the demonstration's impact on a range of outcomes for the eligible population as a whole and for subpopulations (e.g., enrollees, people with severe and persistent mental illness and/or substance use disorders, LTSS recipients). To achieve these goals, RTI collects qualitative and quantitative data from Washington each quarter; analyzes Medicare and Medicaid enrollment and claims data; conducts site visits, beneficiary focus groups, and key informant interviews; and incorporates relevant findings from any beneficiary surveys and focus groups conducted by other entities. In addition to this Annual Report, monitoring and evaluation activities will also be documented in subsequent Annual Reports, and a final evaluation report.

1.1.2 What It Covers

This report analyzes implementation of the Washington Health Homes MFFS demonstration from its initiation on July 1, 2013, through the conclusion of the first demonstration year on December 31, 2014. To capture relevant qualitative information obtained at the conclusion of the demonstration period or immediately afterward, this report includes updated qualitative information through June 30, 2015 (i.e., it includes information from the June 2015 site visit). It describes the demonstration's key features; the policies, administrative processes, and strategies the State adopted as it implemented the demonstration; and successes achieved and challenges encountered. Specifically it addresses the demonstration's approach to integrating the Medicare and Medicaid programs; providing care coordination to enrollees;

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[5] The *Aggregate Evaluation Plan* is available on the CMS website at http://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/EvalPlanFullReport.pdf

enrolling beneficiaries into the demonstration; and engaging stakeholders in the oversight of the demonstration. We also provide a summary of preliminary findings related to Medicare savings results. Results on enrollee service utilization, quality of care, and costs for the first demonstration period spanning July 1, 2013 to December 2014 are also presented. Finally we conduct targeted analyses related to enrollees, health home service users, LTSS users, behavioral health service users, and special populations.

1.1.3 Data Sources

A wide range of information sources informed this first Annual Report of the Washington Health Homes MFFS demonstration. The RTI evaluation team conducted two site visits in Washington from January 14–16, 2014, and June 22–25, 2015. Activities during these site visits included interviews with State officials and stakeholders, which provided information to gain an understanding of the State's objectives, the rationale for the policies put in place to implement the demonstration, and its early operational experiences. In addition to a wide range of State officials with differing demonstration roles, the RTI evaluation team interviewed CMS staff, health home directors, directors of care coordination agencies, representatives of aging and disability advocacy groups, and Area Agencies on Aging (AAAs). Enrollee focus groups were conducted in September 2015 and were a source of information on beneficiary experience. This report presents the focus group findings because they capture enrollee perspectives on their demonstration experience during the time frame of this report.

The RTI evaluation team also drew on the official agreements between CMS and Washington that outline demonstration policies and operational strategies: the Final Demonstration Agreement (Agreement, 2013); the Memorandum of Understanding (MOU, 2012); and the approved Medicaid Health Home State Plan Amendments (SPAs) (Washington Health Care Authority [HCA], hereafter SPAs, 2013a and 2013b). Other useful documents were those prepared by Washington, such as its contracts with health homes, the solicitation for applications for health home selection, and its initial proposal to conduct this demonstration. The State's Medicaid health homes website was a rich source of new health home policies and operational procedures as well as data on demonstration enrollment data and completion of enrollee Health Action Plans. Finally, RTI used data submitted by Washington to the RTI evaluation team through the State Data Reporting System (SDRS).

Analyses of access to care, quality, utilization, and costs are based on Medicare claims data for both Washington and a comparison group for 2 baseline years before the demonstration (July 2011 to June 2013) and for the first 18 months of the demonstration period (July 2013 to December 2014). The Nursing Home Minimum Data Set (MDS) is also analyzed to evaluate nursing facility admission and use rates, characteristics of new entrants, and nursing facility quality. ***Appendix A*** includes details on the methods used for comparison group identification, ***Appendix B*** contains additional information on analysis methods for MDS data, and ***Appendix C*** provides details on all population definitions and measures used in the analyses.

1.2 Model Description and Goals

1.2.1 Description of Model and Goals

Model Description

The Washington Health Homes MFFS demonstration leverages health homes to integrate care for high-cost, high-risk full-benefit Medicare-Medicaid enrollees.[6] Health homes were established by the Affordable Care Act to coordinate care for Medicaid enrollees with chronic conditions. The demonstration operates statewide, except in two counties, King and Snohomish. The Washington Health Homes MFFS demonstration began July 1, 2013, and, with an anticipated 2-year extension, is expected to continue until December 31, 2018. It is jointly administered at the State level by the HCA, which houses the Medicaid agency, and the Department of Social and Health Services (DSHS), which in turn houses the State offices responsible for service delivery systems, including long term services and supports (LTSS) and behavioral health.

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 needs provides the greatest potential for improved health outcomes and cost savings. Its positive experience with the State's previous Chronic Care Management Program led Washington to adopt a comparable model for the demonstration organized around the principles of patient activation and engagement, supporting enrollees to take steps to improve their own health. In the course of integrating care for enrollees across primary care, LTSS, and behavioral health delivery systems, health home care coordinators are charged with engaging enrollees to set health action goals and increase self-management skills to achieve optimal physical and cognitive health.

Washington has designated Medicaid health homes, established under Section 2703 of the Affordable Care Act, to be the lead local entities to organize enhanced integration of primary, acute, LTSS, and behavioral health services for Medicare-Medicaid enrollees participating in the demonstration. The State views health homes as the bridge to integrate care across existing health delivery systems.

For an individual enrollee, service integration is initiated through the development of a Health Action Plan (HAP). Washington's web-based clinical support tool, Predictive Risk Intelligence SysteM (PRISM), integrates individual-level information from payment and assessment data systems covering primary, acute, LTSS, behavioral health, and social services. In working with an enrollee to develop a HAP, health home care coordinators access detailed information stored in PRISM about an enrollee's utilization of Medicare- and Medicaid-financed services, including hospitalizations, emergency department visits, and specific medication usage. The health home care coordinator discusses this information with the enrollee, and together they

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[6] "Full-benefit Medicare-Medicaid enrollees" refers to individuals who are eligible for Medicare and for full Medicaid benefits. "Partial Medicare-Medicaid enrollees" refers to individuals who receive only Medicare premium assistance and cost-sharing assistance from Medicaid.

develop a HAP by prioritizing health action goals, specifying personal actions to take to achieve the goals, and identifying needed interventions and supports.

CMS has worked with the State to align Washington beneficiaries with the demonstration, ensuring that beneficiaries are attributed to only one Medicare shared savings program, such as accountable care organizations.[7] The State auto-enrolls eligible Medicare-Medicaid beneficiaries who have been attributed to the demonstration into health homes. As of June 30, 2015, 16,778 eligible beneficiaries have been enrolled in a health home and thereby were enrolled in the Washington Health Homes MFFS demonstration.

Participation in the demonstration is open to Medicare-Medicaid enrollees of all ages who live in counties where the demonstration is being implemented; do not have other comprehensive health insurance; are not enrolled in Medicare Advantage, Program of All-Inclusive Care for the Elderly (PACE), or receiving hospice services; and meet the State's health home eligibility criteria (e.g., having one chronic condition and being at risk of developing another, measured by a risk score generated by PRISM). All eligible Medicare-Medicaid beneficiaries will be auto-enrolled in a health home, unless they opt out prior to enrollment or choose a different health home provider.

Medicare-Medicaid enrollees in Washington continue to receive their health care and LTSS through fee-for-service Medicare and Medicaid, except for Medicaid community mental health services, which are capitated. Medicare and Medicaid services available to enrollees in the demonstration are unchanged, except for the addition of Medicaid health home services. These services are financed and defined under the authority of Section 2703 of the Affordable Care Act (Patient Protection and Affordable Care Act of 2010), which established health home services as an optional Medicaid State Plan service. Health home services consist of six statutorily defined services, which are mostly variations of care coordination and health promotion. In Washington, health homes are the vehicle for coordinating services for Medicare-Medicaid beneficiaries enrolled in the Washington Health Homes MFFS Demonstration.

Demonstration Goals

This section summarizes the Washington Health Homes MFFS demonstration goals, factors that shaped the demonstration's approach, expectations for improvement in care, and the anticipated sources of cost savings.

The goals for the Washington Health Homes MFFS demonstration are to integrate care for Medicare-Medicaid enrollees, alleviate fragmentation, and improve coordination of services for high-cost, high-risk Medicare-Medicaid enrollees served primarily in fee-for-service systems of care; improve beneficiary outcomes; and reduce costs over time for the State and the Federal government. Key objectives of the demonstration are to improve beneficiary experience in accessing care, promote person-centered health action planning, promote independence in the community, improve quality of care, assist beneficiaries in getting the right care at the right time and place, reduce health disparities, improve transitions among care settings, and achieve cost

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[7] For additional information about the attribution process, see pages 50–51 of the MOU.

savings for the State and the Federal government through improvements in health and functional outcomes (MOU, 2012, p. 4; Agreement, 2013, p. 3).

Several factors shaped the demonstration's approach. First, since 2007 Washington had been operating a Medicaid-funded Chronic Care Management (CCM) Program that targeted intensive care coordination and beneficiary motivation to engage in self-management to Medicaid-only enrollees who were high cost and at high risk of adverse events. An initial evaluation of the program concluded that by concentrating care coordination resources on a group with very complex needs, the program led to improved enrollee health outcomes, fewer emergency department and hospital admissions, and a higher level of individual health activation rates.

The second factor that shaped the State's demonstration approach was a detailed analysis of Washington's Medicare and Medicaid data conducted by the State's internal research office, showing extensive overlap between Medicare-Medicaid enrollees with both high health risk factors and service needs, particularly LTSS needs. This series of population and claims-based analyses led State officials to conclude that a demonstration design that targeted intensive interventions to a high-cost, high-risk population would present the greatest potential for care improvement and cost savings. Access to Medicare data made available to States by CMS in 2011 was crucial to the State's ability to conduct these analyses. Washington was one of the first States to take advantage of these data, not only for pre-demonstration analyses but also as a key element of its PRISM system that integrates Medicare and Medicaid claims data for individual enrollees.

The third factor that shaped the State's demonstration approach was its lack of designated State funding for the provision of intensive care coordination on a large scale. Because the Washington demonstration is built on a health home platform, State officials wanted to design a model that gave them the best possibility of financial sustainability after the end of the eight quarters of enhanced Federal match rates provided under the Medicaid health homes program.

Washington expects improvements in care to be realized in two broad areas. First, by engaging Medicare-Medicaid enrollees to take active, concrete actions to identify and manage their own health risks, the State expects health outcomes to improve, and hospital and emergency department use to decline. Through the use of individualized coaching, motivational interviewing, and mentoring to increase enrollees' self-management skills, the State also expects observable increases in patient activation scores. Second, because it is providing intensive care coordination across delivery systems, Washington expects that beneficiaries will have a more streamlined care experience and improved access to services.

1.2.2 Changes in Demonstration Design during Implementation

Although all key features of the demonstration design have been retained as implementation has proceeded, the State refined a few aspects of its approach to care coordination and took steps to expand the capacity of health homes to serve demonstration enrollees (see ***Section 5***).

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 DSHS and 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 passive enrollment into the demonstration and began planning for termination.

In late October 2015, new information became available about projected savings for the program. 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. Passive enrollment was reinstated effective December 2015. Budget deliberations over the continuation of health home services beyond June 2016 were ongoing at the time of this report.[8]

1.2.3 Overview of State Context

The demonstration builds on delivery system initiatives the State has adopted to improve service integration for Washington's Medicare-Medicaid high-cost, high-risk enrollees who overwhelmingly have multiple chronic conditions, receive LTSS, and have behavioral health needs.

Chronic Care Management

Washington has more than a decade of experience in helping Medicaid fee-for-service (FFS) enrollees manage chronic conditions (Washington DSHS and HCA, 2012; hereafter, Washington proposal, 2012, pp. 3, 7–8, 20). This experience greatly influenced the design of the Washington Demonstration and Medicaid health homes. From 2002 to 2006, Washington contracted with the King County Area Agency on Aging and a consortium of community agencies to provide disease management services to aged, blind, and disabled Medicaid-only beneficiaries across the State (Center for Health Care Strategies, 2008). This program served 20,000 beneficiaries with fee-for-service coverage. Medicare-Medicaid enrollees were excluded from participation.

In 2007, the Washington Medicaid program replaced the disease management program with the CCM program. The State contracted with AAAs to work with high-cost, high-need Medicaid enrollees to ensure that they were connected to a primary care physician, learned chronic care self-management skills, and received intensive care coordination spanning all service needs, including primary care, behavioral health, chemical dependency, and LTSS. Because almost all individuals who were served by the CCM program are eligible for health home services, the CCM program has been terminated.

In implementing the CCM program, the State developed a predictive risk-modeling tool, (PRISM, for determining an individual's need for chronic care management. With refinements and additions, the State is using this tool to determine whether individuals with one chronic condition are at risk of developing a second, which is one of the eligibility criteria for health home enrollment under Section 2703. The CCM program also emphasized enrollee engagement

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[8] Budget deliberations over the continuation of health home services beyond June 2016 were approved by the legislature in March 2016, along with approval to add King and Snohomish counties to the program. This decision is not reflected or discussed in detail in this Annual Report, but it will be covered as appropriate in the second Annual Report.

as an important aspect of improving one's health status. It worked with enrollees to develop HAPs that prioritize personal health goals, and identify self-actions and interventions needed to achieve them. HAPs are also used in the Health Home Demonstration. This CCM experience was the basis for many design features of the Health Home Demonstration.

Long-Term Services and Supports

Washington is known as a pioneer in LTSS policy. It began undertaking rebalancing initiatives in the 1980s to shift LTSS use from facility to community settings, and now has one of the most balanced systems in the country (AARP, 2012, pp. 330–1). In 2009, 75 percent of older adults and adults with physical disabilities using Medicaid LTSS received home and community-based services (HCBS) rather than institutional services, and 62 percent of Medicaid LTSS spending for that population was on HCBS, the second highest rate in the country (AARP, 2012, pp. 330–1). In addition to executive and legislative branch budgetary policies that purposefully allocate resources to community-based supports using a caseload projection model, Washington also assigns case managers to help Medicaid enrollees newly admitted to nursing facilities to begin planning for a return to community living.

Since 2007, Washington has been conducting a Money Follows the Person Demonstration—Roads to Community Living—which assists people with complex LTSS needs in transitioning from institutional to community settings. The program targets people who need more intensive transition assistance by helping them establish a community household, access mental health and substance use services, and acquire needed life skills. It can also cover individuals' first month costs of establishing a community residence.

The State provides a wide range of Medicaid LTSS through HCBS waivers and State Plan personal assistance services. It has also fostered the development of a range of community-based residential services, including assisted living, residential care facilities, and adult family homes.

Behavioral Health System

Washington's Medicaid community mental health services are delivered under a 1915(b) waiver authority through prepaid inpatient health plans (PIHPs) called Regional Support Networks (RSNs), which are mostly single or multicounty government-managed care entities. RSNs receive capitated payments and subcontract with community mental health agencies to provide a wide range of outpatient and in-patient services, recovery supports, crisis response, and peer counseling. Chemical dependency services are delivered separately through State FFS contracts with residential treatment programs and county-contracted outpatient treatment programs (Washington proposal, 2012, p. 4).

Federal Financial Support

Two significant sources of Federal financial support were made available to Washington to design and implement its Health Home demonstration. First, it was 1 of the 15 States in the CMS State Demonstrations to Integrate Care for Dual Eligible Individuals, in which States received a $1 million design contract to support the development of a demonstration proposal for submission to CMS. Those funds were primarily used by Washington to support extensive stakeholder engagement activities, to contract with a consulting firm to develop a payment methodology for health homes as well as specific rates, and to support salary costs of a couple of State staff.

CMS also made funding available to support demonstration implementation for the States that received demonstration design contracts and had finalized MOUs in place. In Washington's case, staff noted that although the State is grateful for the support, it would have been even more valuable had the award been made before the start of the demonstration, when the need for policy and systems development support was extensive. Its first year CMS implementation support award of $1.9 million, made in August 2013, was used for ongoing stakeholder outreach and facilitation, additional work to integrate Medicare and Medicaid data in PRISM, training and curriculum development directed at health homes and community care organizations (CCOs), beneficiary enrollment materials, information technology (IT) supports for enrollment, and additional State staff for health home contract oversight and implementation activity. Its second year award of $750,000 was used for the same purposes. Washington also received an award of $113,000 from CMS to support Aging and Disability Resource Centers in providing options counseling to enrollees in health homes.

1.3 Preliminary Findings

The design of the Health Home Demonstration was based on Washington's Chronic Care Management Program. The State's well-established delivery systems for LTSS, behavioral health, and acute and primary care are unchanged by the Washington demonstration. Health homes coordinate care for enrollees by acting as a bridge to integrate care across these existing delivery systems.

The State legislature initially voted to defund the health homes program effective December 31, 2015, and passive enrollment was terminated. But as evidence of potential Medicare cost savings of $21.6 million came to light, the State decided to continue health home services through June 2016, to give the legislature time to review savings projections, and passive enrollment was reinstated. Results from quantitative analyses on various service types show limited evidence of the demonstration's effect during the first demonstration year because the care model's coordination strategies were only sparsely deployed during the first half of the first demonstration period.

2. Integration of Medicare and Medicaid

Highlights

- Washington's integrated delivery system uses health homes as the organizational and administrative structure that supports the demonstration's care coordination provided to enrollees.
- Care coordination is provided by a network of Care Coordination Organizations that are affiliated with health homes.
- Health homes have been designed to coordinate care for enrollees by bridging existing primary care, LTSS, and behavioral health delivery systems.

In the Washington Health Homes MFFS demonstration, enrollees' health care needs are primarily addressed by Medicare-funded services, whereas their LTSS and behavioral health needs are primarily addressed by Medicaid-funded services. Health homes do not directly deliver health care, LTSS, and behavioral health services, nor do they finance them or authorize their provision. Rather, health home care coordinators work to identify enrollee needs that are not being addressed by existing delivery systems. They are charged with acting as a bridge to integrate care across existing health delivery systems.

2.1 Joint Management of the Demonstration

Unlike capitated model demonstrations under the Financial Alignment Initiative, in which the State and CMS would jointly contract with managed care organizations, Washington and CMS do not share management of the health homes participating in the Washington Health Homes MFFS demonstration. Instead, health homes have contracts with the State to provide health home services to demonstration enrollees and Medicaid-only beneficiaries, and there is no contractual relationship between health homes and CMS.

2.2 Overview of Washington's Integrated Delivery System

2.2.1 Health Homes

Washington has designated health homes as the lead local entities to organize enhanced integration of primary, acute, behavioral, and LTSS for Medicare-Medicaid enrollees participating in the Washington Health Homes MFFS demonstration, as well as other Medicaid beneficiaries in the State outside of the demonstration. The State views health homes as the bridge to integrate care across existing health delivery systems.

The State's decision to use Medicaid health homes, established by Section 2703 of the Affordable Care Act (Patient Protection and Affordable Care Act of 2010), as local lead entities was driven in large measure by the opportunity to capture a 90 percent enhanced Federal Medicaid match rate for care coordination services during the first eight quarters of health home implementation in each geographic area. Because the State legislature did not provide funding for this new service, the health home option was the primary alternative available to State officials. Two Medicaid State Plan Amendments (SPAs) authorize funding for Washington's health home services: SPA 13-08, effective July 1, 2013, authorizes services in three coverage areas encompassing 14 counties; and SPA 13-17, effective October 1, 2013, authorizes services in three other coverage areas covering 24 counties. These SPAs remain in effect, but the time period for which the 90 percent enhanced Medicaid match rate was authorized has expired.

Health homes provide the administrative and organizational structure that supports the intensive care coordination and related interventions for the demonstration's high-cost, high-risk enrollees. The following sections provide more detail on these responsibilities, which include collecting and submitting to HCA Medicaid encounters for health home services; dispersing payments to care coordination contractors; reporting on financial, performance, and outcome measures; overseeing the quality of care coordination; and establishing an information technology (IT) system that supports tracking and sharing of enrollee information across multiple providers. These administrative functions also include establishing a network of care coordination organizations (CCOs) under contract with health homes to deliver health home services. The following six services are specified in the Federal statute authorizing health home services and are incorporated in health homes' contracts with the State:

- Comprehensive care management
- Care coordination
- Health promotion
- Comprehensive transitional care from inpatient to other settings
- Individual and family support
- Referral to community and social support services, if needed

Washington used a competitive Request for Application process to select qualified health homes to serve fee-for-service (FFS) Medicaid beneficiaries, including Medicare-Medicaid enrollees, in each of six geographic coverage areas. Applicants were required to demonstrate a wide range of administrative capabilities related to operating broad-based networks of care coordination organizations; experience in performing an extensive range of detailed care coordination functions; and organizational structures that facilitate enrollee access to health homes services, such as toll-free lines, customer service units, and 24-hour/7-day-a-week information and referrals. Applicants were also required to present a network of diverse affiliated CCOs with collective experience in serving enrollees with a range of needs (SPA, 2013a).

Washington also wanted to ensure that Medicare-Medicaid enrollees in each of the State's six coverage areas had access to a community-based health home, which the State generally defines as an entity with strong, long-standing relationships with service providers and beneficiary organizations. In the State's largest geographic coverage area, no applicant emerged naturally. To achieve its objective, the State actively brokered a partnership among local organizations to create a provider consortium, which led to a successful health home application from Community Choice, a community-based lead entity.

Of the six organizations selected to be health homes, the State categorizes four of them to be community-based health homes:

- Community Choice (provider consortium), serving coverage area 6: Adams, Chelan, Douglas, Ferry, Grant, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, and Whitman counties.
- Northwest Regional Council (Area Agency on Aging [AAA]), serving coverage area 2: Island, San Juan, Skagit, and Whatcom counties.
- Optum (Mental Health Regional Support Network [RSN]), serving coverage areas 1, 4, 5, and 7: Clallam, Gray's Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, and Thurston counties; Pierce County; Clark, Cowlitz, Klickitat, Skamania, and Wahkiakum counties; Asotin, Benton, Columbia, Franklin, Garfield, Kittitas, Yakima, and Walla Walla counties.
- Southeast Washington Aging and Long Term Care (Area Agency on Aging), serving coverage area 7: Asotin, Benton, Columbia, Franklin, Garfield, Kittitas, Yakima, and Walla Walla counties.

In addition, two managed care organizations, United Health Care and Community Health Plan of Washington, were selected to be health homes in several coverage areas. Initially, the State enrolled a few Medicare-Medicaid beneficiaries in the managed care health homes but prioritized enrollment of Medicare-Medicaid beneficiaries in community-based health homes.

2.2.2 Care Coordination Organizations

Each health home is required to establish a network of CCOs representing primary care, mental health, LTSS, chemical dependency providers, and specialty providers; it must include the local agencies that authorize Medicaid LTSS and behavioral health services. This diversity in type of CCOs is intended to ensure that each health home has experience among its affiliates to engage enrollees with diverse service needs and coordinate their health care and other services. Health home care coordinators conduct outreach to achieve enrollee engagement, develop an individualized health action plan with the enrollee, and provide health home care coordination services.

As of January 2015, there were 34 CCOs that had contracts with one or more of the community-based health homes. (Network Composition Report, Washington State, 2015). All of the AAAs that participated in the Chronic Care Management program are CCOs. CCOs also include federally qualified health centers, community mental health agencies, social service agencies, faith-based organizations, and an AIDS service provider. Three of the four community-based health homes also provide care coordination services directly, functioning as CCOs for some of their enrollees. Also, some health homes have contracts with other health homes to be part of their CCO networks.

2.2.3 Approach to Integration

Under the MFFS Demonstration, Washington's existing delivery systems for LTSS, behavioral health, and acute and primary care are unchanged. Health homes have been designed to coordinate care for enrollees by being the bridge for integrating care across these existing delivery systems. Health home care coordinators complement the roles of case managers embedded in specific delivery systems, such as those for LTSS and behavioral health (see ***Section 4.2***). These case managers have not been able to intensively address the full range of an individual's needs, nor do they focus on health risks, medical conditions, or health outcomes.

State officials noted that case managers for Medicaid home and community-based services (HCBS) focus on determining eligibility, authorizing program services, and overseeing service provision. They do not have the time or ability to address other needs. Behavioral health case managers perform similar functions and have similar limitations. To facilitate integration across delivery systems, health homes are required to execute Memoranda of Understanding (MOUs) with the organizations that authorize Medicaid services, including LTSS, mental health services, and chemical dependency treatment. These MOUs contain provisions related to beneficiary privacy and protections, data sharing, referral protocols, and service authorizations. These authorizing agencies also have contracts with health homes to be CCOs.

For an individual enrollee, integration of Medicare and Medicaid services is initiated through the development of a Health Action Plan (HAP). Washington's web-based clinical support tool, Predictive Risk Intelligence SysteM (PRISM), integrates individual-level information from payment and assessment data systems covering primary, acute, LTSS, behavioral health, and social services. In working with an enrollee to develop a HAP, care coordinators access detailed information through PRISM about an enrollee's utilization of Medicare- and Medicaid-financed services, including hospitalizations, emergency department visits, and specific medication usage. The health home care coordinator discusses this information with the enrollee, who prioritizes health action goals and identifies personal actions to take to achieve the goals, and needed interventions and supports. With the enrollee's consent, the health home care coordinator shares the HAP with primary care providers (PCPs), behavioral health treatment providers, and authorizers of HCBS waiver, mental health, and chemical dependency treatment services.

Further integration of the delivery of Medicare- and Medicaid-funded services occurs through the health home role in supporting transitions of enrollees from inpatient settings to home or a nursing facility; helping enrollees to access a range of Medicare and Medicaid services; and accompanying enrollees to primary care or specialty care physician visits.

2.3 Successes

State officials report that their adoption of a new form of integration that bridges existing delivery systems and focuses on previously neglected health risks and outcomes has been well received by other providers and care coordinators because it fills a recognized need. Had they instead built a delivery system that reorganized the roles of existing care coordinators, State officials noted, the reaction might have been quite different.

The State selected a diverse group of organizations to be health homes, including AAAs, an RSN, a provider consortium, and managed care organizations. It was also successful in facilitating the development of a community-based health home, Community Choice, to serve a large geographic area of the State when no other community-based organization naturally emerged.

2.4 Challenges

Some State officials indicated that using health homes as a platform for the care coordination provided through the demonstration has been challenging at times. They cited the need to reconcile various policies, such as eligibility criteria and enrollment policies, grounded either in health homes or the demonstration. Particularly problematic was the length of time it took for approval of its submitted health home State Plan Amendments, which affected initial enrollment processes and other demonstration start-up activities. Yet, they noted that because State funds were unavailable to support intensive care coordination services, the enhanced Federal financing available by using Medicaid health home services made the development of their delivery system possible.

2.5 Preliminary Findings

Washington's purposeful targeting of a high-cost, high-risk population as participants in health homes that integrate care for that population and the focus on patient engagement are key demonstration features. Previous research has found that these factors correlate with improved beneficiary outcomes and lower costs.

The Washington Health Homes MFFS demonstration is designed to intensively address the full range of Medicare-Medicaid enrollees' needs while complementing the roles of the State's service-specific delivery systems. Health homes are the bridge to integrate across service-specific delivery systems.

To comprise their CCO networks, health homes contracted with a wide range of community organizations that collectively have experience working with multiple populations with chronic conditions.

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3. Eligibility and Enrollment

Highlights

- The demonstration's eligibility criteria target high-cost, high-risk beneficiaries.
- As of June 30, 2015, there were 16,772 beneficiaries enrolled in the demonstration, out of a total of 20,541 eligible beneficiaries.
- Medicare-Medicaid beneficiaries who are eligible for the demonstration are auto-enrolled in a health home by the State.

3.1 Enrollment Process

3.1.1 Eligibility

Participation in the demonstration is open to Medicare-Medicaid enrollees of all ages who live in any county except King and Snohomish counties; do not have other comprehensive health insurance; are not enrolled in Medicare Advantage, PACE, or receiving hospice services; and meet the State's health home eligibility criteria as described below (e.g., having one chronic condition and being at risk of developing another, measured by a risk score generated by PRISM).

Washington's health home eligibility criteria were informed by the State's experience with a Medicaid disease management program and the Medicaid Chronic Care Management Demonstration. One of the lessons learned from these previous State demonstrations was that the potential for improving beneficiary outcomes and achieving cost savings is enhanced by targeting high-cost, high-risk individuals for chronic care coordination.

Because the Washington MFFS Demonstration is using health homes as its platform for coordinating services for Medicare-Medicaid enrollees, eligibility criteria for the demonstration are shaped by the statutory eligibility criteria for health home services as adopted by Section 2703 of the Affordable Care Act. States have several options for defining the population eligible for health home services, including the one selected by Washington: individuals with one chronic condition and at risk for another. States may define both of those factors with the approval of CMS.

To satisfy Section 2703 statutory criteria, Washington included an expansive list of qualifying chronic conditions in its Medicaid Health Home State Plan Amendment. Although other States use condition lists to meet the criteria of "at risk of developing another chronic condition," Washington wanted to define this risk in a way that would target high-risk, high-cost individuals. Washington identifies individuals who are "at risk of developing another chronic condition" through use of PRISM, which generates risk scores using Medicare and Medicaid claims data. This tool was originally developed for use in Washington's Medicaid Chronic Care

Management program. To make PRISM an effective tool for predicting costs for Medicare-Medicaid enrollees, the State has incorporated Medicare Parts A, B, and D claims. This addition was made possible when CMS provided States with Medicare data in 2011.

A minimum PRISM score of 1.5 is required for an enrollee to be considered "at risk." Individuals with this score are predicted to have medical expenditures over the next 12 months that are 50 percent greater than average for the base reference group, which is the Washington Supplemental Security Income (SSI) disability population (SPA, 2013a, pp. 9–10; Agreement, 2013, pp. 5–6).

For individuals who have less than the 15 months of electronic claims history needed to generate a PRISM score, a separate tool is used to determine medical eligibility (SPA, 2013a, p. 10). Health homes enter an individual's chronic conditions and medications into the tool, which then calculates a risk score. If it is 1.5 or greater, the tool is submitted to HCA, which performs further analysis to confirm eligibility (SPA, 2013a, p. 10; Agreement, 2013, p. 6). State officials noted that PRISM risk scores may fluctuate from week to week based on updated individual claims, but once individuals have been enrolled in a health home, they will not lose eligibility if their PRISM score drops below 1.5.

3.1.2 Enrollment Processes

Medicare-Medicaid beneficiaries who are eligible for the demonstration are auto-enrolled in a health home by HCA, with the exception of American Indian/Alaska Native individuals, who may choose to enroll in a health home but are not auto-enrolled (SPA, 2013, p. 11). Enrollment is voluntary and beneficiaries may opt out or select a different health home prior to enrollment and may disenroll at any time after enrollment, effective the first day of the following month. Enrollment in a health home enrolls a Medicare-Medicaid beneficiary in the Washington Health Homes MFFS demonstration. This differs from the process of aligning beneficiaries with the demonstration. A beneficiary who is not enrolled in a health home but is eligible for the Washington Health Homes MFFS demonstration is aligned with the demonstration for purposes of determining whether the State is eligible to share in demonstration savings.

The Research and Data Analysis (RDA) Division of the DSHS provides HCA with a list of potentially eligible Medicare-Medicaid enrollees, using PRISM to identify people with qualifying chronic conditions and risk scores. The Medicaid Management Information System (MMIS) system removes anyone who is not eligible, such as Medicare Advantage, PACE, and hospice enrollees; Medicaid-only beneficiaries; and beneficiaries who have died. An HCA enrollment specialist then selects batches of eligible beneficiaries living within a coverage area for auto-enrollment, reviewing beneficiary zip codes to achieve geographic distribution.

Beneficiaries are enrolled in a specific health home in their geographic area based on several criteria; the most important is whether a health home has the capacity to provide outreach, screenings, and beneficiary engagement for new enrollees. State officials assess a health home's capacity based on 1) performance: whether it is submitting timely encounters and enrollee health action plans; and 2) network capacity: number of contracts with care coordination organizations and the number of their qualified care coordinators. In addition, the State gives priority to enrollment of individuals in community-based health homes, considered to be the four health homes that are not managed care organizations. If the State determines that a health home does not have sufficient capacity in a given month, the beneficiary is enrolled in a subsequent month. Eligible beneficiaries with the highest PRISM scores in any given month were selected for enrollment over those with lower scores.

Determining a health home's capacity to serve new enrollees enables the demonstration to align enrollment with the growth of health home care coordination resources. However, as a result, beneficiary enrollment has proceeded at a much slower pace than anyone anticipated. (See ***Section 5*** for a discussion of health home capacity.)

Once beneficiaries are enrolled, HCA sends Medicare-Medicaid enrollees a letter 30 days before the health home enrollment effective date, notifying them they will be enrolled in a health home. An accompanying booklet describes their options, which include allowing enrollment to take effect, selecting a different health home, or opting out. Options counseling is available through the Aging and Disability Resource Centers and the Statewide Health Insurance Benefits Advisors (Washington's State Health Insurance Assistance Program [SHIP]). Options counseling is supported through a cooperative agreement award from CMS, available to States with approved demonstrations under the Financial Alignment Initiative.

Enrollment during the first quarter was extremely low—178 beneficiaries (see ***Table 1***). There were several contributing factors, including programming and coding problems related to the State's Medicaid enrollment system and limited growth in health home capacity. State officials had planned to implement health home services in Pierce County in April 2013 to test enrollment systems in one county before implementing in other coverage areas. However, approval of its health home SPA was delayed and did not become effective until July 1. Because Washington had begun to lay the groundwork for initial enrollment of individuals in three coverage areas, including Pierce County, beginning July 1, it proceeded with its plans to enroll Medicare-Medicaid beneficiaries in health homes in these areas. However, by not being able to use Pierce County as a pilot, Washington missed the chance to test enrollment systems in a single county before implementing on a larger scale.

Washington's decision to use the MMIS managed care enrollment module for health home enrollment resulted in a series of unintended consequences. Because of programming and coding errors, thousands of people were mistakenly enrolled into one health home and then had to be disenrolled. The system also accidentally began to pull Medicaid-only beneficiaries out of managed care plans and enroll them into health homes. In addition, a series of small, yet troublesome coding problems kept arising. Without a pilot-testing period, these setbacks affected enrollment in half of the State's coverage areas instead of just one county.

State officials said that taken individually, none of the enrollment system glitches took long to recognize, but each incident typically required several days to identify the cause and several more days to fix it. Some problems generated service requests to State MMIS staff, whereas others had to be referred to a contractor. State officials noted that contributing to the challenges of enrolling people in health homes were the massive demands that had been placed on the Medicaid eligibility and enrollment systems in the past year: for example, adding to managed care Medicaid beneficiaries who were blind or had disabilities, implementing Medicaid expansion, and establishing a crosswalk between the Medicaid eligibility system and the State health insurance exchange.

In addition to technical systems problems, program start-up issues limited efforts to quickly develop health home capacity, which affected enrollment during the early months. For example, it took longer than expected to finalize contracts between the State and some health homes, which in turn delayed the ability of health homes to enter into contracts with care coordination organizations. Also, the delay in finalizing the CMS Medicare data use agreement with the State pushed back the initiation of training for health home care coordinators required for accessing PRISM and complying with its data privacy provisions. Thus, the infrastructure that could receive enrollees and begin providing care coordination developed more slowly than the State would have liked.

3.1.3 Integration of Enrollment Systems

Beneficiaries enroll in a Medicaid health home to participate in the demonstration. A beneficiary is enrolled in the demonstration when the State automatically enrolls a beneficiary in a health home. There is no specific enrollment in a Medicare program other than the beneficiary's regular Medicare fee-for-service benefits. Thus there is no integrated Medicare-Medicaid enrollment system.

3.1.4 Locating Enrollees

Locating enrollees presents a significant challenge for care coordinators and can have financial implications for health homes. State officials noted that the shift to electronic processes for Medicaid enrollment has had an unintended consequence: because the Medicaid ID card is "good for life," enrollees do not have an incentive to regularly update their contact information; thus, HCA is unaware of changes in their mailing addresses.

Over the course of the demonstration, a great deal of attention has been devoted to identifying new ways to locate enrollees. The results have been somewhat successful. Using claims information in PRISM that identifies an enrollee's providers, care coordinators have contacted primary care physicians and other providers to locate enrollees; they have contacted pharmacies; and they have contacted the Medicaid transportation broker to see if an individual has requested services.

3.1.5 Beneficiary Enrollment Decisions

As the State expected, opt-outs and disenrollments have been low because enrollment has enabled beneficiaries to qualify for a new service without limiting their choice of other services and providers.

3.2 Summary Data

A beneficiary is considered "enrolled" when the State automatically enrolls him or her in a health home. As ***Table 1*** shows, enrollment was low in the first few quarters because of initial start-up challenges health homes faced in hiring care coordinators. As Washington addressed these challenges, the number of enrolled beneficiaries steadily increased through demonstration quarter (DQ) 8.

Table 1
Washington Health Homes MFFS demonstration: Changes in quarterly enrollment

Enrollment status	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6	DQ7	DQ8
Enrolled	178	2,045	4,136	5,767	7,801	10,632	13,677	16,778
Disenrolled during quarter								
Voluntarily disenrolled	0	#	0	#	#	#	16	32
Involuntarily disenrolled[1]	16	54	190	356	573	733	1,091	1,489
Newly enrolled	192	1,917	2,280	1,923	2,477	3,376	3,846	4,254

= not reported due to small sample size (n ≤ 10).

DQ = demonstration quarter; MFFS = Managed Fee-for-Service.

[1] Disenrollment due to death, moving out of area, loss of Medicaid eligibility, or incarceration.

Notes: "Disenrolled during quarter" includes a small number of individuals who opted out. The eighth DQ was from April 1, 2015, to June 30, 2015. For Washington, enrollment is defined as beneficiaries being enrolled in the care model (e.g., health home). Each number represents a quarterly value (not cumulative across quarters).

Source: RTI and AIR calculations based on data submitted by Washington into the SDRS.

As of June 30, 2015, there were 20,541 beneficiaries eligible for the demonstration, of which 16,772 were enrolled. The eligible beneficiaries who were not enrolled as of this date will be enrolled in subsequent quarters. The number of beneficiaries eligible for the demonstration steadily increased with each demonstration quarter. For this report, "eligible" includes all beneficiaries eligible for the demonstration even if they are not yet enrolled. Beneficiaries are considered eligible at the time they meet demonstration criteria for enrollment and are in counties in which the demonstration is active. In Washington, this means that people in the geographic area covered under the second phase of enrollment were not eligible until the second demonstration quarter (see ***Table 2***). The influx of newly eligible beneficiaries during the first two demonstration quarters represents the initial phases of identifying eligible beneficiaries, so subsequent quarters show fewer newly eligible beneficiaries. Relatively few beneficiaries have had their eligibility end during a quarter, shown below as a negative value.

Table 2
Washington Health Homes MFFS demonstration: Eligible beneficiaries

Eligibility status	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6	DQ7	DQ8
Continued eligibility from previous quarter	0	6,652	14,902	16,321	16,735	17,787	18,088	18,608
Newly eligible during quarter	7,821	9,524	2,745	1,812	2,387	1,880	2,122	1,941
Eligibility ended during quarter	−283	−886	−1,274	−1,326	−1,398	−1,335	−1,579	−1602
Total eligible during quarter	7,538	16,176	17,647	18,133	19,122	19,667	20,210	20,549

DQ = demonstration quarter; MFFS = Managed Fee-for-Service.

Note: The eighth (DQ was from April 1, 2015, to June 30, 2015. Each number represents a quarterly value (not cumulative across quarters). Individual numbers may not add up to the total because of rounding or eligibility/enrollment data lags.

Source: RTI and AIR calculations based on data submitted by Washington into the SDRS.

3.3 Successes

The use of PRISM, Washington's predictive modeling tool, facilitated the State's ability to target demonstration enrollment to high-cost, high-risk beneficiaries.

As of June 30, 2015, there were 16,778 beneficiaries enrolled in the demonstration.

3.4 Challenges

Multiple technical issues arose during the first quarter that prevented enrollment and diverted State staff from activities to support demonstration implementation.

Incorrect contact information for health home enrollees made it difficult for health homes to locate them. As a result, health home staff had to focus on outreach instead of enrollee engagement.

3.5 Preliminary Findings

Once initial technical systems issues were resolved, the demonstration enrollment process proceeded without problems and was straightforward for both enrollees and the State.

Unlike enrollment systems in capitated model demonstrations under the Financial Alignment Initiative, integration with Medicare's enrollment system was not required because beneficiaries were enrolled in a Medicaid health home without enrollment in a new Medicare benefit. Thus, Medicare involvement was not required.

Determining a health home's capacity to serve new enrollees enables the demonstration to align enrollment with the growth of health home care coordination resources.

4. Care Coordination

Highlights

- Health homes and their network of CCOs provide care coordination to demonstration enrollees.
- A major focus of Washington's care coordination activities is to engage enrollees to set health action goals for improving their health status and increasing their health self-management skills.
- Resources such as PRISM and HAPs guide the individualized care coordination activities conducted with enrollees.

4.1 Care Coordination Model

Washington's health home care coordinators complement the roles of existing case managers and serve as a bridge connecting individual service delivery systems. Health home care coordinators are employed by CCOs or by the health home itself. They conduct outreach to enrollees, engaging them in their homes, assessing their needs, and developing person-centered HAPs. Health home care coordinators identify unmet needs, arrange services, coordinate across delivery systems, and assist with transitions and referrals.

Many of the functions Washington's health home care coordinators perform are similar to roles performed by care coordinators in other States' systems that are trying to integrate care across delivery systems. What makes Washington's care coordination system unique is its focus on engaging enrollees to set health action goals and increase self-management skills to achieve optimal physical and cognitive functioning. The State's prior experience with the CCM program as well as research on patient engagement has shaped its approach to care coordination provided through the demonstration. They believe this approach improves the health status of enrollees and reduces use of high cost health services, such as repeated hospital and emergency department admissions.

In response to questions from the evaluators during a site visit to Washington in January 2014, State officials consistently noted that increased engagement of enrollees in managing their health risks and achieving self-identified outcomes would be among the most important results of the demonstration. In multiple ways, the State has established policies to reinforce that goal. It developed requirements for delivering health home services that extensively focus on roles that health homes must perform to engage enrollees in improving their own heath. Health homes cannot start providing care coordination to an enrollee until an individual Health Action Plan is finalized. Also, the State continues to conduct training sessions for health homes on motivational interviewing so they can improve their skills to promote self-action by enrollees.

4.1.1 Model of Care Coordination

The HAP is a foundational element of the Washington demonstration. As noted above, health homes cannot initiate health home services for enrollees until a health action plan has been finalized and submitted to the State. Demonstration staff emphasize that a HAP is not a care plan, but rather an articulation of enrollee goals that drive the individualized functions care coordinators perform with each enrollee.

When the State enrolls beneficiaries into a health home, the health home assigns them to a specific CCO after reviewing their service utilization data and other information stored in PRISM to see if they have an existing relationship with a CCO in the area. If there is no prior relationship, the health home matches enrollees with the CCO that is most experienced in addressing the needs identified through PRISM.

A health home care coordinator then contacts enrollees to offer health home services, and if they agree, a home visit is scheduled. Before the visit the care coordinator prepopulates parts of the HAP with information from PRISM about the enrollees' Medicare and Medicaid service utilization, health conditions, completed assessments, and other relevant health information. During the home visit, the care coordinator initially engages enrollees by discussing with them their health status, treatments, health risk factors, and care needs.

The goal of the home visit is to develop a HAP. If enrollees agree to develop a HAP, the health home care coordinator conducts required screens for functional limitations, depression, body mass index (BMI), and any other optional screens as indicated by enrollee medical information stored in PRISM. In addition, the Patient Activation Measure® (PAM®) is assessed for all enrollees to measure their knowledge, skill, and confidence in managing health conditions and health services (Washington HCA, 2013c; hereafter, Contract, p. 32). PAM scores have been validated as strong predictors of health care outcomes, including medication adherence, emergency room visits, and hospitalizations (Insignia Health, 2014). Washington's health home care coordinators use PAM scores to identify the level of enrollee-specific coaching and mentoring activities needed to develop a higher level of enrollee self-activation.

The HAP documents enrollees' chronic conditions, gaps in care, their activation level as measured by PAM scores, and opportunities to prevent potentially avoidable emergency room, inpatient hospital, and institutional use. Most importantly, it includes enrollees' own priorities for improved health, identifies strategies they could take to reach those goals, and ways the care coordinator can assist them. Completing the HAP confirms the individual's consent to receive health home services and enables the health home to begin billing for care coordination.

With the consent of enrollees, the HAP is shared electronically with their providers, case managers, and others who could help in achieving health goals. The HAP is updated every 4 months during a home visit by the health home care coordinator to reflect progress toward the enrollee's clinical goals and patient-centered health goals and incorporate results of the required health and PAM screenings, which are also performed every 4 months (SPA, 2013a, p. 49; Contract, pp. 32–3, 35).

State demonstration staff noted that care coordinators may have had previous roles in other programs where care plans were based on what the care coordinator believed the enrollee needed. To create a new culture, the State launched an extensive training program on writing a person-centered plan; provided training on motivational interviewing; and developed tools to assist care coordinators, such as worksheets to guide the HAP planning process. State officials say that the objective is for a HAP to be a living, breathing, meaningful roadmap that is updated, comprehensive, that has some value to the enrollee and the health home team.

Since the overarching focus of the demonstration is on engagement and empowerment of enrollees to improve their own health status, during the RTI evaluation team's most recent site visit, we asked demonstration staff to describe some typical activities a health home would undertake to advance that goal. They described the interactive process of developing a HAP as follows:

> We ask an enrollee to identify a long-term goal you would ultimately like to do that you can't do now. What's one of the most important things about your health you'd like to change or improve? We coach them to identify a long-term goal and then consider one of many short-term goals to help achieve that longer-term goal. In the course of the conversation and based on the screens we do with the knowledge of the PRISM utilization data and their goals, we ask them "So, your long-term goal is what? A pretty common goal would be "Wake up in the morning and not be in pain." "What would you like to do related to that?" "Better understand how to use my medications. Start an exercise program." Those activities come underneath the short-term goal. The care coordinator will ask the enrollee "What of these do you want to do? Want your caregiver to do? What can I do?" If there are four activities, the enrollee may be assigned to four different people with different timelines for each activity. So the initial health action plan will identify the long-term goal, short-term goals, the activities under that, and who's going to do what when. Checking back, the care coordinator schedules repeat home visits, phone calls, office visits, and team meetings in support of these HAP activities.

4.1.2 Roles of Care Coordinators

Health homes can provide one or more of six services as specified in the Federal statute authorizing health home services and incorporated in their contracts with the State. These services include:

- Comprehensive care management
- Care coordination
- Health promotion
- Comprehensive transitional care from inpatient to other settings
- Individual and family support
- Referral to community and social support services, if needed

As demonstration staff note, care coordination is the most frequently provided health home service, but not all enrollees automatically receive it. Some may already have their care well-coordinated, and may have needs in other areas. Their health home services are driven by their HAP. As the beneficiary experiences reported in ***Section 5*** illustrate, care coordinators are performing a wide range of functions. These include coaching enrollees to identify and achieve health goals; helping enrollees access non-health environmental supports; accompanying enrollees to physician visits; and identifying alternatives to emergency room visits.

Based on the billing patterns of health homes it appears that most enrollees are receiving intensive health home services, defined in part by a monthly face-to-face visit with a care coordinator. Both health home representatives and State officials reported a typical health home caseload has an average of 75 percent of enrollees whose services qualify for the intensive payment tier.

Effective April 1, 2015, the State adopted a policy designed to facilitate face-to-face interaction between an enrollee and a care coordinator when the enrollee is homeless or lives in an unsafe environment. A care coordinator may request non-emergency transportation for the enrollee to alternative locations to conduct care coordination services, such as developing a HAP or administering the required health assessments. At the time of our June 2015 site visit, this policy was too new to obtain an indication of how widely it is being used.

Care Coordination

For many enrollees, care coordination addresses primary care, LTSS, and behavioral health services. As previously noted, the care coordinator's role is to be a bridge across these delivery systems and identify gaps in needed supports. The health home care coordinator's role will vary depending on whether enrollees have a formal relationship with the LTSS and/or behavioral health delivery system. In those instances, the care coordinator will collaborate with enrollees' service-specific case managers. However, these service-specific case managers are charged with coordinating services provided by their delivery systems; they are not responsible for addressing—nor do they have the time to address—enrollees' other needs, such as health care, housing, transportation, and nutrition. In particular during our site visits, the RTI evaluation team was provided with numerous examples of instances in which the behavioral health system was only able to narrowly focus on treatment and did not have resources to address broader needs. Health home care coordinators were able to step in with that support.

One health home provided an example of the support provided by a care coordinator. A homeless enrollee with severe and persistent mental illness (SPMI) was taking multiple medications that he dumped in his backpack. He did not know what he was taking and which ones he had to take when. The care coordinator arranged for him to receive his medications in bubble pack mini-sets, so that wherever he may be at a given point in time, he can pull a bubble pack and take the medications at the right time and know if he missed one.

In addition to the HAP, PRISM is an essential resource for care coordinators. Weekly Medicare and Medicaid claims are uploaded into enrollees' files, enabling care coordinators to use current information to track utilization of Medicare- and Medicaid-financed services. In particular, PRISM information can flag for care coordinators potential health concerns for follow-up, such as essential medications that have not been filled, new diagnostic codes occurring in claims, and bursts of intensive health care services utilization.

Care coordinators communicate with an enrollee's providers in a variety of ways. They send all currently involved providers and service-specific case managers a copy of an enrollee's initial HAP and updates developed at 4- and 8-month intervals. When they learn of a change to an enrollee's status, they contact the relevant provider by phone, fax, or secure email. To provide intensive support to enrollees who are high utilizers of health care services and have particularly complex needs, care coordinators convene monthly case conferences among an enrollee's providers to facilitate collaboration.

Facilitating Transitions

Providing transition supports is another central health home role. In the course of developing a HAP, the enrollee and the care coordinator begin a formalized transitional care-planning process, identifying activities and protocols that will be followed if the enrollee transitions from one care setting to another, for example, from a hospital to an enrollee's home. Prior to the demonstration, none of the case management agencies embedded in service-specific delivery systems provided comprehensive transitional care. Care coordinators are required to make timely visits to the hospital or nursing facility to which an enrollee has been admitted; actively participate in discharge arrangements; ensure that follow-up care is scheduled and medications are accessible; and conduct home visits and follow-up phone calls with enrollees.

Health homes are required to have referral agreements with hospitals for health home enrollees who seek care in hospital emergency departments. Health homes must also have an established relationship with an entity that will notify them when an enrollee is admitted to a hospital. For example, some health homes have made arrangements with the Emergency Department Information Exchange, which has a long-standing capability of sharing hospital admissions data with providers; others are working with the State's designated Health Information Exchange (HIE), OneHealthPort, to receive notifications. One health home has a contract with a regionally based HIE to receive notifications when their enrollees are admitted either to the hospital or to the emergency department.

Health homes can also track enrollee admissions to nursing facilities through their HIE agreements. As both State officials and health home care coordinators commented, most beneficiaries enter nursing facilities following a hospitalization. Through their HIE agreements health homes are notified of enrollee hospital admissions and discharges.

PRISM is another source of information available to care coordinators to identify when an enrollee has been hospitalized or admitted to a nursing facility. However, because the PRISM data is claims-based, information on enrollee hospitalizations is not timely for initiating immediate transition supports. Likewise, health homes also have access to the State's LTSS database CARE, which contains LTSS assessments, case managers' notes, service plans, and service utilization data. However, that database has the same timeliness constraints as PRISM.

Care Coordination Capacity of Health Homes

The biggest challenge facing the demonstration since its inception has been building a supply of care coordinators sufficient to enroll all eligible individuals into the demonstration and work with them to develop HAPs. The HAPs are necessary to trigger initial care coordination to enrollees. Some one-time circumstances limited the ability of health homes and CCOs to hire care coordinators during the demonstration's first 6 months. There are other factors that have persisted throughout the demonstration's implementation. Together the State and the health homes have tried to overcome them.

Start-up Challenges

State enrollment systems faced challenges during the first 3 months of the demonstration, including a wide range of computer programming and coding issues (see ***Section 3***). As a result, only 176 individuals were enrolled in the demonstration during that time frame. Without demonstration enrollees, health homes and CCOs had no other source to pay care coordinators and were therefore reluctant to hire new staff. Although the State enrollment systems issues were eventually resolved, this early glitch contributed to ongoing reluctance by some health homes and CCOs to hire staff before they had amassed sufficient enrollment to support the cost of a new care coordinator. Cautious hiring and contracting rates by some health homes have reportedly continued throughout the demonstration, and as a result, the pace of enrollment has been slower than planned.

In the same vein, early in the demonstration, because of information systems issues, health homes were unable to bill the State for care coordination services they had provided. The demonstration uses an encounter billing system rather than claims. The State and the health homes each have their perspectives on why the State's billing systems would not accept the health homes' submitted encounters; the outcome was that health homes needed to make significant investments in their billing systems to receive and submit encounters for health home services.

Locating Enrollees

Locating enrollees presents a significant challenge for care coordinators and can have financial implications for health homes. State officials pointed out that an unintended consequence of the shift to electronic Medicaid enrollment processes is that, because enrollees receive enrollment verifications by email, HCA is unaware of changes in their mailing address. The inevitable result is that it does not have current addresses for many enrollees. This has two implications for the ability of health homes and CCOs to build care coordination capacity. First, care coordinators' time is being diverted from engaging with enrollees to locating new enrollees. Second, health homes are not paid for outreach activities and cannot begin providing care coordination services unless an enrollee develops a HAP.

Because of the State's strong emphasis on enrollee engagement through the development of HAPs, it established a financial incentive to motivate health home performance. Initially the payment methodology for health homes included a second-year performance payment reduction if the percentage of its enrollees who have not developed a HAP falls below 28 percent. However, in October 2014, the State decided not to impose the payment reduction because of the financial burden it would place on health homes.

As of September 30, 2014, 16 percent of enrollees had a HAP. Over the 6-month period of April 2014–September 2014, the number of HAPs developed doubled, indicating an increase in care coordination capacity (see ***Table 9*** in ***Section 7*** for the monthly increase in the development of HAPs). However, the engagement rate (the percentage of enrollees with a HAP and accompanying care coordination activity) stayed relatively constant at 14–16 percent over that 6-month period because enrollment also doubled (HCA, 2015). As health homes have been able to hire more care coordinators, they have been able to increase their engagement rate.

Over the course of the demonstration, a great deal of attention has been devoted to identifying new ways to locate enrollees. The results have been somewhat successful. Using claims information in PRISM that identifies an enrollee's providers, care coordinators have contacted primary care physicians and other providers to locate enrollees; they have contacted pharmacies; and they have contacted the Medicaid transportation broker to see if an individual has requested services.

Health Home Care Coordination Staffing Policies

To support care coordinators, health homes may also employ administrative support staff and community health workers to perform non-clinical functions such as conducting outreach, locating services for an enrollee, or enrolling them in a benefits program. The State has encouraged health homes to make greater use of these affiliated staff to extend the availability of care coordinators to perform clinical functions for more enrollees.

There is no State policy on required caseload ratios. The health home payment model assumed a caseload ratio of 50:1, using a clinical care coordinator to perform most functions. The health homes and CCOs interviewed by the RTI evaluation team had caseload ratios in that ballpark or slightly higher.

Availability of Care Coordinator Training

Limited availability of care coordinator training has hindered the capability of health homes and CCOs to hire new staff. Before they can provide health home services, care coordinators are required to take a 2-day training course that covers a wide range of information and skills needed to perform this new job. Specifically, the training addresses program philosophy and how it differs from related State programs; care coordination functions; use of PRISM in developing HAPs and for ongoing care coordination; outreach and engagement techniques; PAM; motivational interviewing and coaching; mental health; and care transitions. Because PRISM contains Medicare- and Medicaid-protected health data, the CMS data use agreement with the State requires training segments on confidentiality and information technology. If care coordination training is not available, health homes cannot hire care coordinators.

During the first 6 months of demonstration implementation, State staff conducted 20 2-day sessions to qualify 350 care coordinators. Following this initial round of training, the State concluded that as health homes and CCOs continue to add care coordinator capacity, a train-the-trainer model would be needed. It designated lead trainers in each of the health homes to replicate the initial training provided by State staff. But the health homes did not conduct training frequently or on a predictable schedule. And health homes were intended to have access to the training provided by other health homes, but information was not shared about when they had been scheduled. Health homes began offering ad hoc training sessions as needed. This resulted in small class sizes and a duplication of efforts by the trainers.

To support a more robust care coordinator hiring strategy, the State established a statewide training calendar, with health homes rotating to lead training from month to month. . The Statewide training calendar was implemented in May 2014, offering a session each month in Western and Eastern Washington. Training is now predictable, enabling health homes and CCOs to dovetail hiring plans with available training.

Care coordinators are also required to complete ongoing training within their first 6 months on the job, but these have been more accessible, partly because they are conducted on a regular basis by State training staff. These webinar sessions include outreach and engagement strategies; navigating the LTSS system; cultural and disability competence; assessment screening tools; Medicare grievance and appeals; and coaching and engaging enrollees with mental health needs. The online Care Coordinator Toolkit provides clients and families with health education materials on chronic disease.

Standardization of Care Coordination Policies across Health Homes

Most CCOs provide health home services under contract with several health homes, each of which has distinct policies and operational procedures. State officials noted that their objective in giving health homes flexibility to set local care coordination operating policies had unintended consequences. For example, each health home has its own reporting requirements for the CCOs with which they contract. They also use different platforms for documenting care coordination functions. As a result, care coordinators in CCOs have to learn several distinct operational systems. The CCOs interviewed by the RTI evaluation team emphasized that dealing with these multiple systems is a significant factor that diverts time and resources away from working with enrollees. The State agrees but questions whether it is too late to force health homes to use a single platform.

Another variation of policy among health homes was differing interpretations of State guidelines on what constitutes intensive versus low-level care coordination as applied to the two tiers of health home service payment rates. CCOs reported that what one health home would classify as intensive care coordination provided to an individual (thus eligible for a higher payment rate) would be classified by another health home as low level. The State led an effort to clarify definitions, particularly focusing on the circumstances in which care coordination provided to an individual would change from one tier to another. Now all health homes and CCOs reportedly share a common understanding.

4.1.3 Relationships between Multiple Care Coordinators

As discussed in ***Section 4.2***, health home care coordinators complement the roles of case managers embedded in specific delivery systems, such as LTSS and behavioral health. Health home care coordinators focus on the full range of an individual’s needs, and focus on areas that case managers are typically unable to address such as health risks, medical conditions, and health outcomes.

Health homes have MOUs with the organizations that provide case management and authorize Medicaid services within the LTSS, chemical dependency treatment, and behavioral health systems. The MOUs spell out how all of the organizations will share information and the privacy procedures that will be followed. During interviews, health home care coordinators discussed informing the case managers when a significant event occurred related to an enrollee and receiving information from case managers about service plan changes.

4.1.4 Roles of the Health Home and Care Coordination Organizations

Care coordination is provided either by health homes functioning as their own CCO or by CCOs that are a part of the health homes' contracted networks. The general principle that health homes follow in assigning an enrollee to a CCO is to review PRISM service utilization data to determine if an enrollee has a prior relationship with a contracted CCO.

Patterns of delegation vary among the four community-based health homes. One delegates all care coordination to its contracted CCO and does no care coordination itself. The two health homes that are AAAs perform care coordination for enrollees who receive HCBS waiver services, since they are the LTSS authorizing agencies and would have a prior relationship. All other enrollees are assigned to CCOs in the health homes' networks. The fourth health home is a consortium of providers that performs care coordination for some of its enrollees, but more typically delegates care coordination to its provider members.

Health homes are responsible for oversight of the CCOs and handle administrative functions on their behalf, such as submitting Medicaid encounters for payment and submitting completed HAPs to the State's database. CCOs interviewed during the site visit were generally satisfied with relationships with the health homes and the volume of enrollee assignments they received. However, CCOs that are part of networks of several health homes noted their frustrations with the differing reporting processes and requirements and care coordination platforms each health home has established. (See discussion above in ***Section 4***.)

4.1.5 Information Sharing

Care coordinators reported during site visit interviews that they routinely shared enrollee information with providers, particularly primary care physicians, and with delivery system-specific case managers, with the permission of the enrollee. Typically, information was shared by secure email. Some CCOs have capability to transmit electronic health records, but the smaller, more social service-based CCOs do not. With the permission of the enrollee, HAPs (which are in an electronic format) are shared by care coordinators with all relevant providers and case managers.

4.1.6 Use of Integrated Care Teams

Care teams, led by the care coordinator, vary dramatically in composition and function depending on the enrollees' individual health goals. Members could include primary care physicians, other providers, delivery system-specific case managers, and health home staff who specialize in motivational behavior. As noted previously, the support an enrollee receives from a health home is highly individualized, and so too is the care team.

4.2 Successes

The demonstration has established a new culture for providing care coordination services based on enrollee empowerment and engagement. The results of the enrollee focus groups reported in ***Section 5*** provides examples of the beneficiary health activation that has been achieved through the demonstration.

4.3 Challenges

The biggest challenge facing the demonstration since its inception has been building a supply of care coordinators sufficient to enroll all eligible individuals into the demonstration. Without an adequate supply of care coordinators, the demonstration cannot work with enrollees to develop HAPs and provide care coordination to support achievement of enrollee goals.

4.4 Preliminary Findings

The nature and scope of health home services provided by care coordinators to enrollees varies significantly based on individual goals as articulated in a HAP. There is no standardized expectation of what each care coordinator should do, except tailor their functions to each person's needs.

There appears to be widespread consensus among State officials, health homes, and stakeholders, as well as anecdotal evidence from beneficiaries themselves, that this model of care coordination is yielding positive results. However, the vision of this new system has not been fully realized at this time because a high proportion of enrollees are not yet engaged through the development of a Health Action Plan and the care coordination its completion initiates.

5. Beneficiary Experience

Highlights

- Focus group participants reported achieving goals or significant improvements in health or quality of life.
- Successes ranged from reduced emergency department use, overcoming depression, weight loss, increased exercise, and smoking cessation.
- Participants appreciated health home support for achieving their goals.

5.1 Summary

Evaluation of beneficiaries' experiences with the demonstration focused on the experiences of focus group participants who were enrolled in a health home and had engaged with their care coordinators to complete a Health Action Plan. Focus group participants reported that health home services helped them access services, coordinate care, and make changes in their own behavior. Some of the focus group participants still struggled—as they did prior to the demonstration—to access specialty services including mental health services and dental care, and some participants experienced additional new struggles with communicating across providers. Overall, however, they were actively engaged in setting goals for improving their health status and quality of life, and they reported achieving those goals with support from their health homes.

Focus group participants recognized setting and achieving goals as being closely associated with health home care coordination. They were less clear on the relationship of other care coordination functions to health homes, possibly because health homes are still new and participants receive services from multiple agencies. When they needed help accessing services, some focus group participants said they contacted their health home care coordinators, while others described advocating for themselves or contacting familiar agencies for assistance, such as HCBS and behavioral health case managers.

5.2 Methods and Data Sources

The evaluation collected data on beneficiary experience through beneficiary focus groups, site visit interviews with care coordinators, and a review of health home documents describing the beneficiary experience. The state has not conducted research on beneficiary experience, but did share vignettes submitted by health homes.

RTI conducted four beneficiary focus groups in Washington, over 3 days in September 2015. Two groups were held in Bellingham on September 15, one in Yakima on September 16, and one in Vancouver on September 17. A total of 32 demonstration enrollees participated in the focus groups. Focus group participants were recruited from a list of demonstration enrollees provided to the RTI evaluation team by the Washington DSHS. As a token of the RTI evaluation team's appreciation for their input, focus group participants were given gift cards. Participants were similar in demographic and health conditions to the enrollee population overall.

5.3 Impact of the Demonstration on Beneficiaries

5.3.1 Overall Satisfaction with the Demonstration

Most focus group participants reported experiencing improvements in their health, quality of life, and access to services. Many of the changes resulted from enrollees setting goals and taking responsibility for their own health. The following vignettes are based on success stories reported by health home care coordinators and remarks of focus group participants. Participants' remarks are presented in their own words, as indicated by quotation marks, and have been edited for length and clarity.

- "I was shut in my house for years. My windows were drawn. I didn't have company. I just was mentally depressed, and my house was horrible—not dirty, but just like hoarders…Well, I'm completely off my psych medications, and I was on a lot of them for many years. I go outside. I interact with my neighbors. I go to church. My cholesterol is down to normal. It was dangerously high for many years."

- An older enrollee asked for help cleaning junk out of his living room. The care coordinator arranged for a social service agency to remove it, enabling the enrollee to set-up a stationary bike, which he is using to rebuild his stamina and strength.

- An enrollee faced eviction and homelessness. His care coordinator intervened with the landlord and helped avoid relocation or homelessness.

- An enrollee achieved his goal to quit smoking after his care coordinator referred him to free smoking cessation classes. His care coordinator also arranged counseling on weight loss and managing diabetes, and referred him to a Chronic Disease Self-Management Program, which helped him increase his physical activity.

- An enrollee was homeless, living in his car, and had difficulty storing his insulin and taking injections on schedule. His care coordinator helped him find temporary shelter with refrigeration for his insulin. He was assessed for LTSS and may qualify for assisted living. His care coordinator helped him access mental health services and primary care.

- An enrollee's care coordinator accompanied him on a visit with his primary care provider (PCP) to discuss his reliance on pain medications and alcohol. He felt unable to control his substance use without assistance and entered a detox facility. His care coordinator helped with discharge planning and finding new housing in a town where he will be less isolated and have better access to medical care.

- "Well, I think now there's kind of steps. If you're in the hospital, then they provide you with the things that you need. It's more channeled through the case manager and stuff, where before it wasn't. You didn't have anybody to go to and it seemed more confusing."

5.3.2 Access to and Quality of Services

Because the Washington Health Homes MFFS demonstration uses the fee-for-service financial alignment model, enrollees continue to access their providers directly and are free to seek services from any fee-for-service provider. However, the demonstration support improved access to care for enrollees by helping them communicate their health goals to providers, identifying unmet needs, arranging services, and providing health education and information. Most focus group participants had established relationships with PCPs and specialists and did not need assistance connecting with physicians, although a few had received assistance communicating with physicians. Several participants reported problems finding specialists who would accept Medicare or Medicaid, a long-standing problem the demonstration is not designed to address. Participants reported that their care coordinators had helped them access a wide range of services, including medical equipment, assistive technology, home modifications, and health education.

- "I have access to an EMPI (pain management) machine…They've got me everything for my neck to hold it in place. I have everything that anybody could possibly want."
- "After my care coordinator came, she sent out a nutritionist because I had some nutritional questions."
- "I can go to (my care coordinator) if I need some medical equipment or if something's wrong I can go to her. She actually calls…If we didn't have the care coordinator and they weren't doing their job, then we wouldn't know about these things and we wouldn't get that help."
- "Most of my doctors will accept the Washington insurance. Since August—and now it's September, all these weeks—they just called me yesterday and said, 'We can't accept your insurance. You'll have to go find someone else.' Finding someone else with this disease is not the easiest."
- "It's difficult [*to find a mental health provider*] unless you go with an agency. There's no psychiatrist in the Vancouver area, I think, that takes Medicare…That is a big problem for the majority of people."

5.3.3 Relationships with Health Home Care Coordinators

Focus group participants had some difficulty differentiating between their health home care coordinators and case managers in the HCBS and behavioral health systems. The distinguishing factor was that health home care coordinators had helped participants set goals and provided support to achieve those goals, particularly in the areas of chronic disease management and quality of life. Some participants carried their care coordinators' cards in their purses and wallets. Once they understood that the focus group facilitator was asking about the person who helped them set and achieve goals, many focus group participants offered very positive comments about their care coordinators:

- "She seems very helpful and very much interested in my care. And we've set goals and things like that for exercising and improving my weight loss and my physical health and things like that."
- "He comes to my house once a month. If I need him by tomorrow, he'd be there to see me. He's more than happy to help me with any need that I have."
- "If I need help, she's kind of a resource person and helps me set goals."
- "She actually just walked me through the whole process of when I got my dentures and she followed up with me. She's like 'Don't give up. It's going to hurt for a little while, but it's worth it and it will get better.'"

5.3.4 Person-centered Care and Patient Engagement

Participants in the focus groups said they want to be involved in their health care and emphasized the need to advocate for themselves. Most focus group participants said they had found regular medical providers who listen to them, provide options, and include them in decisions. Many focus group participants voiced dissatisfaction with current or former providers who did not listen or present options. A few participants said their care coordinators had helped them communicate with physicians:

- "If I need help, she's kind of a resource person and helps me set goals. And then we'll talk to the doctors I see, if need be, as an advocate."

Nearly all of the focus group participants exhibited some degree of patient activation. Health home services support patient activation through goal setting and by providing health information and resources for chronic disease management. While care coordinators were strongly associated with setting and achieving goals, some participants did not think of their care coordinators when they have problems with services. These participants talked about advocating for themselves, or relying on familiar agencies for assistance resolving problems, rather than calling their health home care coordinator:

- "Well, I'm a squeaky wheel if I don't get my way. And also I'm under the theory if you don't ask, you won't get a yes."
- "I would call [care coordinator] if I needed help with something, but I don't think she would be very necessary because I have so many different layers of help for different things that I think she would be one of the later people I would try."
- "I would call different organizations, and probably that is because I worked in mental health for so many years."

5.3.5 Beneficiary Protections

Under the Washington demonstration, beneficiaries continue to receive their Medicare and Medicaid services under fee-for-services arrangements, and beneficiary protections are unchanged.

An ombuds program exists to help beneficiaries who are having problems with LTSS. The program has no specific role related to the demonstration. Some of the participants reported that they were familiar with the ombuds program in the LTSS and behavioral health systems and had used it successfully. Other participants reported talking with supervisors or changing providers when they had problems with services.

5.3.6 Impact of Services on Health, Well-being and Quality of Life

Approximately half of focus group participants reported improvements in their health and quality of life. Typically these outcomes were the result of goals set during the assessment process. Participants indicated successes such as improved management of chronic conditions, increased activity, and increased community engagement. They were more likely to achieve their goals by changing their own behavior rather than by accessing additional services. In some cases, health information provided by the health home helped participants reach their goals. Goals included managing diabetes, quitting smoking, weight loss, maintaining ambulation, and increased community engagement, as illustrated by these quotes:

- "I was going to the emergency room three or four times a week for little things. Since I started working with [my care coordinator] over the last 2 years, I've been to the ER once in 2 years. If I'm worrying about something, she gave me some nurse hotline numbers I can call."

- "My blood sugars were super high, so she gave me some suggestions. And with other classes that I took, I've reached my goals. I've been able to work on it, and she's given me suggestions, brought out material for me to go over. So it's been a benefit."

- "I've taken pills for my diabetes. Now I don't take anything because my diabetes is [under] control."

- "I lost 80 pounds. I'm walking. My vertigo has gotten a lot better…my balance isn't a lot better, but I should be using my walker…I learned a pain management program from their pain management person, too."

- "I quit smoking."

- "Actually, I had a goal where I use the walker when I walk…My goal was to walk around the house at least twice a day and I met that goal. My next goal was to be able to go from the living room to the bathroom and back. I met that goal also."

- "And you can change [your goal] from time-to-time. I do a book discussion group. I do a garden group…they keep me mentally alive."

5.4 Successes

Health home services have helped enrollees achieve a wide range of improvements in their lives, from securing housing to managing chronic conditions and increasing community engagement. Care coordinators were most likely to report successes achieved by helping enrollees to access services, whereas many focus group participants described changing their own behavior with support from their health home.

Health homes may have also had an impact on the level of patient engagement by encouraging enrollees to set goals, change their behavior, and participate in managing their own health care. Nearly all of the focus group participants were engaged in their own health care to some degree, and many were highly engaged.

5.5 Challenges

Some focus group participants had trouble differentiating their care coordinators from service-specific case managers who have more limited responsibilities. Many focus group participants looked to their care coordinators for assistance setting and achieving goals, and utilized their HCBS case managers and providers for assistance accessing and coordinating services or resolving issues.

Some focus group participants said that they are accustomed to calling familiar agencies for assistance or advocating for themselves. Although focus group participants provided numerous examples of ways they received support from their care coordinators, in some instances they appeared to be unaware of the range of supports available through their care coordinators.

5.6 Preliminary Findings

More than half of focus group participants reported they had achieved a goal or experienced a significant improvement in their health or quality of life as a result of health home services. Many of the changes resulted from participants setting goals and taking responsibility for their own health. Participants reported changes ranging from decreased use of the emergency department and reduced use of medications to increased physical activity and weight loss. Some participants said they appreciated the support of their care coordinators, particularly in regards to helping to set goals and providing support to meet them.

Patient engagement. Participants indicated they are involved in their health care, and some participants emphasized the need to advocate for themselves. One participant took her care coordinator on a visit to her PCP and said her doctor was more communicative as a result.

Assessments and Health Action Plans. Health home care coordinators helped participants identify their needs, discuss service options, and set personal goals for health improvement.

Access to services. Participants reported their care coordinators helped them access home modifications, assistive devices, medical equipment, dental care, health education, and other services. They were most likely to mention services that might not be arranged by their PCP or by an HCBS or behavioral health case manager.

Care coordination. Most focus group participants who had been admitted to the hospital or had visited the emergency department in the past year said their PCPs had been notified. One participant said his health home had initially contacted him and initiated services due to his high utilization of emergency department services.

Impact of services on health, well-being, and quality of life. Participants were asked about changes during the past year in order to focus on experiences during the demonstration that they were likely to recall. Half of all participants said they had achieved a goal or experienced an improvement in their health or quality of life in the past year. Most focus group participants achieved goals by changing their own behavior rather than accessing additional services. In some cases, health information provided by health homes helped participants achieve their goals.

6. Stakeholder Engagement

Highlights

- The demonstration has used multiple strategies to engage stakeholders and increase their awareness of heath home services.
- The Health Home Advisory Team, consisting of consumer organizations, provider associations, State and county agencies, and care coordinators, advises the State on policy development and oversees implementation of demonstration.
- It has been difficult for the State to successfully communicate to stakeholders the concept of health home services and what they are designed to achieve.

6.1 Overview

Washington has conducted an extensive stakeholder engagement process for both development of the demonstration design and ongoing input on implementation. During the demonstration design process, stakeholder engagement focused on identifying the delivery systems changes needed, soliciting stakeholder input on approaches and best practices for integration of Medicare and Medicaid, and communicating the health home concept to stakeholders. Community forums were held in four locations across the State. Consumers, advocates, and providers were invited to share their views about care under the current system and about best practices for integrating care.

Prior to the demonstration, Washington also conducted a series of beneficiary focus groups attended by 135 Medicare-Medicaid enrollees to obtain input on ways to improve services for Medicare-Medicaid enrollees. Five provider focus groups and one group of paid in-home caregivers were also held. The State conducted a series of consultations with tribal nations seeking to engage tribal clinics in participating in the health home program; those efforts are continuing. State officials made presentations on the Washington Health Homes MFFS demonstration at numerous meetings of provider associations, consumer advocacy groups, and other stakeholders.

6.2 Organization and Support

6.2.1 State Role

As implementation of the demonstration commenced, the State concentrated on soliciting input from stakeholders on operational policies, and on increasing awareness of health home services among beneficiaries and providers. Engagement is conducted through State participation in meetings and conferences sponsored by key stakeholder groups, by regularly scheduled monthly meetings with AAAs and health home directors, and through webinars focused on aspects of health home roles targeted to providers and other stakeholders to increase awareness of the demonstration. The monthly meetings with health home directors are a vehicle for the

State to review administrative policies, to highlight needed program improvements, and for sharing best practices among health home directors.

The State and health homes began observing that service providers lacked an understanding of health home roles and what health homes can offer providers in supplementing the support they give to their enrollees. As a result the State developed a Health Home Provider Toolkit with targeted information for providers delivering medical services, behavioral supports, LTSS, nursing facility services, and hospital services and disseminated it to providers. The State also conducted targeted outreach to nursing facilities when it learned some providers were refusing to give health home coordinators access to residents. In addition to working with Washington's nursing facility associations, in May 2015 HCA sent a Dear Provider Letter that described health home roles and underscored that residents have a right to participate in the demonstration and have access to health home care coordinators. During the June 2015 site visit, State officials expressed optimism that nursing facilities will provide access to health home care coordinators.

6.2.2 Health Home Advisory Team

The State established the Health Home Advisory Team, which meets monthly, to solicit ongoing stakeholder input regarding the demonstration. Members include consumer advocacy organizations, provider associations, State and county agencies, and the union representing most home care workers. Examples of recent Advisory Team activities include providing input on the Health Home Provider Toolkit, the Medicaid policy to provide enrollees with non-emergency medical transportation to support care coordination activities, and contingency plans for the demonstration's potential shutdown.

6.3 Successes

Washington continues to conduct a robust stakeholder engagement process related to the design and implementation of the Health Home Demonstration involving a broad range of stakeholders, including consumer advocacy organizations, provider associations, State and county agencies, beneficiaries, and the union representing most home care workers, in the design and implementation of the Health Home Demonstration.

6.4 Challenges

The State initially experienced troubles engaging beneficiary stakeholders because it was difficult to clearly articulate the concept of health home services and what they are designed to achieve. To increase awareness of the demonstration among enrollees, the State conducted regional forums of enrollees across the State.

6.5 Preliminary Findings

Washington has conducted both broad-based stakeholder engagement activities and tailored outreach targeted at specific interest groups such as nursing facilities and tribal organizations.

The Health Home Advisory Team has a meaningful role in shaping the development of demonstration policy. For example, the Advisory Team has recently provided input on the

Health Home Provider Toolkit, the Medicaid policy to provide enrollees with non-emergency medical transportation to support care coordination activities, and contingency plans for the demonstration’s potential shutdown.

7. Results from Quantitative Analyses

7.1 Results of Preliminary Medicare Cost Savings Calculation

RTI International previously developed a preliminary Medicare savings calculation for the first demonstration period for Washington State using an actuarial methodology. States implementing an MFFS model demonstration under the Medicare-Medicaid Financial Alignment Initiative are eligible for performance payments from CMS based on achieving statistically significant savings and meeting or exceeding established quality requirements. The actuarial savings calculations will be performed annually and provide CMS with the resulting Medicare and Medicaid savings for each MFFS State.

As a preliminary estimate, RTI determined that Washington State achieved $21.6 million (6.1 percent) in Medicare savings during the first demonstration period. Medicaid savings analyses will be conducted once data become available. Detailed results and a more detailed description of the actuarial methodology are available in an RTI Issue Brief.[9]

These results should not be viewed as final for two reasons. First, the calculations cover Medicare expenditures only, because the data needed to perform the calculations on Medicaid expenditures were not yet available. Final calculations will include both Medicare and Medicaid data. Second, only 7 months of claims run-out were available for this calculation.

An important distinction between the actuarial methodology and the methodology used in the remaining sections of this Annual Report is that in the actuarial methodology, the same beneficiaries appear in both of the baseline and the demonstration periods and an individual beneficiary must have 3 months of baseline period experience before being included for the savings calculation. This means that the beneficiary must have been dually eligible for at least 3 months during the applicable baseline period. Because the savings calculation methodology relies on determining the trend in per member per month (PMPM) expenditures between the baseline period and the demonstration period, it is important that each beneficiary have relevant experience in both of these periods.

Conversely, experience in the baseline period is not a requirement for analyses presented in the remaining sections of this Annual Report, because baseline period eligibility is determined using all beneficiaries who met demonstration eligibility sometime in the baseline period, regardless of whether they lost demonstration eligibility later in the demonstration period because of death or the loss of full Medicaid benefits or demonstration eligibility. The actuarial methodology therefore includes only a subset of the beneficiaries used in the remaining Annual Report analyses. Therefore, the results of the actuarial savings calculations and the remaining Annual Report analyses should not be compared to each other.

7.2 Purpose of Quantitative Analyses

The purpose of the remaining analyses in this section is to understand the trends over time in the demonstration and comparison groups so that CMS, the State, and stakeholders can

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[9] See https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/WAEvalResults.pdf.

understand the composition of these groups and their utilization patterns and costs before direct group comparisons are made in the Final Report that will provide the results of impact analyses. As will be discussed in these quantitative analyses using a different population and methods from the previous Issue Brief, there is limited evidence of the demonstration's effect during the first demonstration year. As noted in ***Section 3.2.2*** on enrollment processes, enrollment into health homes began slowly and increased gradually, and engagement with health home care coordination services lagged even after large numbers of beneficiaries had been enrolled. Thus, while the results in this report cover the full 18 month demonstration period, the care model's coordination strategies were only sparsely deployed during the first half of the first demonstration period.

Highlights

- During the demonstration period, there were notable differences in utilization and spending patterns between Washington demonstration eligible beneficiaries and the subgroup who were enrolled in health homes. Enrollees were more frequent users of most services, including inpatient hospitals, emergency departments (EDs), skilled nursing facilities (SNFs), and ambulatory care. Washington enrolled the demonstration eligibles with the highest PRISM scores first (e.g., relatively more expensive beneficiaries), which was reflected in high levels of service utilization in these analyses. Exceptions were in the use of inpatient psychiatric, substance abuse care and hospice services, where enrollees used fewer services than the larger eligible population.
- Similarly, enrollees contacted by their assigned care coordinator and who had begun receiving health home services were more frequent users of various services than those enrollees had yet to be contacted by the end of the first demonstration year, suggesting that health homes were prioritizing those enrollees who were likely to use services more intensively.
- While the percentage of Washington eligible beneficiaries with an inpatient admission remained relatively constant between the baseline and demonstration periods (5.5 percent), the rate of admissions decreased slightly (61.3 admissions per 1,000 eligible months in the first baseline period to 60.9 admissions per 1,000 eligible months in the demonstration period). This trend was also observed in the comparison group. Among Washington eligible beneficiaries with any inpatient admissions, use declined from 186.0 to 160.6 admissions per 1,000 eligible months between the baseline period and demonstration periods. A similar trend was observed in the comparison group.

(continued)

Highlights (continued)

- The percentage of eligible beneficiaries with a specialist visit slightly increased between the baseline and demonstration periods for both the demonstration (5.8 to 6.5 percent) and comparison groups (5.6 to 5.7 percent). Conversely, the number of specialist visits among those with any specialist visits greatly decreased in both the demonstration (151.8 to 135.7 visits per 1,000 eligible months) and comparison (151.8 to 120.6 visits) groups between the baseline and demonstration periods. Potentially, the increase in primary care visits may have resulted in fewer specialist visits among those with any specialist visits in both groups. It may also be the case that the newest users of specialty care use less than those who had been using such care in earlier years.
- In Washington, the percentage of eligible beneficiaries who were LTSS users and who had an ED visit appears to trend upwards, increasing from 8.4 to 9.8 percent between the baseline and demonstration periods. At the same time, among those LTSS users with any ED visits, the average number of visits and expenditures declined over time, suggesting that the increased use rate was concentrated among lower intensity ED users. There was no increasing trend for LTSS users in the comparison group.
- The percentage of Washington eligible beneficiaries with any behavioral health visits decreased between the baseline and demonstration periods (5.9 percent to 3.1 percent) and the number of visits also decreased over this period (92.0 to 84.8 visits per 1,000 eligible months). However, the number of visits and level of expenditures among those with any visits increased substantially (538.5 to 844.6 visits), suggesting a shift in the composition of behavioral health services to a smaller group, selected on higher needs for those services. This shift predates the beginning of the demonstration, however, and to some extent is also observed in the comparison group.
- As expected, in both Washington and the comparison group, those with Hierarchical Condition Category (HCC) scores greater than 4 had a higher percentage with any inpatient admissions compared to those with HCC scores less than 1. For example, in Washington, 16.7 percent of those with HCC scores greater than 4 in baseline period 1 had an inpatient admission, compared to only 2.3 percent with scores less than 1. Among those with an HCC score greater than 4, the percentage of Washington eligible beneficiaries with any inpatient admissions declined from 16.7 to 10.9 percent between the baseline and demonstration periods. This trend was observable in the comparison group as well. HCC scores are correlated with the PRISM scores used by Washington State.

(continued)

Highlights (continued)

- Regarding the quality of care measures identified for the evaluation, Washington eligible beneficiaries experienced a dramatic increase in the number of pneumococcal vaccinations between the baseline and demonstration periods (1.8 to 25.9 per 1,000 eligible months). The rate also rose in the comparison group, albeit less dramatically (1.1 to 4.4). Ambulatory care sensitive admissions fell between the baseline and demonstration periods in both Washington and the comparison group. However, preventable ED visits appeared to increase between the baseline and demonstration periods in both Washington and the comparison group.

7.3 Methods

We briefly describe the overall evaluation design, the data used, and the populations and measures analyzed.

7.3.1 Evaluation Design

RTI International is using an intent-to-treat (ITT) approach for the quantitative analyses conducted for the evaluation, comparing the eligible population under each State demonstration with a similar population that is not affected by the demonstration (i.e., a comparison group). ITT refers to an evaluation design in which all Medicare-Medicaid enrollees eligible for the demonstration constitute the evaluation sample, regardless of whether they actively participated in demonstration models. Thus, under the ITT framework, analyses include all beneficiaries eligible for the demonstration, including those who are eligible but are not contacted by the State or participating providers to enroll in the demonstration or care model; those who enroll but do not engage with the care model; and a group of similar eligible individuals in the comparison group.

Results for sub-populations within each of the demonstration and comparison groups are also presented in this section (e.g., those with any LTSS use in the demonstration and comparison groups; those with any behavioral health claims in the demonstration and comparison groups). In addition, two groups for which results are also reported in this section are *not* compared to the comparison group because such groups do not exist within the comparison group: Washington demonstration enrollees and Washington health home users. For these latter two groups, we compare them to in-State non-enrollees, and in-State non-health home users, respectively.

7.3.2 Comparison Group Identification

The comparison group will serve to provide an estimate of what would have happened to the demonstration group in the absence of the demonstration. Thus, the comparison group members should be similar to the demonstration group members in terms of their characteristics and health care and long-term services and supports (LTSS) needs, and they should reside in areas that are similar to the demonstration State in terms of the health care system and the larger environment. For this evaluation, identifying the comparison group members entailed two steps: 1) selecting the geographic area from which the comparison group would be drawn and 2) identifying the individuals who would be included in the comparison group.

To construct Washington's comparison group, we used out-of-State areas. We compared demonstration and potential comparison areas on a range of measures, including spending per Medicare-Medicaid enrollee by each program, the shares of LTSS delivered in facility-based and community settings, and the extent of Medicare and Medicaid managed care penetration. Using statistical analysis, we selected the individual comparison metropolitan statistical areas (MSAs) that most closely match the values found in the demonstration area on the selected measures. We also considered other factors when selecting comparison States, such as timeliness of Medicaid data submission to CMS. We identified a comparison group from MSAs in Arkansas, Georgia, and West Virginia at least as large as the eligible population in Washington. For details of the comparison group identification strategy, see ***Appendix A***.

To identify beneficiaries for the comparison group and the baseline period that had characteristics similar to those of the demonstration-eligible population, it was important for the RTI evaluation team to develop an algorithm that closely replicated the PRISM algorithm used by the State to identify individuals eligible for the demonstration. After consultation with State staff, we developed an algorithm that required beneficiaries to have scores of 1.5 or greater for at least one quarter in order to qualify for inclusion. When comparing the results of the RTI scoring algorithm with results generated by Washington, we found that beneficiaries had similar prevalence of chronic conditions as those persons identified by Washington.

7.3.3 Data

Annual Report analyses used data from a number of sources. First, the State provided quarterly finder files containing identifying information on all demonstration eligible beneficiaries in the demonstration period. Second, RTI obtained administrative data on beneficiary demographic, enrollment, and service use characteristics from CMS data systems for both demonstration and comparison group members. Third, these administrative data were merged with Medicare claims data on utilization and costs of Medicare services.

Although Medicaid service data on use of LTSS, behavioral health, and other Medicaid-reimbursed services were not available for the demonstration period and therefore are not included in this report, CMS administrative data identifying eligible beneficiaries who used *any* Medicaid-reimbursed LTSS or *any* Medicare behavioral health services were available, so that their Medicare service use could be presented in this report. Future reports will include findings on Medicaid service use once data are available.

7.3.4 Populations and Services Analyzed

The populations analyzed in the report include all demonstration eligible beneficiaries, as well as the following subpopulations: demonstration enrollees; health home service users; those receiving any LTSS; those with any behavioral health service use in the last 2 years for a serious and persistent mental illness (SPMI); and nine demographic and health condition groups (age, gender, race, urban/rural status, any disability, presence of Alzheimer's disease or other dementias, Hierarchical Condition Category Score category, higher vs. lower cost, and whether one died).

For each group and service type analyzed, we provide estimates of five access to care, utilization, and cost measures: the percent of demonstration eligible beneficiaries with any use of a service; counts of service use for both all eligible beneficiaries and users of the respective service; and costs per eligible beneficiary and users of the respective service.

The 16 service settings analyzed include both institutional (inpatient, inpatient psychiatric, inpatient substance use, emergency department visits not leading to admission, emergency department psychiatric visits, observation stays, skilled nursing facility, and hospice) and community settings (primary care, specialist care, behavioral health visits, outpatient as well as independent physical, speech, and occupational therapy, home health, durable medical equipment, and other hospital outpatient services).

In addition, seven quality measures representing specific utilization types of interest are presented: 30-day all-cause risk-standardized readmission rate; preventable emergency room visits; rate of 30-day follow-up after hospitalization for mental illness; ambulatory care sensitive condition overall composite rate (AHRQ PQI#90); ambulatory care sensitive condition chronic composite rate (AHRQ PQI#92); pneumococcal vaccination rate for those age 65 and older; and depression screening rate.

The analyses were conducted for each of the years in the 2-year baseline period (July 1, 2011 to June 30, 2013) and for the first demonstration period (July 1, 2013 to December 31, 2014) for both the demonstration and comparison group in each of the 3 years.

Population Characteristics

Table 3 identifies selected demographic and health characteristics of the Washington demonstration and comparison group populations by their participation status (e.g., eligible for the demonstration, enrolled with a health home, having any health home service use in the demonstration, or whether in the comparison group). Enrollment in a health home enrolls a Medicare-Medicaid beneficiary in the Washington Health Homes MFFS demonstration. This differs from the process of aligning beneficiaries with the demonstration. A beneficiary who is not enrolled in a health home but is eligible for the Washington Health Homes MFFS demonstration may be aligned with the demonstration for purposes of determining whether the State is eligible to share in demonstration savings.

Beneficiaries differed little on these characteristics by their participation status. Overall, approximately half of beneficiaries were under age 65, about one-quarter were between ages 65–74, and the remaining quarter were age 75 and over. Almost two-thirds of all beneficiaries were female. Approximately 82–86 percent across the groups analyzed were White. Whereas only about 4 percent of beneficiaries in Washington were African American, about 17.7 percent in the comparison group were. Washington had much larger percentages of beneficiaries of Hispanic (5.4 percent vs. 0.7 percent) and Asian races (4.9 percent vs. 0.6 percent) than the comparison group.

Table 3
Demographic and health characteristics for the Washington Demonstration eligible, enrolled, health home use, and comparison groups

	Demonstration period 7/1/2013–12/31/2014			
Characteristic (percent)	Eligibles	Enrolled	Any health home service use	Comparison
Number of Beneficiaries	20,786	10,285	1,448	55,889
Age				
Under 65	47.5	47.1	51.0	49.1
65–74	25.8	27.5	27.8	21.3
75 and older	26.7	25.4	21.2	29.6
Gender				
Male	35.5	35.3	32.7	35.9
Female	64.5	64.7	67.3	64.1
Race				
White	85.7	84.5	86.2	81.1
African American	4.1	3.7	4.4	17.7
Hispanic	5.4	7.6	7.1	0.7
Asian/Pacific Islander	4.9	4.2	2.3	0.6
Hierarchical condition category score				
<1	27.2	24.0	20.4	28.3
1<2	42.7	40.7	43.5	42.2
2<4	23.8	27.2	27.6	23.0
4+	6.2	8.0	8.6	6.5
Disabled				
Yes	61.0	60.1	64.5	61.0
No	39.0	39.9	35.5	39.0
Severe and persistent mental illness diagnosis				
Yes	31.0	30.8	35.8	33.6
No	69.0	69.2	64.2	66.4

The Hierarchical Condition Category (HCC) score is a measure of the predicted relative annual cost of a Medicare beneficiary based on the diagnosis codes present in recent Medicare claims. Beneficiaries with a score of 1 are predicted to have average cost in terms of annual Medicare expenditures. Beneficiaries with HCC scores less than 1 are predicted to have below average costs, whereas beneficiaries with scores of 2 are predicted to have twice the average annual cost. Approximately one-quarter of eligible beneficiaries analyzed had HCC scores less than 1, whereas between approximately 40–43 percent of eligible beneficiaries had scores between 1 and 2, meaning their costs were predicted to be between those of the average Medicare beneficiary and double the average beneficiary costs. Similarly, about one-quarter of beneficiaries had predicted costs between two and four times that of the average Medicare beneficiary, whereas about 6–8 percent of eligible beneficiaries had predicted costs over four times the average Medicare beneficiary.

In terms of disability status, almost two-thirds of beneficiaries in each group were originally eligible for Medicare prior to age 65 because of their disability status, and almost one-third of eligible beneficiaries had been treated in the past 2 years for a severe and persistent mental illness.

Table 4 describes the participation status of the Washington eligible population during each quarter of the 18-month demonstration period (July 2013 to December 2014). Demonstration eligibility ramped up quickly and was phased in geographically, such that almost half of all Medicare-Medicaid enrollees in the demonstration were passively enrolled in the first demonstration quarter, and most of the second half were passively enrolled in the second demonstration quarter, which ended in December 2013. Beginning in January 2014, new entrants who were not yet eligible before the demonstration began but qualified by having a PRISM score of 1.5 or greater after that time became eligible on a rolling basis such that the count of total demonstration eligibles was 17,258 in the quarter spanning October–December 2014. The count of demonstration eligibles in demonstration quarter 6 is lower than the overall number of beneficiaries who were *ever* eligible during the demonstration period (20,786) mostly because of death, but also due to minor disenrollment or retrospective loss of dual eligibility status.

Table 4
Quarterly count of Washington Demonstration beneficiaries by eligibility, enrolled, and health home service use status during the demonstration period

Demonstration status	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Eligible	6,917	14,910	16,217	16,558	17,067	17,258
Enrolled	157	1850	3776	5270	7038	9445
Health home service use	11	106	397	738	974	1215

Note: The results in this table differ from those in Tables 1 and 2 in that these results are calculated after data from the State are merged to CMS administrative data systems, which results in small decreases in number of beneficiaries reported in each category.

As discussed above, the State sought not to overwhelm newly formed health home service entities with assigned enrollees until they were judged to have capacity to work with their respective caseloads. Enrollment ramped up more slowly than eligibility, but the State made great strides during calendar year 2014, such that over half (54.7 percent) of demonstration eligibles were enrolled with a health home. Provision of any health home services—for example, initial development of health action plans—was much slower to occur because of the lag time in employing and training care coordinators to identify beneficiaries. By the end of the first demonstration period, 1,215 beneficiaries (7.0 percent) had received any health home services, including development of health action plans and provision of care coordination.

7.4 Medicare Utilization and Costs for the Eligible Population

7.4.1 Overview of Benefits and Services

Most Medicare-Medicaid enrollees in Washington will continue to receive their health care and LTSS through fee-for-service Medicare and Medicaid, except for Medicaid community mental health services, which are capitated. Medicare and Medicaid services available to enrollees in the demonstration are unchanged, except for the addition of Medicaid health home services. Health home services consist of six statutorily defined services, which are mostly variations of care coordination and health promotion (see ***Section 2.2.1*** on Health Homes for more details). In Washington, health homes are the vehicle for coordinating services for Medicare-Medicaid beneficiaries enrolled in the demonstration.

Table 5 presents results on the average percentage of beneficiaries using selected Medicare service types during the months in which they met demonstration eligibility criteria in the baseline and first demonstration periods. In addition, average counts of service use and payments are presented across all such eligible months, and across eligible months among beneficiaries that were users of each respective service type. Data is shown for the baseline and demonstration period for both Washington eligible beneficiaries (a.k.a. the demonstration group) and the comparison group. Subsequent tables in this section examine percentage of use, counts of service use, and payments for selected subgroups. See ***Appendix C*** for a detailed description of populations analyzed and measure definitions. Key findings for the overall demonstration eligible population are summarized below.

- While the percentage of the demonstration group with any inpatient admissions remained relatively constant between the baseline and demonstration periods (5.5 to 5.5 percent), the number of admissions decreased slightly (61.3 admissions per 1,000 eligible months in the first baseline period to 60.9 in the demonstration period). This trend was also observed in the comparison group.

- Among demonstration group beneficiaries with any inpatient admissions, use declined from 186.0 to 160.6 admissions per 1,000 eligible months between the baseline and demonstration periods. A similar trend was observed in the comparison group.

- The number of inpatient psychiatric admissions in the demonstration group decreased between the baseline period and demonstration periods (4.2 per 1,000 eligible months in the first baseline period to 3.5 in the demonstration period). The rate of psychiatric admissions in the comparison group was considerably higher (9.2 per 1,000 eligible months), and showed no consistent trend over time.

- The percentage of beneficiaries with an emergency department (ED) visit, and the number of ED visits, increased slightly between the baseline and demonstration periods for the demonstration group (9.4 to 10.5 percent, and 127.4 to 137.1 visits per 1,000 eligible months, respectively). The same measures increased by slightly less in the comparison group over the same time period.

- The percentage of beneficiaries with a skilled nursing facility claim and the number of skilled nursing facility claims decreased between the baseline and demonstration periods for the Washington demonstration group (1.7 to 1.4 percent and 18.6 to 15.5 admissions per 1,000 eligible months, respectively). The number of admissions to skilled nursing facilities decreased between the baseline period and demonstration periods for the comparison group as well (23.3 to 19.3 admissions per 1,000 eligible months).

- The percentage of beneficiaries with a primary care visit increased between the baseline and demonstration periods for both the demonstration (62.1 to 66.3 percent) and comparison groups (67.4 percent to 67.5 percent). In addition, the number of primary care visits increased in both the demonstration (1,106 to 1,233 visits per 1,000 eligible months) and comparison (1,211 to 1,259 visits per 1,000 eligible months) groups between the baseline and demonstration periods.

- The percentage of beneficiaries with a specialist visit slightly increased between the baseline and demonstration periods for both the demonstration (5.8 to 6.5 percent) and comparison groups (5.6 to 5.7 percent). Conversely, the number of specialist visits among those with any specialist visits greatly decreased in both the demonstration (151.8 to 135.7 visits) and comparison (149.8 to 120.6 visits) groups between the baseline and demonstration periods. Potentially, the increase in primary care visits may have resulted in fewer specialist visits among those with any specialist visits. The percentage of demonstration group beneficiaries with any behavioral health visits decreased between the baseline and demonstration periods (5.9 percent to 3.1 percent), and the number of visits also decreased between periods (92.0 to 84.8 visits per 1,000 eligible months). However, the number of visits and level of expenditures among those with any visits increased substantially (538.5 to 844.6 visits), suggesting a shift in the composition of behavioral health services to a smaller group, selected on higher needs for those services. This shift predates the beginning of the demonstration, however, and to some extent is also observed in the comparison group.

Table 5
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–-12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Number of beneficiaries	28,054	59,383	27,568	56,421	20,786	55,889
INSTITUTIONAL SETTING						
Inpatient Admissions[1]						
% with use	5.5	6.8	5.9	6.9	5.5	5.9
Utilization per 1,000 user months	186.0	202.0	187.5	208.7	160.7	157.1
Utilization per 1,000 eligible months	61.3	75.6	65.2	76.8	60.9	65.1
Expenditures per user months ($)	2,173	1,957	2,389	2,146	2,104	1,669
Expenditures per eligible months ($)	715	730	829	788	798	691
Inpatient Psychiatric Admissions						
% with use	0.4	0.8	0.4	0.8	0.3	0.8
Utilization per 1,000 user months	150.9	165.1	159.2	165.2	122.5	122.8
Utilization per 1,000 eligible months	4.2	9.2	4.3	8.9	3.5	9.1
Expenditures per user months ($)	1,324	1,144	1,441	1,147	1,187	845
Expenditures per eligible months ($)	36	63	38	61	33	61
Inpatient Substance Abuse						
% with use	0.0	0.1	0.1	0.1	0.0	0.1
Utilization per 1,000 user months	138.4	129.2	128.6	152.2	106.8	102.9
Utilization per 1,000 eligible months	0.5	0.8	0.6	0.9	0.5	0.8
Expenditures per user months ($)	738	512	812	732	697	565
Expenditures per eligible months ($)	3	3	4	4	3	4
Emergency Department (Non-admit)						
% with use	9.4	9.6	9.5	9.8	10.5	9.8
Utilization per 1,000 user months	270.2	264.2	258.9	265.3	241.7	234.2
Utilization per 1,000 eligible months	127.4	128.4	124.2	130.6	137.1	133.5
Expenditures per user months ($)	120	97	127	107	124	100
Expenditures per eligible months ($)	57	47	61	52	70	57

(continued)

Table 5 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups

Measures by setting	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–-12/31/2014	
	Demonstration	Comparison	Demonstration	Comparison	Demonstration	Comparison
Emergency Department (Psychiatric)						
% with Use	0.6	0.5	0.6	0.4	0.6	0.5
Utilization per 1,000 user months	184.1	142.5	167.5	138.1	148.8	98.7
Utilization per 1,000 eligible months	7.6	5.3	7.3	4.9	7.7	4.9
Expenditures per user months ($)	70	48	66	48	63	33
Expenditures per eligible months ($)	3	2	3	2	3	2
Observation Stays						
% with Use	1.0	1.2	1.1	1.4	1.2	1.5
Utilization per 1,000 user months	117.8	117.4	121.3	125.6	96.0	99.0
Utilization per 1,000 eligible months	10.3	12.6	11.5	14.9	12.5	15.7
Expenditures per user months ($)	205	179	237	195	200	171
Expenditures per eligible months ($)	18	19	22	23	26	27
Skilled Nursing Facility						
% with Use	1.7	2.1	1.9	2.2	1.4	1.8
Utilization per 1,000 user months	166.2	167.7	176.1	176.1	136.3	127.1
Utilization per 1,000 eligible months	18.6	23.3	20.6	24.1	15.5	19.3
Expenditures per user months ($)	1,916	1,524	2,027	1,570	1,593	1,256
Expenditures per eligible months ($)	204	207	225	210	178	188
Hospice						
% with Use	1.0	1.4	1.7	1.7	0.9	1.6
Utilization per 1,000 user months	360.3	349.1	417.2	455.7	302.3	357.6
Utilization per 1,000 eligible months	10.9	14.5	17.9	17.9	9.2	16.0
Expenditures per user months ($)	1,238	1,068	1,447	1,376	1,023	1,176
Expenditures per eligible months ($)	37	44	62	54	31	52

(continued)

Table 5 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–-12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
NON-INSTITUTIONAL SETTING						
Specialist E&M Visits						
% with use	5.8	5.5	5.8	5.6	6.5	5.7
Utilization per 1,000 user months	151.8	149.8	152.3	151.4	135.7	120.6
Utilization per 1,000 eligible months	62.9	59.7	63.2	60.7	71.0	62.0
Expenditures per user months ($)	15	14	15	14	13	11
Expenditures per eligible months ($)	6	5	6	5	7	6
Primary Care E&M Visits						
% with use	62.1	67.4	62.2	67.3	66.3	67.5
Utilization per 1,000 user months	1,135.7	1,237.0	1,171.5	1,267.6	1,253.5	1,282.2
Utilization per 1,000 eligible months	1,105.5	1,211.5	1,137.8	1,240.7	1,233.2	1,258.6
Expenditures per user months ($)	79	73	84	75	92	78
Expenditures per eligible months ($)	77	72	81	73	90	77
Behavioral Health Visits						
% with use	5.9	6.6	4.7	5.1	3.1	4.2
Utilization per 1,000 user months	538.5	490.6	598.4	443.4	844.6	590.0
Utilization per 1,000 eligible months	92.0	93.9	96.9	86.5	84.8	94.1
Expenditures per user months ($)	22	20	27	19	52	31
Expenditures per eligible months ($)	4	4	4	4	5	5
Outpatient Therapy (PT, OT, ST)						
% with use	5.8	6.1	5.8	6.0	5.2	6.4
Utilization per 1,000 user months	3,711.6	5,805.9	3,242.1	5,451.3	2,974.6	5,991.0
Utilization per 1,000 eligible months	811.9	1,337.1	754.7	1,271.7	717.1	1,639.4
Expenditures per user months ($)	144	202	125	181	87	166
Expenditures per eligible months ($)	31	45	28	41	20	44

(continued)

Table 5 (continued)

Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013—12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Independent Therapy (PT, OT, ST)						
% with use	2.1	1.1	2.0	1.0	2.4	0.9
Utilization per 1,000 user months	2,073.3	2,039.4	1,875.4	1,900.9	1,835.1	1,679.0
Utilization per 1,000 eligible months	173.3	99.4	160.2	84.8	213.2	96.3
Expenditures per user months ($)	65	62	58	60	47	42
Expenditures per eligible months ($)	5	3	5	3	5	2
Home Health						
% with use	2.6	3.3	2.7	3.4	2.7	3.0
Utilization per 1,000 user months	182.8	213.9	179.2	214.0	156.6	175.1
Utilization per 1,000 eligible months	25.9	33.6	26.8	33.8	26.8	30.6
Expenditures per user months ($)	504	515	490	499	421	420
Expenditures per eligible months ($)	71	81	73	79	72	73
Durable Medical Equipment						
% with use	31.4	29.7	30.2	28.5	32.0	25.5
Utilization per 1,000 user months						
Utilization per 1,000 eligible months						
Expenditures per user months ($)	147	152	142	151	122	134
Expenditures per eligible months ($)	85	83	80	80	77	73
Other Hospital Outpatient Services						
% with use	42.1	36.6	42.1	36.4	47.1	36.4
Utilization per 1,000 user months						
Utilization per 1,000 eligible months						
Expenditures per user months ($)	345	266	357	278	380	261
Expenditures per eligible months ($)	283	219	292	229	333	227

[1] Includes acute admissions, inpatient rehabilitation, and long term care hospital admissions

Note: Utilization for inpatient admissions, inpatient psychiatric admissions, inpatient substance abuse, skilled nursing facility, and hospice are defined as number of admissions during the eligible month, and eligible months among users of the respective service. Utilization for emergency department (non-admit), emergency department (psychiatric), observation stays, specialist E&M visits, primary care E&M visits, behavioral health visits, home health, and outpatient and independent therapy are defined as the number of visits during the eligible month, and eligible months among users of the respective service . Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

7.5 Overview of Quality Structures and Processes

Washington uses a combination of quality management strategies to oversee the operation of health homes. As with all Medicaid service contracts, health homes are subject to annual post-audits and external quality reviews, managed by the HCA and DSHS. Using implementation support funds that CMS awarded to Washington for the demonstration, DSHS and HCA hired two new staff to perform ongoing contract compliance monitoring of health homes. The two agencies also share responsibility for tracking performance and quality measures. Health homes are responsible for monitoring the delivery of care coordination services and for contract oversight of the CCOs. The most important quality monitoring tools are the ones the State has designed specifically to track the performance of health homes, as described below.

Health homes submit monthly spreadsheet reports to the HCA that verify their health home encounter submissions by providing additional details on their contacts with each enrollee. In addition, health homes submit quarterly quality reports to the State, which include narrative reporting and data. Narrative reporting elements are outreach and engagement success stories for five enrollees with PRISM risk scores of 4.0 and higher, new community relationships and partnerships, barriers to program success, and processes for care transitions. Data include the number of referrals, HAP completion rates for initial enrollees, enrollee completion of short-term and long-term goals, and training of CCOs.

The State also monitors program performance through the HAPs submitted to a State database. HAP elements reported are scores for the required screens (BMI, functional limitations, depression), scores for the optional screens (behavioral health conditions, anxiety, fall risk, and pain), Patient Activation Measure (PAM) scores, enrollees' self-identified goals, and completion of short-term and long-term goals.

The State conducts annual audits of health home performance that consist of two components. One component is a desk audit that reviews the health home's required policies and procedures. The other component is a review of the care coordination records of a randomized list of health home enrollees requested by the State. As part of this audit, PRISM files are reviewed to assess whether HAPs reflect identified needs and provision of appropriate follow-up with enrollees following a major health event, as documented by claims stored in PRISM. Care coordination activity documented for each enrollee also addresses whether screenings and HAP updates are conducted on the schedule specified in the health home contract with the State.

The State convenes a monthly meeting of all health home leadership and State demonstration staff to review identified trends in quality concerns and strategize about approaches to address them. Performance issues related to individual health homes are addressed through regular monthly calls with HCA and DSHS contract managers.

7.5.1 Quality and Care Coordination Measures for the Eligible Population

- ***Table 6*** displays values for quality of care and care coordination measures for the Washington demonstration and comparison groups, across the baseline and demonstration periods. As is the case for utilization, the demonstration had likely not yet reached enough beneficiaries by December of 2014 to have a major impact on quality of care measures, so any trends that appear were likely associated with other factors. In both Washington and the comparison group, there were no notable trends in 30-day all-cause risk standardized readmission (30-day readmission) rates between the baseline and demonstration periods.

- In Washington, there was an increase in preventable ED visits per 1,000 eligible months between the baseline and demonstration periods (162.9 to 182.8 per 1,000 eligible months). This trend was also observed in the comparison group.

- There was a slight decline, in Washington, in both overall and chronic composite ambulatory care sensitive condition hospital admissions per 1,000 months over the baseline to demonstration periods (37.4 to 31.8 for overall, and 22.9 to 20.4 for chronic related). This trend was also observed in the comparison group.

- In Washington, the number of pneumococcal vaccinations received dramatically increased from 1.8 to 25.9 per 1,000 eligible months between the baseline and demonstration periods.

Results on quality of care measures for the populations who were enrolled, had any health home service use, any LTSS use, or any behavioral health service use in the last 2 years for an SPMI are presented in each of the respective report sections to follow. Generally, there were few differences in the quality measure results reported across these populations analyzed. Because Washington had a delayed start in completing health action plans and did not make substantial progress until near the end of the demonstration period, any differences in quality measures across these populations are most like associated with factors not related to demonstration implementation.

Table 6
Quality of care and care coordination outcomes for the Washington Demonstration eligible population and comparison groups

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
Quality and care coordination measures	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
30-day all-cause risk-standardized readmission rate (%)	16.0	18.8	15.3	19.3	15.9	17.0
Preventable ER visits per 1,000 eligible months	162.9	169.4	173.9	192.6	182.8	193.0
Rate of 30-day follow up after hospitalization for mental illness (%)	37.4	41.9	39.7	39.6	37.1	41.3
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	37.4	55.2	37.8	50.7	31.8	38.6
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	22.9	32.3	22.5	29.5	20.4	22.8
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	1.8	1.1	11.3	2.5	25.9	4.4
Screening for clinical depression per 1,000 eligible months	0.0	0.3	0.1	0.2	0.8	0.8

Source: RTI Analysis of Medicare Claims

7.6 Beneficiaries Enrolled versus Not Enrolled in Health Homes during the Demonstration

Highlights

- There were notable differences in inpatient service use between health home enrollees and nonenrollees. On average, 6.7 percent of enrollees had an inpatient admission in a given month compared to 4 percent of nonenrollees. Enrollees had 73.5 inpatient admissions per 1,000 eligible months, with average spending of $967 per month, compared to 44.4 admissions per 1,000 eligible months and $573 per month among nonenrollees. The State gave priority to beneficiaries among the passively enrolled with higher PRISM scores, resulting in an initial enrollment group with higher health care needs.
- Similar patterns of differences between enrollees and nonenrollees held for emergency department (ED) visits and observation stays.
- There were also notable differences, but in the opposite direction, in the percentage of Medicare-Medicaid beneficiaries having inpatient psychiatric admissions, inpatient substance abuse admissions, and ED psychiatric visits. For these service types, enrollees had lower percentages of use, admissions/visits per 1,000 eligible months, admissions/visits per user, and payments compared to nonenrollees.
- While the percentage of those with any type of ED visit was 11.6 percent among enrollees, and 8.9 percent among nonenrollees, ED use per 1,000 eligible months among users was similar.
- Among enrollees, 69.2 percent had an evaluation and management (E&M) visit with a primary care physician, compared to 62.5 percent among nonenrollees. Enrollees also had greater use of primary care E&M visits per 1,000 eligible months among users, per 1,000 eligible months, and expenditures per eligible months and eligible months among users.
- Enrollees appeared to have higher durable medical equipment and other hospital outpatient service use relative to nonenrollees (37.7 and 53.5 percent, compared to 24.4 and 38.5 percent, respectively).

Table 7 illustrates the utilization, payments, and the percentage with service use among Medicare-Medicaid beneficiaries who enrolled in a health home compared to those who were eligible but not enrolled (nonenrollees). Although enrollees comprised half of all demonstration eligibles by the end of the first demonstration period, enrollment did not begin to greatly increase until the latter half of the first demonstration period. Demonstration group enrollees are compared to demonstration group nonenrollees in Washington in the tables in this subsection and not to the comparison group, because comparison group members outside Washington cannot enroll in the demonstration.

Table 7
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration group, by enrollment status

Measures by setting	Demonstration period 7/1/2013–12/31/2014 Nonenrollees	Enrollees
Number of beneficiaries	10,501	10,285
INSTITUTIONAL SETTING		
Inpatient Admissions[1]		
% with use	4.0	6.7
Utilization per 1,000 user months	167.1	157.8
Utilization per 1,000 eligible months	44.4	73.5
Expenditures per user months ($)	2,162	2,079
Expenditures per eligible months ($)	573	967
Inpatient Psychiatric Admissions		
% with use	0.3	0.3
Utilization per 1,000 user months	140.4	111.1
Utilization per 1,000 eligible months	3.6	3.4
Expenditures per user months ($)	1,430	1,039
Expenditures per eligible months ($)	35	31
Inpatient Substance Abuse		
% with use	0.1	0.0
Utilization per 1,000 user months	119.6	95.7
Utilization per 1,000 eligible months	0.5	0.4
Expenditures per user months ($)	879	541
Expenditures per eligible months ($)	4	2
Emergency Department (Non-Admit)		
% with use	8.9	11.6
Utilization per 1,000 user months	234.1	246.2
Utilization per 1,000 eligible months	114.6	154.1
Expenditures per user months ($)	117	128
Expenditures per eligible months ($)	57	80
Emergency Department (Psychiatric)		
% with use	0.7	0.6
Utilization per 1,000 user months	168.4	134.5
Utilization per 1,000 eligible months	8.6	7.1
Expenditures per user months ($)	69	58
Expenditures per eligible months ($)	4	3
Observation Stays		
% with use	0.9	1.5
Utilization per 1,000 user months	101.9	93.5
Utilization per 1,000 eligible months	9.0	15.1
Expenditures per user months ($)	203	199
Expenditures per eligible months ($)	18	32
Skilled Nursing Facility		
% with use	1.0	1.7
Utilization per 1,000 user months	168.3	125.6
Utilization per 1,000 eligible months	11.1	18.9
Expenditures per user months ($)	1,970	1,469
Expenditures per eligible months ($)	126	216

(continued)

Table 7 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration group, by enrollment status

Measures by setting	Demonstration period 7/1/2013–12/31/2014	
	Nonenrollees	Enrollees
Hospice		
% with use	1.5	0.5
Utilization per 1,000 user months	374.7	211.8
Utilization per 1,000 eligible months	14.6	5.0
Expenditures per user months ($)	1,278	703
Expenditures per eligible months ($)	50	16
NON-INSTITUTIONAL SETTING		
Specialist E&M Visits		
% with USE	5.7	7.2
Utilization per 1,000 user months	137.2	134.9
Utilization per 1,000 eligible months	61.2	78.3
Expenditures per user months ($)	14	13
Expenditures per eligible months ($)	6	8
Primary Care E&M Visits		
% with use	62.5	69.2
Utilization per 1,000 user months	1,111.7	1,359.2
Utilization per 1,000 eligible months	1,085.0	1,345.3
Expenditures per user months ($)	80	100
Expenditures per eligible months ($)	78	99
Behavioral Health Visits		
% with use	2.9	3.3
Utilization per 1,000 user months	825.8	856.7
Utilization per 1,000 eligible months	75.6	91.7
Expenditures per user months ($)	51	53
Expenditures per eligible months ($)	5	6
Outpatient Therapy (PT, OT, ST)		
% with use	4.4	5.7
Utilization per 1,000 user months	3,200.6	2,857.7
Utilization per 1,000 eligible months	611.2	797.2
Expenditures per user months ($)	91	84
Expenditures per eligible months ($)	17	23
Independent Therapy (PT, OT, ST)		
% with use	2.4	2.4
Utilization per 1,000 user months	1,954.1	1,754.4
Utilization per 1,000 eligible months	213.1	213.3
Expenditures per user months ($)	50	46
Expenditures per eligible months ($)	5	6
Home Health		
% with use	1.8	3.3
Utilization per 1,000 user months	161.4	154.7
Utilization per 1,000 eligible months	18.5	33.2
Expenditures per user months ($)	431	418
Expenditures per eligible months ($)	49	89

(continued)

Table 7 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration group, by enrollment status

Measures by setting	Demonstration period 7/1/2013–12/31/2014 Nonenrollees	Enrollees
Durable Medical Equipment		
% with use	24.4	37.7
Utilization per 1,000 user months		
Utilization per 1,000 eligible months		
Expenditures per user months ($)	90	141
Expenditures per eligible months ($)	48	98
Other Hospital Outpatient Services		
% with use	38.5	53.5
Utilization per 1,000 user months		
Utilization per 1,000 eligible months		
Expenditures per user months ($)	214	492
Expenditures per eligible months ($)	176	452

[1] Includes acute admissions, inpatient rehabilitation, and long term care hospital admissions

Notes: Utilization for inpatient admissions, inpatient psychiatric admissions, inpatient substance abuse, skilled nursing facility, and hospice are defined as number of admissions during the eligible month, and eligible months among users of the respective service. Utilization for emergency department (non-admit), emergency department (psychiatric), observation stays, specialist evaluation and management (E&M) visits, primary care E&M visits, behavioral health visits, home health, and outpatient and independent therapy are defined as the number of visits during the eligible month, and eligible months among users of the respective service. Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

Table 8 displays values for quality of care and care coordination measures for the Washington demonstration health home enrollees versus demonstration eligibles not enrolled in health homes. As was shown above, whether a result of intentional targeting or not, those beneficiaries who were enrolled in the health home program tended to be more intensive users of services than those who had not yet enrolled, and because of the low rate of engagement among enrollees by the end of the first demonstration period, differences in quality of care between enrollees and nonenrollees likely reflect conditions that pre-date the demonstration.

- Those who were enrolled had slightly higher 30-day readmission compared to those who were eligible, but did not enroll (16.1 vs. 15.1 percent).

- Enrollees had more preventable ED visits per 1,000 eligible months, relative to nonenrollees (212.1 vs 145.2, respectively).

- Enrollees had more overall ambulatory care sensitive condition admissions per 1,000 eligible months, relative to nonenrollees (40.3 vs 21.0, respectively).

- Enrollees had more chronic ambulatory care sensitive condition admissions per 1,000 eligible months, relative to nonenrollees (27.0 vs 12.0, respectively).

- Enrollees had a slightly higher number of pneumococcal vaccinations per 1,000 eligible months, relative to nonenrollees (29.5 vs 20.9, respectively).

Table 8
Quality of care and care coordination outcomes for the Washington Demonstration group, by enrollment status

	Demonstration period 7/1/2013–12/31/2014	
Quality and care coordination measures	**Nonenrollees**	**Enrollees**
30-day all-cause risk-standardized readmission rate (%)	15.1	16.2
Preventable ER visits per 1,000 eligible months	145.2	212.1
Rate of 30-day follow up after hospitalization for mental illness (%)	33.5	39.1
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	21.0	40.3
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	12.0	27.0
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	20.9	29.5
Screening for clinical depression per 1,000 eligible months	0.6	0.9

Source: RTI Analysis of Medicare Claims.

7.7 Beneficiaries with and without Health Home Service Use

Highlights

- Health Home service users appeared to have a greater percentage of inpatient admissions and ED visits, compared to non–health home service use (6.9 vs. 5.4 percent, and 13.0 vs. 10.2 percent respectively). The State prioritized enrollment in health homes for beneficiaries with higher care needs.
- This inpatient service use corresponded with a greater number of inpatient admissions (78.4 vs. 59.3) and ED visits (177 vs. 133.3) per 1,000 eligible months among health home service users, as well as approximately 25 and 43 percent more in monthly expenditures for each respective service category.
- There were no meaningful differences in the percentage using skilled nursing facilities or having observation stays.

(continued)

Highlights (continued)

- Among health home service users, 72.8 percent had an E&M visit with a primary care physician, compared to 65.7 percent for non–health home service users. Health home service users had approximately 23 percent more primary care E&M visits than non–health home service users, and 24 percent more monthly expenditures.
- Health homes service users had a greater percentage using durable medical equipment and other hospital outpatient services relative to non–health home service users (43.4 vs. 30.9 percent, and 59.3 vs. 45.9 percent, respectively.)

Washington was slow in developing infrastructure to identify enrollees needing health action plans and complete them (see ***Section 5*** for a discussion of health home capacity). As a result, the number of enrollees receiving high intensity care coordination or maintenance care coordination activities was substantially delayed (see ***Table 9***). However, by the end of the demonstration period, approximately 5 percent of the demonstration group, and 10 percent of all health home enrollees, had completed a health action plan. High intensity care coordination and maintenance coordination activities gradually increased over time. Washington prioritized those with high medical needs for health home service action plans.

Table 9
Health home service use during Washington Demonstration period

Month	Number of health action plans completed	Cumulative health action plans completed	Number of high intensity care coordination claims	Number of maintenance care coordination claims
Jul-13	6	6	0	0
Aug-13	5	11	6	0
Sep-13	7	18	7	0
Oct-13	15	33	13	1
Nov-13	32	65	16	3
Dec-13	59	124	33	10
Jan-14	82	206	77	15
Feb-14	126	332	135	28
Mar-14	126	458	242	43
Apr-14	122	580	325	67
May-14	114	694	435	64
Jun-14	181	875	502	66
Jul-14	126	1001	607	87
Aug-14	123	1124	675	40
Sep-14	137	1261	774	63

Derived from Medicaid AlphaMAX data; claims after September 2014 had insufficient runout for presentation.

Table 10 reports results on utilization and expenditures among Medicare-Medicaid beneficiaries with and without any health home service utilization. Demonstration group health home service users are compared to demonstration group non-health home service users in Washington in the tables in this subsection and not to the comparison group, because comparison group members outside Washington cannot receive services in health homes in Washington.

Table 10
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration group, by health home service use

	Demonstration period 7/1/2013–12/31/2014	
Measures by setting	**No health home use**	**Health home use**
Number of beneficiaries	19,338	1,448
INSTITUTIONAL SETTING		
Inpatient Admissions[1]		
% with use	5.4	6.9
Utilization per 1,000 user months	160.1	164.8
Utilization per 1,000 eligible months	59.3	78.4
Expenditures per user months ($)	2,101	2,127
Expenditures per eligible months ($)	777	1,009
Inpatient Psychiatric Admissions		
% with Use	0.3	0.3
Utilization per 1,000 user months	126.2	95.1
Utilization per 1,000 eligible months	3.5	3.7
Expenditures per user months ($)	1,257	673
Expenditures per eligible months ($)	33	26
Inpatient Substance Abuse		
% with use	0.0	0.0
Utilization per 1,000 user months	108.4	90.9
Utilization per 1,000 eligible months	0.5	0.4
Expenditures per user months ($)	709	584
Expenditures per eligible months ($)	3	3
Emergency Department (Psychiatric)		
% with use	0.6	0.6
Utilization per 1,000 user months	152.9	114.9
Utilization per 1,000 eligible months	7.8	7.2
Expenditures per user months ($)	63	55
Expenditures per eligible months ($)	3	3
Emergency Department (Non-admit)		
% with use	10.2	13.0
Utilization per 1,000 user months	240.1	255.7
Utilization per 1,000 eligible months	133.3	177.0
Expenditures per user months ($)	122	140
Expenditures per eligible months ($)	68	97

(continued)

Table 10 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington demonstration group, by health home service use

Measures by setting	Demonstration period 7/1/2013–12/31/2014	
	No health home use	Health home use
Observation Stays		
% with use	1.2	1.6
Utilization per 1,000 user months	96.5	92.4
Utilization per 1,000 eligible months	12.1	17.1
Expenditures per user months ($)	199	210
Expenditures per eligible months ($)	25	39
Skilled Nursing Facility		
% with use	1.4	1.4
Utilization per 1,000 user months	140.0	106.8
Utilization per 1,000 eligible months	15.6	15.4
Expenditures per user months ($)	1,639	1,226
Expenditures per eligible months ($)	178	173
Hospice		
% with use	1.0	0.2
Utilization per 1,000 user months	307.0	182.1
Utilization per 1,000 eligible months	9.8	2.4
Expenditures per user months ($)	1,037	666
Expenditures per eligible months ($)	33	9
NON-INSTITUTIONAL SETTING		
Specialist E&M Visits		
% with use	6.4	8.3
Utilization per 1,000 user months	135.9	134.2
Utilization per 1,000 eligible months	69.1	90.4
Expenditures per user months ($)	14	13
Expenditures per eligible months ($)	7	9
Primary Care E&M Visits		
% with use	65.7	72.8
Utilization per 1,000 user months	1,230.3	1,492.7
Utilization per 1,000 eligible months	1,209.2	1,483.8
Expenditures per user months ($)	90	110
Expenditures per eligible months ($)	88	109
Behavioral Health Visits		
% with use	3.0	4.8
Utilization per 1,000 user months	822.7	1,007.5
Utilization per 1,000 eligible months	79.8	136.9
Expenditures per user months ($)	51	62
Expenditures per eligible months ($)	5	8

(continued)

Table 10 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington demonstration group, by health home service use

	Demonstration period 7/1/2013–12/31/2014	
Measures by setting	**No health home use**	**Health home use**
Outpatient Therapy (PT, OT, ST)		
% with use	5.1	5.8
Utilization per 1,000 user months	3,072.5	2,190.4
Utilization per 1,000 eligible months	721.6	670.0
Expenditures per user months ($)	89	65
Expenditures per eligible months ($)	20	19
Independent Therapy (PT, OT, ST)		
% with use	2.3	3.6
Utilization per 1,000 user months	1,824.0	1,912.7
Utilization per 1,000 eligible months	203.1	318.6
Expenditures per user months ($)	46	54
Expenditures per eligible months ($)	5	9
Home Health		
% with use	2.5	4.1
Utilization per 1,000 user months	157.4	152.2
Utilization per 1,000 eligible months	25.5	40.9
Expenditures per user months ($)	420	431
Expenditures per eligible months ($)	68	115
Durable Medical Equipment		
% with use	30.9	43.4
Utilization per 1,000 user months		
Utilization per 1,000 eligible months		
Expenditures per user months ($)	120	143
Expenditures per eligible months ($)	73	111
Other Hospital Outpatient Services	45.9	59.3
% with use		
Utilization per 1,000 user months		
Utilization per 1,000 eligible months		
Expenditures per user months ($)	362	554
Expenditures per eligible months ($)	315	525

[1] Includes acute admissions, inpatient rehabilitation, and long term care hospital admissions

Notes: Utilization for inpatient admissions, inpatient psychiatric admissions, inpatient substance abuse, skilled nursing facility, and hospice are defined as number of admissions during the eligible month, and eligible months among users of the respective service. Utilization for emergency department (non-admit), emergency department (psychiatric), observation stays, specialist E&M visits, primary care E&M visits, behavioral health visits, home health, and outpatient and independent therapy are defined as the number of visits during the eligible month, and eligible months among users of the respective service. Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

Table 11 displays values for quality of care and care coordination measures for the Washington demonstration group, comparing demonstration group eligibles with and without health home service use in Washington. As was discussed in the comparisons of enrollees and nonenrollees, the differences observed may well be the result of selective targeting of more intensive service users in the early roll-out of the health home demonstration program.

- Health home service users had slightly higher rates of 30-day readmission than non–health home service users (18.6 vs. 15.5 percent, respectively).
- Health home service users had more preventable ER visits per 1,000 eligible months, relative to non–health home service users (253.6 vs. 176.2 visits, respectively).
- Health home service users had a greater rate of 30-day follow up after hospitalizations for a mental illness, relative to non–health home service users (49.0 vs. 35.7 percent, respectively).
- Health home service users had more overall ambulatory care sensitive condition admissions relative those without health home use (50.8 vs. 30.1 per 1,000 eligible months, respectively).
- Health home service users had more chronic ambulatory care sensitive condition admissions relative those without health home use (37.4 vs. 18.8 per 1,000 eligible months, respectively).

Table 11
Quality of care and care coordination outcomes for the Washington Demonstration group, beneficiaries with health home use

	Demonstration Period 7/1/2013-12/31/2014	
Quality and Care Coordination Measures	**No Health Home Use**	**Health Home Use**
30 day all-cause risk-standardized readmission rate	15.5	18.6
Preventable ER Visits per 1,000 eligible months	176.2	253.6
Rate of 30 day follow up after hospitalization for mental illness	35.7	49.0
Ambulatory Care Sensitive Condition Admissions per 1,000 eligible months - Overall Composite (AHRQ PQI # 90)	30.1	50.8
Ambulatory Care Sensitive Condition Admissions per 1,000 eligible months - Chronic Composite (AHRQ PQI # 92)	18.8	37.4
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	24.6	39.5
Screening for Clinical Depression per 1,000 eligible months	0.7	1.4

Source: RTI Analysis of Medicare Claims.

7.8 Population with LTSS Needs

Highlights

- In Washington, the percentage of LTSS users in the demonstration-eligible population with an ED visit appears to trend upwards, increasing from 8.4 to 9.8 percent between the baseline and demonstration periods. At the same time, among those with any ED visits, the average number of visits and expenditures declined over time, suggesting that the increased use rate was concentrated among lower intensity ED users. There was no increasing trend for LTSS users in the comparison group.
- There was a small increase in the count of ED visits per 1,000 eligible months in Washington, from 107.1 to 123.8 visits between the baseline and demonstration periods. However, there was also a small decline in the count of ED visits per 1,000 eligible months among users, which suggests that while more LTSS users are visiting the ED, they are visiting it fewer times on average.

Integrating or coordinating care for people with LTSS needs is a major objective of the demonstrations under the Financial Alignment Initiative. In this chapter we provide information on the Washington State LTSS system and the role of health homes in coordinating care for demonstration enrollees with LTSS. We also report findings from the evaluation, including the characteristics of the demonstration eligibles who used any LTSS, the experience of people who used LTSS with care coordination services provided by the demonstration, and the medical and health service utilization, quality, and expenditures for the subset of demonstration eligible who used any LTSS.

7.8.1 Background

A substantial portion of the dually eligible population has disabilities, including limitations in the activities of daily living (ADLs), such as eating, bathing, and dressing; instrumental activities of daily living (IADLs), such as meal preparation and money management; or cognitive functioning, such as dementia from Alzheimer's disease. In 2010, 55 percent of Medicare-Medicaid enrollees had limitations in ADLs; one-third had three to six limitations in ADLs, and nearly one-quarter (24 percent) lived in institutions, primarily nursing homes (MedPAC and MACPAC, 2015). Nearly one-quarter had Alzheimer's disease or related dementias. Medicare-Medicaid enrollees with disabilities have a very high use of expensive long-term services and supports (LTSS), such as nursing homes, personal care services, residential care facilities, and adult day care. Nationally, in 2010, 21 percent of full-benefit Medicaid fee-for-service Medicare-Medicaid enrollees used institutional services, which accounted for half of total national Medicaid spending for Medicare-Medicaid enrollees; 13 percent of full-benefit fee-for-service Medicare-Medicaid enrollees used Medicaid home and community-based services (HCBS) waivers, which accounted for 23 percent of Medicaid spending on Medicare-Medicaid enrollees (MedPAC & MACPAC, 2015). Thus, nationally, institutional services and Medicaid HCBS waivers accounted for nearly three-quarters of Medicaid spending on Medicare-Medicaid enrollees.

Medicare does not cover LTSS, although its benefits include post-acute care services in skilled nursing facilities (SNFs), home health agencies, inpatient rehabilitation facilities, and long-term care hospitals. Medicare-Medicaid enrollees have much higher use of Medicare-reimbursed SNF and home health services than those who are not Medicare-Medicaid enrollees, but use of these services only constitute about 15 percent of Medicare spending for this population. Because users of LTSS are also high users of acute care services, average costs for Medicare-Medicaid enrollees who use LTSS are high. In 2010, average national Medicare and Medicaid expenditures for Medicare-Medicaid enrollees who used any LTSS totaled $60,801, split about 60 percent/40 percent between Medicare and Medicaid (MedPAC & MACPAC, 2015).

Financing for acute care is largely the responsibility of Medicare and the federal government, whereas long-term care is principally the responsibility of Medicaid and state governments. As with the general Medicare-Medicaid enrollee population, the principal problem for older and younger people with disabilities is that there is no organization that has financial responsibility and accountability for both acute care and LTSS; that is, no organization is responsible for managing all aspects of care for a person. Indeed, under the current system, the financial incentives are to shift costs between Medicare and Medicaid, especially for users of LTSS, where Medicaid's financial role is so large and Medicare's financial role is so small (Grabowski, 2007).

The lack of coordination and integration within the financing and delivery system has negative consequences for Medicare-Medicaid enrollees with disabilities. For example, several studies have found that users of LTSS services—such as nursing home residents and those receiving Medicaid HCBS waiver services—have high levels of hospitalizations and potentially avoidable hospitalizations (Walsh et al., 2012; Konetzka, Karon, & Potter, 2012; Polniaszek, Walsh, & Wiener, 2011).

Nationally within LTSS systems, Medicaid funding is tilted towards institutional services, although steady progress has been made toward a more balanced delivery system (Eiken et al., 2015). In FY 2013, 40.2 percent of Medicaid LTSS expenditures for older people and younger people with physical disabilities were for HCBS compared to 34.9 percent in FY 2008. Within this subpopulation, however, much more progress in rebalancing has occurred for younger people with physical disabilities than for older people (Brock et al., 2014). In part, this may be because of difficulties assembling a comprehensive package of services that would allow a beneficiary to remain in the community. Moreover, access is not assured in the current system; in 2014, 155,697 older people and younger people with physical disabilities were on waiting lists for Medicaid HCBS waivers (Ng et al., 2015). Washington, however, has no wait lists for waiver services.

Washington has long been considered a pioneer in LTSS policy. The state began efforts to rebalance Medicaid LTSS in the 1980s and has steadily reduced use of institutional services by expediting services, avoiding waiting lists for HCBS waivers, and offering a range of community-based residential options that includes adult foster care, assisted living, and residential care facilities (Lind, Gore, & Somers, 2010). Washington has one of the most balanced LTSS systems in the nation, ranking first among states with 74.8 percent of its LTSS budget spent on HCBS in 2009, and third in the percentage of beneficiaries using LTSS receiving services in the community at 81.7 percent (Brock, Peebles, Miller & Schmitz, 2014).

Washington has been particularly successful in transitioning individuals from nursing homes to the community. Between 2005 and 2010, Washington decreased the number of Medicaid supported nursing facility residents by 6 percent, a rate double the national average (Houser, Fox-Grage, & Ujvari, 2012). One policy that has facilitated transitions is assignment of case managers to nursing facility residents and HCBS waiver participants. Within a week of admission to a nursing facility, a case manager visits residents to identify individuals with an interest in returning to the community, assess their support needs, and provide transition counseling. Case managers also work with long-stay residents, and assist residents who indicate an interest in returning to the community.

The Washington Health Homes MFFS demonstration attempts to achieve better and less expensive outcomes for LTSS beneficiaries by enrolling them in health homes where LTSS delivery can be coordinated with acute care delivery. Given that Washington already had one of the most balanced LTSS delivery systems, State officials thought that the demonstration would have little effect on reducing nursing home use. Potentially, if a greater percentage of acute and LTSS service needs can be met in the community, then those beneficiaries who do need institutional placement will have higher frailty than before the demonstration.

7.8.2 Organization and Delivery of LTSS

Washington provides a wide range of Medicaid-funded LTSS through HCBS waivers, State Plan personal assistance services, and State Plan nursing facility services. It has also fostered the development of a range of community based residential services, including assisted living, residential care facilities, and adult family homes. Most personal assistance services funded under the HCBS waiver and the State Plan are delivered by consumer-employed providers. As discussed above, most LTSS are provided in the community.

Area Agencies on Aging (AAAs) provide case management of HCBS services for enrollees. HCBS care coordinators are responsible for coordinating services provided by their delivery systems: they are not responsible—nor do they typically have time to address—enrollees' other needs such as health care, transportation, and nutrition. Care coordination provided by health homes under the demonstration is the bridge for integrating care across the delivery systems for LTSS, physical health, and behavioral health. Health home care coordinators are also charged with engaging enrollees to set health action goals and increase self-management skills to achieve optimal physical and cognitive health.

7.8.3 Demonstration Experience

Over half of the 32 demonstration enrollees who participated in the RTI focus groups used community-based LTSS. They reported positive experiences working with their health home care coordinators to set and achieve goals and address unmet needs (see ***Section 5***). They said their care coordinators had helped address needs such as accessing dental care, assistive devices, and home modifications. Some focus group participants who use LTSS reported successes in achieving personal goals of improving of self-management of their chronic conditions, increasing physical activity, and enhancing social engagement.

For example, one participant reported controlling her blood sugar with information and support provided by her health home. Another participant reported she had achieved her health goals by losing 80 pounds and was walking to maintain her mobility. Another enrollee provided an example of receiving nutrition counseling and a personal emergency response system through the assistance of her health home care coordinator.

Table 12 presents demographic and health condition information on the LTSS population examined for this report. Approximately 57.3 percent of the demonstration group had use of any LTSS in the demonstration period, whereas 53.3 percent of comparison group beneficiaries did. In terms of age, demonstration group beneficiaries with any LTSS are younger than those in the comparison group. Enrollees and those with any health home service use were somewhat younger than the overall demonstration group with LTSS. The demonstration group's LTSS beneficiaries were less likely to be African American and more likely to be Hispanic or Asian than the comparison group's LTSS beneficiaries. They were also more likely to have some disabilities than the comparison group. There was little difference across all groups on gender, HCC scores, and whether they had an SPMI.

Table 12
Descriptive statistics for Washington Demonstration eligible, enrolled, health home users, and comparison groups, among those using LTSS

	Demonstration period 7/1/2013–12/31/2014			
Beneficiary Characteristic	**Eligibles**	**Enrolled**	**Health home use**	**Comparison**
Number of Beneficiaries	12,399	6,423	970	29,405
Age (%)				
Under 64	39.3	41.5	46.0	29.8
65–74	27.0	28.1	28.9	22.4
75 and older	33.7	30.4	25.2	47.8
Gender				
Male	35.5	34.9	32.7	34.9
Female	64.5	65.1	67.3	65.1
Race				
White	89.3	88.4	87.4	84.0
African American	4.0	3.6	4.4	15.3
Hispanic	3.8	5.4	6.5	0.3
Asian/PI	2.9	2.7	1.7	0.3
Hierarchical condition category				
<1	21.2	18.3	16.5	19.7
1–2	41.8	39.8	41.9	41.2
3–4	28.6	31.4	30.9	30.0
4+	8.5	10.5	10.7	9.1
Disabled	58.7	60.3	62.9	49.6
Severe and persistent mental illness diagnosis	30.2	31.3	33.7	31.6

7.8.4 Health Care Service Use of LTSS Beneficiaries

Table 13 illustrates the utilization, expenditures, and percentage of inpatient and outpatient service use among Medicare-Medicaid beneficiaries who used LTSS during the period among comparison and demonstration groups. Beneficiaries were defined as using LTSS if they had any institutional services or HCBS during the period.

- In Washington, there were no notable trends in the percentage of LTSS users with inpatient admissions, psychiatric admissions, and observation stays, while in the comparison group, there appears to have been a modest decline in the share with inpatient admissions. The number of admissions among those with any use of the three services decreased in both the demonstration and comparison groups between the baseline and demonstration periods.

- In both Washington and the comparison group, there was a small decline in the percentage of LTSS users receiving skilled nursing facilities services between the baseline and demonstration periods (2.6 to 2.2 percent in Washington, and 3.7 to 3.3 percent in the comparison group). This corresponded with a small decrease in expenditures for SNF stays in both groups ($318 to $273 per eligible month in Washington, and $367 to $349 per eligible month in the comparison group).

- In Washington, the percentage of LTSS users in the demonstration-eligible population with an ED visit appears to trend upwards, increasing from 8.4 to 9.8 percent between the baseline and demonstration periods. At the same time, among those with any ED visits, the average number of visits and expenditures declined over time, suggesting that the increased use rate was concentrated among lower intensity ED users. There was no increasing trend for LTSS users in the comparison group.

- There was a small increase in the count of ED visits per 1,000 eligible months in Washington, from 107.1 to 123.8 visits between the baseline and demonstration periods. But there was a small decline in the count of ED visits per 1,000 eligible months among users, which suggests that while more LTSS users are visiting the ED, they are visiting it fewer times on average.

- In both Washington and the comparison group, the percentage of LTSS users with primary care visits appeared stable across baseline and demonstration periods, whereas the count of visits per 1,000 eligible months increased from 1,122.3 to 1,297 visits in Washington.

- The percentage of beneficiaries using home health services increased from 3.6 percent to 3.8 in Washington, from the baseline to the demonstration period. This increase corresponded with a decline in home health utilization per 1,000 eligible months among users (189.4 to 164.3 visits), suggesting that the increased use rate was concentrated on low intensity home health users. Similar trends in utilization were seen in the comparison group.

Table 13
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with LTSS

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Number of beneficiaries	16,030	30,582	16,664	29,337	12,399	29,405
INSTITUTIONAL SETTING						
Inpatient Admissions[1]						
% with use	6.2	7.9	6.6	8.0	6.4	6.8
Utilization per 1,000 user months	186.7	202.0	187.8	215.1	167.0	160.3
Utilization per 1,000 eligible months	68.8	86.7	72.3	88.2	71.0	74.4
Expenditures per user months ($)	2,205	1,962	2,394	2,234	2,208	1,706
Expenditures per eligible months ($)	811	839	920	916	938	791
Inpatient Psychiatric Admissions						
% with use	0.3	0.8	0.3	0.7	0.2	0.7
Utilization per 1,000 user months	128.7	144.7	147.5	142.4	106.3	103.5
Utilization per 1,000 eligible months	3.1	8.5	3.3	7.8	2.6	7.7
Expenditures per user months ($)	1,290	1,167	1,503	1,174	1,110	839
Expenditures per eligible months ($)	30	68	33	64	27	62
Inpatient Substance Abuse						
% with use	0.0	0.0	0.0	0.0	0.0	0.0
Utilization per 1,000 user months	110.7	93.7	94.4	105.6	93.6	127.2
Utilization per 1,000 eligible months	0.2	0.4	0.2	0.3	0.3	0.4
Expenditures per user months ($)	720	379	805	499	693	716
Expenditures per eligible months ($)	1	2	2	1	2	2
Emergency Department (Non-Admit)						
% with use	8.4	8.0	8.6	8.2	9.8	8.0
Utilization per 1,000 user months	232.3	218.5	230.9	221.2	219.8	190.2
Utilization per 1,000 eligible months	107.1	99.8	107.2	101.5	123.8	100.4
Expenditures per user months ($)	115	88	124	98	122	89
Expenditures per eligible months ($)	53	40	57	45	68	47

(continued)

Table 13 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with LTSS

Measures by setting	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
	Demonstration	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Emergency Department (Psychiatric)						
% with use	0.4	0.4	0.4	0.3	0.5	0.3
Utilization per 1,000 user months	149.2	137.0	156.0	119.0	118.1	90.1
Utilization per 1,000 eligible months	4.9	3.9	5.2	3.3	5.5	3.5
Expenditures per user months ($)	64	49	67	44	54	35
Expenditures per eligible months ($)	2	1	2	1	2	1
Observation Stays						
% with use	1.0	1.1	1.1	1.3	1.3	1.4
Utilization per 1,000 user months	115.3	113.6	118.1	124.7	97.3	97.2
Utilization per 1,000 eligible months	10.6	11.1	11.9	13.6	13.3	14.2
Expenditures per user months ($)	205	163	228	183	201	158
Expenditures per eligible months ($)	19	16	23	20	27	23
Skilled Nursing Facility						
% with use	2.6	3.7	2.8	3.8	2.2	3.3
Utilization per 1,000 user months	168.0	170.7	176.4	179.4	141.3	129.2
Utilization per 1,000 eligible months	28.7	41.2	30.3	42.3	23.5	35.5
Expenditures per user months ($)	1,965	1,558	2,071	1,602	1,687	1,292
Expenditures per eligible months ($)	318	367	336	368	273	349
Hospice						
% with use	1.4	2.3	2.3	2.9	1.3	2.8
Utilization per 1,000 user months	352.8	346.3	410.7	451.6	305.1	371.0
Utilization per 1,000 eligible months	15.4	23.7	24.8	30.0	12.9	28.7
Expenditures per user months ($)	1,227	1,071	1,421	1,364	1,039	1,227
Expenditures per eligible months ($)	54	73	86	90	44	94

(continued)

Table 13 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with LTSS

Measures by setting	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
	Demonstration	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
NON-INSTITUTIONAL SETTING						
Specialist E&M Visits						
% with use	5.3	4.5	5.3	4.5	6.4	4.6
Utilization per 1,000 user months	145.9	140.2	149.0	141.7	135.9	115.2
Utilization per 1,000 eligible months	56.8	47.3	57.6	48.5	69.7	49.8
Expenditures per user months ($)	14	12	15	13	13	10
Expenditures per eligible months ($)	5	4	6	4	7	4
Primary Care E&M Visits						
% with use	63.6	73.8	63.5	73.1	68.5	73.8
Utilization per 1,000 user months	1,147.2	1,363.9	1,191.5	1,399.6	1,312.9	1,452.7
Utilization per 1,000 eligible months	1,122.3	1,349.0	1,162.6	1,381.9	1,297.1	1,440.6
Expenditures per user months ($)	80	79	84	80	96	86
Expenditures per eligible months ($)	77	78	82	79	94	85
Behavioral Health Visits						
% with use	5.3	4.7	4.8	4.3	3.8	4.5
Utilization per 1,000 user months	485.6	370.7	689.8	403.4	1,021.7	679.9
Utilization per 1,000 eligible months	83.6	61.0	111.6	73.6	114.3	113.4
Expenditures per user months ($)	21	17	32	18	62	35
Expenditures per eligible months ($)	4	3	5	3	7	6
Outpatient Therapy (PT, OT, ST)						
% with use	8.4	10.4	8.1	10.6	7.2	11.6
Utilization per 1,000 user months	4,190.5	6,603.9	3,612.4	6,126.3	3,435.3	6,964.1
Utilization per 1,000 eligible months	1,283.2	2,455.2	1,137.1	2,378.1	1,090.7	3,179.1
Expenditures per user months ($)	162	229	139	204	101	192
Expenditures per eligible months ($)	49	82	42	77	31	85

(continued)

Table 13 (continued)
Percentage, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with LTSS

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Independent Therapy (PT, OT, ST)						
% with use	1.8	0.8	1.8	0.6	2.3	0.6
Utilization per 1,000 user months	1,986.2	2,226.0	1,807.2	2,237.8	1,791.0	1,933.3
Utilization per 1,000 eligible months	147.2	75.4	133.9	56.9	194.9	69.3
Expenditures per user months ($)	66	74	58	73	48	49
Expenditures per eligible months ($)	5	2	4	2	5	2
Home Health						
% with use	3.6	4.2	3.7	4.2	3.8	4.1
Utilization per 1,000 user months	189.4	231.9	183.7	231.1	164.3	198.5
Utilization per 1,000 eligible months	36.3	42.8	36.8	41.8	38.2	41.4
Expenditures per user months ($)	530	574	509	551	448	488
Expenditures per eligible months ($)	101	106	102	99	104	101
Durable Medical Equipment						
% with use	34.3	27.5	32.5	26.4	35.5	24.1
Utilization per 1,000 user months						
Utilization per 1,000 eligible months						
Expenditures per user months ($)	162	173	153	172	135	168
Expenditures per eligible months ($)	97	86	89	82	88	84
Other Hospital Outpatient Services						
% with use	41.1	37.8	41.1	36.6	47.7	37.1
Utilization per 1,000 user months						
Utilization per 1,000 eligible months						
Expenditures per user months ($)	318	224	315	218	364	211
Expenditures per eligible months ($)	255	183	253	177	318	182

[1] Includes acute admissions, inpatient rehabilitation, and long term care hospital admissions

Notes: Utilization for inpatient admissions, inpatient psychiatric admissions, inpatient substance abuse, skilled nursing facility, and hospice are defined as number of admissions during the eligible month, and eligible months among users of the respective service. Utilization for emergency department (non-admit), emergency department (psychiatric), observation stays, specialist E&M visits, primary care E&M visits, behavioral health visits, home health, and outpatient and independent therapy are defined as the number of visits during the eligible month, and eligible months among users of the respective service. Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

Table 14 displays values for quality of care and care coordination measures for the Washington demonstration and comparison groups between the baseline and demonstration periods among those with long-term services and supports (LTSS). For the most part, the trends here show similar patterns to the eligible population as a whole.

- In Washington, there was a small increase in the 30-day readmission rate from 15.7 to 16.6 from the baseline to the demonstration period. There was no notable trend in the comparison group.

- Among those in Washington with LTSS, preventable ER visits increased from 131.2 to 159.5 visits per 1,000 eligible months between the baseline and demonstration periods. There was not a notable trend in visits among those in the comparison group.

- The rate of 30-day follow-up after hospitalization for mental illness increased in Washington from 34.7 to 35.8 percent between the baseline and demonstration periods. There was a small decline in the comparison group from 40.3 to 37.4 percent between the baseline and demonstration periods.

- Overall ambulatory care sensitive condition admissions declined among those using LTSS in Washington from 43.6 to 38.3 per 1,000 eligible months between the baseline and demonstration periods. A similar trend was observed for the comparison group.

- Chronic ambulatory care sensitive condition admissions among those using LTSS in Washington remained relatively unchanged between baseline and demonstration periods, whereas these admissions declined from 33.9 to 23.5 per 1,000 eligible months in the comparison group.

- In Washington, pneumococcal vaccinations increased from 1.5 to 25.5 per 1,000 eligible months from the baseline to the demonstration periods. A smaller increase was observed in the comparison group (0.8 to 3.8 visits per 1,000 eligible months).

Table 14
Quality of care and care coordination outcomes for the Washington Demonstration group and comparison groups, beneficiaries with LTSS use

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
Quality and care coordination measures	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
30-day all-cause risk-standardized readmission rate (%)	15.7	18.6	15.4	19.8	16.6	16.6
Preventable ER visits per 1,000 eligible months	131.2	118.5	143.0	135.9	159.5	132.0
Rate of 30-day follow up after hospitalization for mental illness (%)	34.7	40.3	37.2	41.0	35.8	37.4
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	43.6	65.9	43.2	61.8	38.2	46.8
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	24.1	33.9	23.8	31.0	23.2	23.5
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	1.5	0.8	10.4	2.2	25.5	3.8
Screening for clinical depression per 1,000 eligible months	0.0	0.6	0.2	0.4	1.2	0.9

Source: RTI Analysis of Medicare Claims.

7.8.5 Measures on the Nursing Facility Population from Minimum Data Set Data Analysis

Whereas the previous table of results was derived from Medicare claims data, the results presented in this subsection on LTSS use are derived from the CMS Minimum Data Set containing information on only the nursing home population. These analyses provide information on the annual nursing facility utilization of demonstration eligibles, including the rate of new long-stay nursing facility admissions, and the percentage of demonstration eligibles who are long-stay users. RTI defines long-stay users as those who have stayed in a nursing facility for at least 101 days.

The admission rate defines the population of *new* long-stay nursing facility residents at admission, for whom we present health characteristics in ***Table 15*** and ***Table 16***. Then we examine the overall population of *all* (new and existing) long-stay nursing facility users, also presenting their health characteristics as well as certain quality measures related to nursing home services in ***Table 17*** and ***Table 18***.

The analyses of annual nursing facility utilization and characteristics of newly admitted, and separately, new and existing, long-stay residents are indirect measures of access to care in the community based on two hypotheses. First, fewer people will need nursing facility care if they are receiving adequate medical care and HCBS. Thus, we would generally expect the admission rate for newly admitted long-stay residents and the percentage of all long-stay users in the demonstration population to eventually decrease. Since Washington already has extensive HCBS, the hypothesized effects might be reduced. Second, those who do require care should have higher levels of impairment and care needs if access to medical care and HCBS are adequate because those with lower impairment and care needs are more likely to have those needs met through HCBS. Therefore, we would expect health characteristics of newly admitted long-stay residents, and separately, all long-stay residents, to become worse over time. We are also evaluating selected measures of nursing facility quality to identify whether there are any changes in nursing facility quality as a result of the demonstration.

Table 15 presents results on the admission rate and characteristics of new long-stay residents at admission. Successful rebalancing is expected to eventually shift utilization more towards HCBS, reducing new nursing facility admissions, and increasing the level of impairment and care need for these admissions. However, at the start of the demonstration Washington already had one of the country’s highest proportion of Medicaid LTSS spending for HCBS. During site visits, State officials indicated they did not expect to see any significant reductions in nursing facility utilization.

Table 15
Annual nursing facility utilization and characteristics at admission, Washington and comparison group

	Baseline period 1 July 2011–June 2012		Baseline period 2 July 2012–June 2013		Demonstration period 1 July 2013–Dec 2014	
Measures of long-stay residents at admission	**Washington**	**Comparison group**	**Washington**	**Comparison group**	**Washington**	**Comparison group**
Number of beneficiaries eligible for admission	25,759	50,825	23,585	44,416	20,989	43,777
Annual nursing facility utilization						
Weighted number of beneficiaries	18,972	34,894	17,658	31,599	16,984	27,240
New long-stay nursing facility admissions per 1,000 eligibles[1]	24.6	24.2	27.0	26.4	36.5	33.1
Characteristics of new long-stay nursing facility residents at admission						
Weighted number of admitted beneficiaries	467	845	476	834	620	901
Functional status (RUG-IV ADL scale)	8.9	7.2	9.6	8.0	9.2	7.6
Percent with severe cognitive impairment[2]	31.6	38.1	28.5	40.4	27.6	33.2
Percent with SPMI[3]	12.9	14.6	12.1	7.1	11.6	13.9
Percent with low level of care need[4]	2.3	2.2	1.3	1.0	0.5	3.3

[1] Eligibles refers to beneficiaries who were demonstration-eligible for the corresponding time period. The denominator for the admission rate measure also excludes those who were already residing in a NF at the start of the time period.

[2] Severe cognitive impairment was defined by a low score on the Brief Interview for Mental Status (BIMS), poor short-term memory, or severely impaired decision-making skills.

[3] Serious and persistent mental illness (SPMI) was defined as having an active diagnosis of schizophrenia or bipolar disorder, determined by the Minimum Data Set (MDS) 3.0.

[4] Low level of care need was defined as users in the reduced physical function Resource Utilization Group (RUG) who required no assistance with late-loss ADLs (bed mobility, transfer, toilet use, eating).

- The long-stay nursing facility admission rate in the demonstration group increased from 24.6 to 36.5 admissions per 1,000 eligibles between the baseline period and demonstration period. Similarly, the admission rate in the comparison group increased between the baseline and demonstration periods from 24.2 to 33.1 admissions per 1,000 eligibles.

- In Washington, the percentage of admitted beneficiaries with severe cognitive impairment decreased over time from approximately 31.6 to 27.6 percent, as did the percentage with low level of care need, which also dropped from 2.3 to 0.5 percent. Admitted beneficiaries' functional status and percent with SPMI remained stable.

- In the comparison group, the percentage of admitted beneficiaries with severe cognitive impairment also decreased from 38.1 percent during the baseline period to 33.2 percent during the demonstration period. There was little change in functional status and no consistent trend in the percent with SPMI or the percent with low level of care need.

Table 16 presents the admission rate and characteristics of new long-stay residents at admission for the eligible and enrolled groups during the first demonstration period.

Table 16
Annual nursing facility utilization and characteristics at admission, Washington eligible and enrollee group

	Demonstration period 1 July 2013–Dec 2014	
Measures of long-stay residents at admission	**Washington eligible**	**Washington enrollee**
Number of beneficiaries eligible for admission	20,989	9,678
Annual nursing facility utilization		
Weighted number of beneficiaries	16,984	3,420
New long-stay nursing facility admissions per 1,000 eligibles[1]	36.5	14.7
Characteristics of new long-stay nursing facility residents at admission		
Weighted number of admitted beneficiaries	620	50
Functional status (RUG-IV ADL scale)	9.2	8.1
Percent with severe cognitive impairment[2]	27.6	17.8
Percent with serious/persistent mental illness[3]	11.6	12.0
Percent with low level of care need[4]	0.5	2.2

[1] Eligibles refers to beneficiaries who were demonstration-eligible for the corresponding time period. The denominator for the admission rate measure also excludes those who were already residing in a NF at the start of the time period.
[2] Severe cognitive impairment was defined by a low score on the Brief Interview for Mental Status (BIMS), poor short-term memory, or severely impaired decision-making skills.
[3] Serious mental and persistent illness was defined as having an active diagnosis of schizophrenia or bipolar disorder, determined by the Minimum Data Set (MDS) 3.0.
[4] Low level of care need was defined as users in the reduced physical function RUG group who required no assistance with late-loss ADLs (bed mobility, transfer, toilet use, eating).

- The admission rate for the demonstration group during the demonstration period was 36.5 admissions per 1,000 eligibles, and 14.7 admissions per 1,000 for enrollees.

- Enrollees, as compared to the eligible population, were less likely to have severe cognitive impairment (17.8 vs. 27.6 percent), but much more likely to have low level of care needs (2.2 vs. 0.5 percent).

- The enrolled population was similar to the eligible population in terms of functional status and percent with SPMI.

Table 17 presents results on long-stay nursing facility users, their characteristics, and several measures usually considered as reflecting quality of care. Whereas the prior two tables were based on new long-stay residents at admission, the following two tables are based on both new and existing long-stay residents. Although the annual nursing facility utilization measures draw from a similar sample of demonstration-eligible residents, the characteristics and quality measures refer to only those residents who were either newly admitted or part of the overall long-stay population for a given time period. Thus the weighted number of long-stay beneficiaries/eligibles is generally larger than the weighted number of admitted beneficiaries/eligibles.

Table 17
Annual utilization, characteristics, and quality measures of long-stay nursing facility residents, Washington and comparison group

	Baseline period 1 July 2011–June 2012		Baseline period 2 July 2012–June 2013		Demonstration period 1 July 2013–Dec 2014	
Measures of long-stay residents	**Washington**	**Comparison group**	**Washington**	**Comparison group**	**Washington**	**Comparison group**
Number of beneficiaries eligible for long-stay	30,454	69,212	28,018	61,569	23,166	61,394
Annual nursing facility utilization						
Weighted number of beneficiaries	22,271	47,098	20,866	42,771	18,620	36,172
Long-stay nursing facility users as % of eligibles[1]	15.8	25.5	16.6	26.2	12.8	23.5
Characteristics of long-stay nursing facility residents						
Weighted number of long-stay beneficiaries	3,511	12,013	3,456	11,222	2,392	8,503
Functional status (RUG-IV ADL scale)	8.7	8.0	8.8	8.1	8.2	8.1
Percent with severe cognitive impairment[2]	45.0	50.4	46.0	49.2	40.8	47.6
Percent with SPMI[3]	12.7	11.0	12.2	12.0	13.5	13.6
Percent with low level of care need[4]	4.5	6.6	4.4	6.6	6.7	6.9
Quality measures for long-stay nursing facility residents						
Weighted quality measure denominator	3,511	12,012	3,456	11,221	2,393	8,503
Percent of long-stay residents who were physically restrained	1.6	2.4	1.3	1.8	1.1	1.4
Weighted quality measure denominator	3,281	11,291	3,226	10,502	2,193	7,886
Percent of long-stay residents who received an antipsychotic medication	29.1	32.6	27.9	30.8	25.0	28.5
Weighted quality measure denominator	2,887	9,039	2,920	8,438	1,935	6,511
Percent of long-stay high-risk residents with pressure ulcers	12.6	13.1	12.4	11.3	13.6	14.4
Percent of long-stay residents who self-report moderate to severe pain[5]	-	-	-	-	-	-
Percent of long-stay residents experiencing one or more falls with major injury[5]	-	-	-	-	-	-

[1] Eligibles refers to beneficiaries who were demonstration-eligible for the corresponding time period.

[2] Severe cognitive impairment was defined by a low score on the Brief Interview for Mental Status (BIMS), poor short-term memory, or severely impaired decision-making skills.

[3] Serious and persistent mental illness (SPMI) was defined as having an active diagnosis of schizophrenia or bipolar disorder, determined by the Minimum Data Set (MDS) 3.0.

[4] Low level of care need was defined as users in the reduced physical function RUG group who required no assistance with late-loss ADLs (bed mobility, transfer, toilet use, eating).

[5] Not included in this year's Annual Report, but planned for future analyses.

- The percentage of long-stay users in the demonstration group modestly decreased from approximately 15.8 percent during the baseline period to 12.8 percent during the first demonstration period. The comparison group long-stay user percentage also decreased over time from 25.5 percent to 23.5 percent.

- There was some change over time in characteristics of long-stay nursing facility residents in the demonstration and comparison groups; both had a slight decrease in severe cognitive impairment and some increase in SPMI.

  - In the demonstration group, the percentage of long-stay nursing facility residents with severe cognitive impairment decreased (from 45.0 percent to 40.8 percent). The percentage with SPMI increased slightly (from 12.7 percent to 13.5 percent), as did the percentage with low level of care need (from 4.5 percent to 6.7 percent). Functional status remained stable.

  - In the comparison group, there was little change in functional status or low level of care need over time. The percent with SPMI increased over time from approximately 11.0 to 13.6 percent. The percent with severe cognitive impairment decreased slightly from 50.4 percent to 47.6 percent.

- There were similar changes over time in most quality measures of long-stay nursing facility residents in both Washington and the comparison group, with decreases in the percentage with physical restraints and antipsychotic medication use.

  - In the demonstration group, the percentage of long-stay users who were physically restrained decreased from 1.6 percent to 1.1 percent over time. The percentage who received antipsychotic medication also decreased over time from 29.1 to 25.0 percent, and the percentage of long-stay high-risk residents with pressure ulcers increased slightly from 12.6 to 13.6 percent.

  - In the comparison group, as in Washington, there was a similar decrease over time in the percentage of long-stay users who were physically restrained (2.4 to 1.4 percent), and a decrease in the percentage who received antipsychotic medication (32.6 percent to 28.5 percent). There was no consistent trend in the percent of long-stay high-risk residents with pressures ulcers.

Table 18 presents the admission rate, characteristics, and quality measures of long-stay nursing facility residents for the eligible and enrollee groups during the first demonstration period.

Table 18
Annual utilization, characteristics, and quality measures of all long-stay nursing facility residents, Washington eligible and enrollee groups

Measures of long-stay residents	Demonstration period 1 July 2013–Dec 2014	
	Washington eligible	Washington enrollee
Number of beneficiaries eligible for long-stay	23,166	11,228
Annual nursing facility utilization		
Weighted number of beneficiaries	18,620	3,893
Long-stay nursing facility users as % of eligibles[1]	12.8	3.6
Characteristics of long-stay nursing facility residents		
Weighted number of long-stay beneficiaries	2,392	139
Functional status (RUG-IV ADL scale)	8.2	7.6
Percent with severe cognitive impairment[2]	40.8	32.7
Percent with SPMI[3]	13.5	14.6
Percent with low level of care need[4]	6.7	5.4
Quality measures for long-stay nursing facility residents		
Weighted quality measure denominator	2,393	139
Percent of long-stay residents who were physically restrained	1.1	0.0
Weighted quality measure denominator	2,193	127
Percent of long-stay residents who received an antipsychotic medication	25.0	24.2
Weighted quality measure denominator	1,935	102
Percent of long-stay high-risk residents with pressure ulcers	13.6	14.4
Percent of long-stay residents who self-report moderate to severe pain[5]	-	-
Percent of long-stay residents experiencing one or more falls with major injury[5]	-	-

[1] Eligibles refers to beneficiaries who were demonstration-eligible for the corresponding time period.

[2] Severe cognitive impairment was defined by a low score on the Brief Interview for Mental Status (BIMS), poor short-term memory, or severely impaired decision-making skills.

[3] Serious and persistent mental illness (SPMI) was defined as having an active diagnosis of schizophrenia or bipolar disorder, determined by the Minimum Data Set (MDS) 3.0.

[4] Low level of care need was defined as users in the reduced physical function RUG group who required no assistance with late-loss ADLs (bed mobility, transfer, toilet use, eating).

[5] Not included in this year's Annual Report, but planned for future analyses.

- The percentage of long-stay users during the demonstration period was 12.8 percent for the Washington eligible group and 3.6 percent for the enrolled group.

- There were relatively few differences in characteristics of new long-stay NF residents at admission between the eligible and enrolled populations. However, the percentage with severe cognitive impairment was 40.8 percent among eligibles and 32.7 percent among enrollees. The percentage with low level of care need was 6.7 percent among eligibles and 5.4 percent among enrollees.

- Quality measures were generally similar between the eligible and enrolled populations, although only the enrollees had no residents who were physically restrained.

7.9 Population with Behavioral Health Care Needs

Highlights

- The proportion of SPMI diagnosed Medicare-Medicaid beneficiaries with primary care E&M visits increased from 63.8 percent in the baseline period to 71.0 percent in the demonstration period.
- About 30.8 percent of the enrolled population had a SPMI diagnosis, whereas 35.8 percent of those who received health home services had an SPMI diagnosis, suggesting that the State targeted early demonstration enrollment of higher need beneficiaries.
- Health homes are a bridge to integrate delivery of physical and behavioral health services.

Integrating or coordinating care for people with behavioral health disorders is a major objective of the demonstrations under the Financial Alignment Initiative. In this chapter we provide information about the prevalence of behavioral health disorders among Medicare-Medicaid beneficiaries nationwide and in Washington; the Washington behavioral health service system; the demonstration’s goals for improving care for people with behavioral health disorders; and the role of health homes in coordinating care for this group of beneficiaries. We also report findings from the evaluation, including information about demonstration activities to coordinate care across the medical and behavioral health systems, the characteristics of the demonstration eligible population with SPMI, the experience of people with SPMI with care coordination services provided by the demonstration, and the medical and behavioral health service utilization, quality, and expenditures for the subset of demonstration eligibles with SPMI in Washington. In the quantitative analyses reported in tables below, the sub-population with SPMI are those with any behavioral health service use for an SPMI as identified in Medicare claims data in the last 2 years.

7.9.1 Background

Behavioral health disorders (e.g., serious mental illnesses and/or substance use disorders) are highly prevalent among Medicare-Medicaid enrollees. An estimated 9 million of these beneficiaries live in the United States today, comprised of low-income seniors and under-65 adults with disabilities, and many of these beneficiaries have complex physical and mental health disorders (CBO, 2013). It has been widely documented that Medicare-Medicaid enrollees generate greater health care costs than those with Medicare only, and research has documented that Medicare-Medicaid enrollees with behavioral health disorders have greater health care expenditures than Medicare-Medicaid enrollees without such disorders) (SAMHSA, 2014; Kasper et al., 2010). Despite the obvious need to provide behavioral health care to Medicare-Medicaid enrollees, the demand for these services remains unmet in various parts of the country, especially in States with large portions of populations in rural areas (SAMHSA, 2012).

Medicare-Medicaid enrollees often have co-occurring physical and behavioral health illnesses, and their needs are often greater than Medicare-Medicaid enrollees with only physical conditions. In 2003, almost forty percent of Medicare-Medicaid enrollees had both a physical and mental illness compared to only 17 percent of all other Medicare beneficiaries (Kasper et al, 2010). Of these beneficiaries, Medicare-Medicaid enrollees with co-occurring conditions were found to utilize a greater amount of inpatient hospital, nursing home, and community-based long term care services than those with only a physical condition (Kasper et al., 2010). A greater prevalence of co-occurring physical and behavioral conditions has also been documented in older Medicare-Medicaid enrollees (aged 65 and older) than younger dual beneficiaries (aged 18–64, CBO, 2013; Kasper et al., 2010). Given their greater use of services, Medicare-Medicaid enrollees with co-occurring conditions have been found to generate greater health care costs than Medicare-Medicaid enrollees without co-occurring conditions (CBO, 2013; Kasper et al., 2010; SAMHSA, 2014).

Of the estimated 126,444 Medicare-Medicaid beneficiaries in Washington State as of 2009, approximately 40 percent of duals aged 65 and older, and 60 percent of duals aged 18 to 64, had behavioral health needs (DSHS, 2011). Among Medicare-Medicaid enrollees aged 65 and older, twenty percent are estimated to have dementia (DSHS, 2011), which has been documented as a significant driver for health care costs (Schaller et al., 2015). Additionally, twenty percent of Medicare-Medicaid enrollees aged 18 to 64 were identified as having substance use disorders (DSHS, 2011). Overall total expenditures for treating mental health and substance use disorder needs were higher for Washington Medicare-Medicaid enrollees aged 18 to 64 (approximately $137 million) than for those aged 65 and older (approximately $29 million, DSHS, 2011). Although the prevalence of diagnosed behavioral health disorders in Washington is higher than national averages, many individuals do not receive treatment (KCMU, 2014).

The Washington demonstration adds care coordination to the existing service system of medical and behavioral health care. Washington's Medicaid community mental health services are delivered under a 1915(b) waiver authority through prepaid inpatient health plans (PIHPs) called Regional Support Networks (RSNs), which are mostly single or multicounty government-managed care entities. RSNs receive capitated payments and subcontract with community mental health agencies to provide a wide range of outpatient and in-patient services, recovery supports, crisis response, and peer counseling. Chemical dependency services are delivered separately through State FFS contracts with residential treatment programs and county-contracted outpatient treatment programs.

7.9.2 Demonstration Design Intended to Improve Care for People with Behavioral Health Needs

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 needs provides the greatest potential for improved outcomes and cost savings. The demonstration is organized around the principles of patient activation and engagement, which support enrollees to take steps to improve their own health. In the course of integrating care for enrollees across primary care, behavioral health, and LTSS delivery systems, health home care coordinators are charged with engaging enrollees to set health action goals and increase self-management skills to achieve optimal physical and cognitive health.

The health home care coordinator's role is to be a bridge across physical and behavioral health delivery systems and identify gaps in needed supports. The health home care coordinator's role varies depending on whether enrollees have a formal relationship with the behavioral health delivery system. In those instances, the health home care coordinator will collaborate with enrollees' service-specific case managers. However, case managers in the behavioral health system are charged with coordinating services provided by their delivery systems; they are not responsible for addressing—nor do they have the time to address—enrollees' other needs, such as health care, housing, transportation, and nutrition. During site visits, the evaluation team was provided with numerous examples of instances in which the behavioral health system was only able to narrowly focus on treatment and did not have resources to address broader needs. Health home care coordinators were able to step in with that support.

7.9.3 Demonstration Experience

Six demonstration enrollees who used behavioral health services participated in the evaluation's beneficiary focus groups and reported very favorable experiences with health home care coordinators, including assistance with physical health and social needs, as well as symptoms of their mental illnesses (see ***Section 5***). Setting health goals was important for focus group participants who used behavioral health services. They reported achieving goals ranging from increased physical activity, controlling cholesterol, and smoking cessation, to getting out of the house after 8 years of isolation and reducing use of the emergency room for minor issues. Health homes also helped individuals to access behavioral health services and address basic needs such as finding affordable housing, as described in interviews during the site visit and vignettes shared by Washington demonstration staff.

One health home provided the evaluation team with an example of the support provided by a care coordinator. A homeless enrollee with severe mental illness was taking multiple medications that he dumped in his backpack. He did not know what he was taking and which ones he had to take when. The care coordinator arranged for him to receive his medications in bubble pack mini-sets, so that wherever he may be at a given point in time, he can pull a bubble pack and take the medications at the right time and know if he missed one. Another enrollee who used mental health services was isolated, neglecting herself, and had suicidal thoughts. Her care coordinator helped connect her with mental health services, a support group, and other social services. As a result she became more active and was able to "get her life back."

7.9.4 SPMI Population Characteristics

Approximately 31 percent of the Washington eligible population in the demonstration period had a SPMI diagnosis (identified from Medicare claims data over the past 2 years). About 30.8 percent of the enrolled population had a SPMI diagnosis, whereas 35.8 percent of those who used health home services had an SPMI diagnosis. In the demonstration period, 35.7 percent of comparison group eligibles had a SPMI diagnosis. While there is little apparent difference in the share of eligible and enrolled beneficiaries who have a mental illness diagnosis, those using health home services have a slightly higher prevalence of these diagnoses, and are quite similar to eligible beneficiaries in the comparison group. This suggests that Washington and its health home entities targeted these beneficiaries for engagement in care coordination in the first year of the demonstration.

Table 19 provides information on demographic characteristics, HCC score, and disability status of beneficiaries with an SPMI diagnosis.

Table 19
Descriptive statistics for the Washington Demonstration eligible, enrolled, health home users, and comparison groups, among those with SPMI

	Demonstration period 7/1/2013–12/31/2014			
Beneficiary Characteristic	**Eligibles**	**Enrolled**	**Health home use**	**Comparison**
Number of Beneficiaries	6,436	3,171	518	16,424
Age (%)				
Under 64	66.1	64.4	71.0	66.0
65–74	22.0	23.5	20.7	17.8
75 and older	11.9	12.1	8.3	16.2
Gender				
Male	33.8	33.4	34.0	35.9
Female	66.2	66.6	66.0	64.1
Race				
White	91.0	90.5	93.2	86.0
African American	4.2	3.8	2.2	13.2
Hispanic	2.8	3.9	3.6	0.4
Asian/PI	2.0	1.9	1.0	0.3
Hierarchical Condition Category				
<1	25.0	20.1	15.4	25.3
1–2	44.0	41.3	43.4	43.1
3–4	24.1	28.7	30.5	24.2
4+	7.0	9.9	10.6	7.3
Disabled				
Yes	80.2	78.7	84.0	77.5
No	19.8	21.3	16.0	22.5

7.9.5 Health Care Utilization of SPMI Beneficiaries

Table 20 illustrates the utilization, expenditures, and proportion of inpatient and outpatient service use among Medicare-Medicaid beneficiaries who were diagnosed with an SPMI (identified from Medicare claims data over the past 2 years). As was discussed above, however, one should not conclude that observed changes resulted from the health home intervention, as it had not yet been widely deployed in the population eligible for the Washington Health Homes MFFS demonstration.

- In both Washington and the comparison group, there appears to be no meaningful trend in the proportion of Medicare-Medicaid beneficiaries diagnosed with a SPMI that have an inpatient admission, inpatient psychiatric admission, ED visit, or observation status over the baseline and demonstration periods. However, there was a decline in use per 1,000 eligible months for ED visits, inpatient admissions, and psychiatric ED visits from the baseline through the demonstration periods among users of each respective service.

- In both Washington and the comparison group, there were moderate upticks in the count of observation stays per 1,000 eligible months (12.1 to 13.6 in Washington, and 15.9 to 18.9 in the comparison group).

- In Washington, the proportion of SNF use declined from 1.8 percent to 1.5 percent from the baseline to the demonstration period, and there was an approximately 22 percent reduction in expenditures per eligible month on SNF use. This trend corresponded with a small decline in the count of SNF use per 1,000 eligible months (19.7 to 16.1), and a decline of 163.4 to 133 per 1,000 eligible months among users from the baseline period through the demonstration period.

- In Washington, the proportion of SPMI diagnosed Medicare-Medicaid beneficiaries with primary care E&M visits increased from 63.8 percent in the baseline period to 71.0 percent in the demonstration period. This trend was present in comparison states, albeit more modestly, where the proportion using primary care E&M services increased from 68.2 to 71.3 percent across the three periods.

- There was also an increase in the count of primary care E&M visits per 1,000 eligible months in Washington and the comparison groups from the baseline period through the demonstration period (1,190.9 to 1,413.7 in Washington, and 1,295.4 to 1,413.5 in the comparison group).

- In both Washington and comparison states, the proportion of Medicare-Medicaid beneficiaries with behavioral health visits decreased dramatically from 17.5 percent to 7.3 percent, and 18.1 to 9.7 percent across the three periods, respectively. Potentially, beneficiaries were receiving more Medicaid-reimbursed mental health services given that fewer SPMI beneficiaries received Medicare-reimbursed services.

- In Washington, monthly utilization of behavioral health visits declined from 265.8 per 1,000 eligible months to 187.4 per 1,000 months from the baseline period to the demonstration period. A similar decline was observed in the comparison states during the same time period. Despite this decline, the number of behavioral health visits per 1,000 eligible months among users increased from 569.8 to 791.5 from the baseline period to the demonstration period. Thus, while fewer people had a behavioral health visit, those that did have a visit had more frequent visits, suggesting that the user population became more selective of high need patients over the three year period.

Table 20
Proportion, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with SPMI

Measures by setting	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
	Demonstration	Comparison	Demonstration	Comparison	Demonstration	Comparison
Number of beneficiaries	7,992	16,184	7,750	15,762	6,436	16,424
INSTITUTIONAL SETTING						
Inpatient Admissions[1]						
% with use	6.0	7.0	6.2	7.1	5.7	5.9
Utilization per 1,000 user months	195.6	209.1	195.0	214.0	168.9	156.8
Utilization per 1,000 eligible months	67.2	79.2	68.8	79.6	64.2	65.6
Expenditures per user months ($)	2,204	1,909	2,436	2,113	2,096	1,548
Expenditures per eligible months ($)	755	721	858	786	796	647
Inpatient Psychiatric Admissions						
% with use	1.0	2.2	1.0	2.1	0.8	2.1
Utilization per 1,000 user months	162.5	177.1	169.5	172.0	130.6	128.8
Utilization per 1,000 eligible months	12.3	24.6	12.5	23.4	9.4	22.7
Expenditures per user months ($)	1,449	1,224	1,530	1,179	1,267	873
Expenditures per eligible months ($)	105	167	107	158	87	151
Inpatient Substance Abuse						
% with use	0.1	0.2	0.1	0.2	0.1	0.2
Utilization per 1,000 user months	140.8	128.2	137.6	146.2	107.0	108.4
Utilization per 1,000 eligible months	1.4	1.9	1.5	2.0	1.1	1.9
Expenditures per user months ($)	733	486	836	686	721	590
Expenditures per eligible months ($)	7	7	9	9	7	10

(continued)

Table 20 (continued)
Proportion, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with SPMI

Measures by setting	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
	Demonstration	Comparison	Demonstration	Comparison	Demonstration	Comparison
Emergency Department (Non-Admit)						
% with use	13.4	13.0	13.1	13.2	13.7	12.8
Utilization per 1,000 user months	359.0	331.9	337.3	335.4	311.3	282.5
Utilization per 1,000 eligible months	202.3	187.5	188.7	187.9	197.7	183.8
Expenditures per user months ($)	141	114	145	123	144	114
Expenditures per eligible months ($)	79	64	81	68	91	74
Emergency Department (Psychiatric)						
% with use	1.6	1.1	1.6	0.9	1.4	0.9
Utilization per 1,000 user months	208.9	155.5	193.4	154.2	171.4	105.0
Utilization per 1,000 eligible months	21.8	12.8	19.6	11.2	18.9	10.6
Expenditures per user months ($)	76	50	71	52	68	34
Expenditures per eligible months ($)	8	4	7	4	8	3
Observation Stays						
% with use	1.1	1.5	1.2	1.6	1.3	1.8
Utilization per 1,000 user months	121.1	118.4	126.4	124.5	98.3	102.9
Utilization per 1,000 eligible months	12.1	15.6	13.3	17.3	13.6	18.7
Expenditures per user months ($)	207	162	231	186	197	173
Expenditures per eligible months ($)	21	21	24	26	27	31

(continued)

Table 20 (continued)
Proportion, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with SPMI

Measures by setting	Baseline period 1 7/1/2011–6/30/2012 Demonstration	Baseline period 1 7/1/2011–6/30/2012 Comparison	Baseline period 2 7/1/2012–6/30/2013 Demonstration	Baseline period 2 7/1/2012–6/30/2013 Comparison	Demonstration period 7/1/2013–12/31/2014 Demonstration	Demonstration period 7/1/2013–12/31/2014 Comparison
Skilled Nursing Facility						
% with use	1.8	2.3	1.9	2.4	1.5	1.9
Utilization per 1,000 user months	163.4	171.4	172.1	181.1	133.0	123.8
Utilization per 1,000 eligible months	19.7	25.2	20.6	26.6	16.1	20.3
Expenditures per user months ($)	1,959	1,462	2,024	1,541	1,500	1,207
Expenditures per eligible months ($)	229	211	232	221	178	195
Hospice						
% with use	0.6	1.0	1.1	1.1	0.7	1.2
Utilization per 1,000 user months	336.2	346.9	392.1	435.6	306.9	357.6
Utilization per 1,000 eligible months	6.1	10.3	11.2	11.7	6.6	12.5
Expenditures per user months ($)	1,157	1,052	1,385	1,282	1,089	1,245
Expenditures per eligible months ($)	21	31	40	34	23	43
NON-INSTITUTIONAL SETTING						
Specialist E&M Visits						
% with use	6.7	6.3	6.7	6.5	7.2	6.4
Utilization per 1,000 user months	159.3	155.3	159.2	157.4	143.1	125.3
Utilization per 1,000 eligible months	72.3	68.0	73.4	70.6	77.8	69.1
Expenditures per user months ($)	16	14	16	14	14	11
Expenditures per eligible months ($)	7	6	7	6	8	6

(continued)

Table 20 (continued)
Proportion, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with SPMI

Measures by Setting	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
	Demonstration	Comparison	Demonstration	Comparison	Demonstration	Comparison
Primary Care E&M Visits						
% with use	63.8	68.2	65.2	69.6	71.0	71.3
Utilization per 1,000 user months	1,223.4	1,321.1	1,303.2	1,382.7	1,432.9	1,437.5
Utilization per 1,000 eligible months	1,190.9	1,295.4	1,270.8	1,357.0	1,413.7	1,413.5
Expenditures per user months ($)	85	80	91	81	102	87
Expenditures per eligible months ($)	83	78	88	80	101	86
Behavioral Health Visits						
% with use	17.5	18.1	12.6	13.2	7.3	9.7
Utilization per 1,000 user months	569.8	531.6	537.3	456.6	791.5	600.3
Utilization per 1,000 eligible months	265.8	261.7	236.2	219.9	187.4	214.2
Expenditures per user months ($)	22	21	24	19	49	31
Expenditures per eligible months ($)	10	10	10	9	12	11
Outpatient Therapy (PT, OT, ST)						
% with use	6.1	6.3	6.0	6.4	5.8	6.5
Utilization per 1,000 user months	3,919.4	5,861.1	3,017.0	5,903.2	2,967.5	5,850.1
Utilization per 1,000 eligible months	910.8	1,403.4	740.2	1,448.7	786.7	1,675.0
Expenditures per user months ($)	150	202	116	199	86	161
Expenditures per eligible months ($)	34	47	28	48	22	44
Independent Therapy (PT, OT, ST)						
% with use	2.4	1.3	2.4	1.2	2.8	1.1
Utilization per 1,000 user months	1,821.1	1,978.4	1,786.7	1,892.7	1,761.2	1,583.5
Utilization per 1,000 eligible months	186.0	113.2	182.5	104.1	232.8	112.1
Expenditures per user months ($)	58	58	55	58	47	39
Expenditures per eligible months ($)	6	3	6	3	6	3

(continued)

Table 20 (continued)
Proportion, utilization, and expenditures for institutional and non-institutional services for the Washington Demonstration and comparison groups, beneficiaries with SPMI

Measures by setting	Baseline period 1 7/1/2011–6/30/2012 Demonstration	Baseline period 1 7/1/2011–6/30/2012 Comparison	Baseline period 2 7/1/2012–6/30/2013 Demonstration	Baseline period 2 7/1/2012–6/30/2013 Comparison	Demonstration period 7/1/2013–12/31/2014 Demonstration	Demonstration period 7/1/2013–12/31/2014 Comparison
Home Health						
% with use	2.2	2.7	2.1	2.9	2.3	2.5
Utilization per 1,000 user months	172.4	199.2	161.8	208.4	141.1	166.8
Utilization per 1,000 eligible months	21.7	27.4	21.3	29.3	22.6	25.0
Expenditures per user months ($)	504	469	457	463	402	390
Expenditures per eligible months ($)	63	64	60	65	64	58
Durable Medical Equipment						
% with use	27.9	27.0	26.9	26.0	28.6	23.2
Utilization per 1,000 user months						
Utilization per 1,000 eligible months						
Expenditures per user months ($)	131	143	125	152	112	119
Expenditures per eligible months ($)	72	75	67	77	66	62
Other Hospital Outpatient Services						
% with use	41.8	36.3	41.5	35.4	46.3	35.4
Utilization per 1,000 user months						
Utilization per 1,000 eligible months						
Expenditures per user months ($)	273	204	267	218	302	196
Expenditures per eligible months ($)	229	172	221	180	266	173

[1] Includes acute admissions, inpatient rehabilitation, and long term care hospital admissions

Notes: Utilization for inpatient admissions, inpatient psychiatric admissions, inpatient substance abuse, skilled nursing facility, and hospice are defined as number of admissions during the eligible month, and eligible months among users of each respective service. Utilization for emergency department (non-admit), emergency department (psychiatric), observation stays, specialist E&M visits, primary care E&M visits, behavioral health visits, home health, and outpatient and independent therapy are defined as the number of visits during the eligible month, and eligible months among users of each respective service. Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

Table 21 displays values for quality of care and care coordination measures for the Washington demonstration and comparison groups, across the baseline and demonstration periods, among those with SPMI. Again, the patterns we observe are consistent with those discussed in the overall quality measure section.

- In Washington and the comparison group, there appears to be a small decline in the rate of 30-day readmission from the baseline to the demonstration period (17.7 to 16.7 and 21.6 to 18.4, respectively)

- Among those in Washington with an SPMI diagnosis, preventable ED visits increased from 250.5 to 255.8 visits per 1,000 eligible months between the baseline and demonstration periods. A similar increase was observed for the comparison group.

- Overall ambulatory care sensitive condition admissions declined slightly among those with an SPMI diagnosis in Washington from 36.4 to 32.8 per 1,000 eligible months between the baseline and demonstration periods. A similar trend was observed for those in the comparison group (57 to 35.4 visits per 1,000 eligible months between the baseline and demonstration periods).

- Chronic ambulatory care sensitive condition admissions among those with an SPMI diagnosis in Washington declined slightly from 22.9 to 20.4 per 1,000 eligible months between baseline and demonstration periods. A similar decline was observed in the comparison group (35.0 to 20.4 per 1,000 eligible months).

- In Washington, pneumococcal vaccinations increased from 1.9 to 28.4 per 1,000 eligible months between the baseline and demonstration periods. A smaller increase was observed in the comparison group (1.0 to 4.2 vaccinations per 1,000 eligible months).

Table 21
Quality of care and care coordination outcomes for the Washington Demonstration eligible population and comparison groups, beneficiaries with SPMI diagnosis

	Baseline period 1 7/1/2011–6/30/2012		Baseline period 2 7/1/2012–6/30/2013		Demonstration period 7/1/2013–12/31/2014	
Quality and care coordination measures	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
30-day all-cause risk-standardized readmission rate (%)	17.7	21.6	17.0	21.3	16.7	18.4
Preventable ER visits per 1,000 eligible months	250.5	239.7	255.5	275.5	255.8	267.4
Rate of 30-day follow up after hospitalization for mental illness (%)	37.4	41.9	39.7	39.6	37.1	41.3
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	36.4	57.0	35.9	48.4	32.8	35.4
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	22.9	35.0	22.2	29.4	20.4	21.5
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	1.9	1.0	10.9	2.4	28.4	4.2
Screening for clinical depression per 1,000 eligible months	0.0	0.6	0.2	0.4	1.4	1.4
Follow-up per positive screen for Clinical Depression	0.1	1.0	1.0	1.0	1.0	0.8
Fall Risk Assessment, aged 65+, per 1,000 eligible months	2.9	7.2	4.4	5.5	108.3	17.7
Fall Care Plan, aged 65+, per positive screen for fall risk	0.5	0.6	0.8	0.3	0.5	0.5

Source: RTI Analysis of Medicare claims.

7.10 Utilization and Costs for Selected Demographic and Health Conditions Groups

In this section we present results in the text on Medicare service utilization from subgroup analyses on age, gender, race, urban/rural status, disability, Alzheimer's and other dementias, HCC score, high cost, and death. ***Tables B-1*** to ***B-9*** in ***Appendix B*** provide the associated detailed results from which this narrative text was derived on the utilization, payments, and percentage of beneficiaries using various inpatient and outpatient services for each of these subgroups in both Washington and the comparison group over the baseline and demonstration periods.

7.10.1 Age Groups

We categorized "age" as under 65, 65–74, and 75 years and older.

- In Washington, there was no observable trend in the percentage of Medicare-Medicaid beneficiaries having an inpatient admission by age group over the baseline and demonstration periods. This was also the case for the comparison group.

- However, while the percentage of inpatient users in Washington appeared similar across age groups, those 75 years and older had slightly fewer inpatient stays relative to those under 65 across the baseline and demonstration periods. For example, in baseline period 1, those under 65 had 63.9 visits per 1,000 eligible months, compared to 55.0 visits among those 75 years and older. Among those with any inpatient use, those 75 years and older had fewer inpatient visits per 1,000 eligible months than those under 64 (166.1 compared to 199.0).

- In Washington and the comparison group, it appears that inpatient admissions among those 75 years and older were slightly less expensive compared to those under 65. For example, those under 65 in Washington during the demonstration period expended 20 percent more per eligible month on inpatient admissions, compared to those 75 years and older. A similar trend occurred among those with any inpatient admissions,and was present across the baseline and demonstration periods for both the demonstration and comparison groups.

- In Washington, there were no observable trends in the percentage of Medicare-Medicaid beneficiaries having an ED visit over the baseline and demonstration periods. However, those 75 years and older consistently had 5–6 percentage points fewer ED visits compared to those under 65. This was also the case for the comparison group.

- In Washington, there was no observable trend in the percentage of skilled nursing facility use across the baseline and demonstration periods. However, the percentage of those 75 years and older using skilled nursing facility services was 1–2 percentage points more than those under 65, across the baseline and demonstration periods. As expected, SNF payments per eligible month were 128–165 percent greater among those over 75 compared to those under 65. However, among those with any SNF use, there were no notable differences in expenditures within age groups. This trend was similar in the comparison group.

- In Washington and the comparison group, there was no meaningful trend in primary care E&M visits from the baseline period through the demonstration period. In Washington, there was a similar percentage of utilization of primary care E&M between those 75 years and older and those under 65 during the baseline periods. During the demonstration period, 66.7 percent of those under 65 had a primary care E&M visit, compared to 64.1 percent among those 75 years and older. Within the comparison group, those 75 and older consistently had 8–10 percentage points more with primary care E&M visits compared to those under 65.

- In addition, those over 75 years old in Washington had fewer E&M visits per 1,000 eligible months compared to those under 65 (i.e., 1,107.2 vs. 1,277.2 in the demonstration period). By contrast, those over 75 years old in the comparison group consistently had more E&M visits compared to those under 65 years old.

- In Washington and the comparison group, the count of specialist visits per 1,000 eligible months among those over 75 were approximately34–42 percent fewer than those under 65 across the baseline and demonstration periods.

- In Washington, the percentage having behavioral health visits was consistently greater among those under 65 compared to those over 75 years old across the baseline and demonstration period. However, this difference declined to less than 1 percentage point in the demonstration period as the percentage having behavioral health visits under 65 dropped from 9.5 percent to 3.6 percent.

7.10.2 Gender

- In both Washington and the comparison group, the percentage of Medicare-Medicaid beneficiaries with an inpatient admission, inpatient psychiatric admission, ED visits (psych and non-psych related), observation stays, skilled nursing facility use, and hospice were very similar by gender.

- Males in both Washington and the comparison group appeared to have more Medicare spending on inpatient admissions per month relative to females. For example, in baseline period 1, males had 13–16 percent more in inpatient expenditures per 1,000 eligible months compared to females in both Washington and the comparison group. This pattern was consistent across the baseline and demonstration periods, and for among those with any inpatient admissions.

- The count of ED visits per 1,000 eligible months appeared to be similar between males and female in Washington across the baseline and demonstration periods. In contrast, Males in the comparison group had a slightly higher count of visits relative to females, ranging from 9–17 more visits per 1,000 eligible months.

- In both Washington and the comparison groups, the percentage of females with a primary care E&M visit was greater than males across the baseline and demonstration periods. For example, the percentage of females in Washington with a primary care E&M visit was roughly 6 percentage points greater than their male counter parts across the baseline and demonstration periods.

- In both Washington and the comparison group, the percentage having a behavioral health visit was similar between men and women across the baseline and demonstration periods. However, in Washington, women tended to have a greater count per 1,000 eligible months compared to men (95.2 vs 65.5 visits). In contrast, in the comparison group, there was no discernable pattern in use between males and females.

7.10.3 Race

We categorized "race" as White, African American, Hispanic, and Asian/Pacific Islander.

- In Washington, the percentage of African Americans with an inpatient admission was consistently 0.7–2.0 percentage points higher than their White and Hispanic counter parts across the baseline and demonstration periods. This trend was present in the comparison group, with exception to the demonstration period where there were similar percentages across race.

- The difference in inpatient admissions across race corresponded with greater inpatient expenditures per 1,000 eligible months. For example, in Washington, African Americans expended $1,015–$1,081 per 1,000 eligible months relative to $701–$806 among Whites, $751–$859 among Hispanics, and $570–$743 among Asians from the baseline period through the demonstration period. Expenditures per 1,000 months were also greater among African Americans compared to other ethnicities, indicating greater intensity of inpatient use. This trend was also present in the comparison group.

- In Washington, African Americans consistently had a greater percentage of ED visits relative to their White counterparts (e.g., 12.7 percent vs 9.4 percent in baseline period 1, and 11.6 vs. 10.6 in the demonstration period, respectively). This trend was present but less pronounced in the comparison group.

- However, the number of ED visits per 1,000 eligible months declined from 186.6 to 156.1 among African Americans, and increased from 127.2 to 139.3 among Whites, 123.9 to 142.0 among Hispanics, and 53.0 to 69.0 among Asians from the baseline to demonstration periods. For African Americans in the comparison group, ED visits per 1,000 eligible months increased from 147.5 to 168.6 over the baseline to demonstration periods.

- While there was no meaningful difference across race in the percentage using skilled nursing facilities, there were small differences in number of stays per 1,000 eligible months. Whites consistently had a slightly higher number of skilled nursing facility stays per 1,000 eligible months than their African American or Hispanic counterparts across the baseline and demonstration period. For example, Whites had 19.9 visits per 1,000 eligible months compared to 10.2 visits among Hispanics in baseline period 1, and 16.4 visits per 1,000 eligible months compared to 9.8 visits among Hispanics in the demonstration period.

- In Washington, the percentage of African American and Whites having a primary care E&M visit was similar across the baseline and demonstration periods. However, this percentage was slightly higher than the percentage of Hispanic Medicare-Medicaid beneficiaries during the baseline and demonstration. In contrast, the percentage of Whites in the comparison group with a primary care E&M visit was 14-18 percentage points greater than Hispanics, and 4 –5 percentage points greater than African Americans from the baseline through the demonstration period.

7.10.4 Urban/Rural Status

We defined "urban" as counties with population totaling 20,000 or more people using Rural Urban Continuum Codes, and "rural" as having less than 20,000 people. Approximately 5 percent of Washington beneficiaries were categorized as "rural" under this definition, whereas approximately 50 percent of the comparison group were categorized as "rural."

- In Washington and the comparison group, there were no notable trends in the percentage of rural Medicare-Medicaid beneficiaries with inpatient admissions across the baseline and demonstration year.

- Among rural Medicare-Medicaid beneficiaries in Washington, the count of inpatient admissions per 1,000 eligible months among users declined from 188.7 to 150.0 from baseline period 2 through the demonstration period. There was a corresponding increase in the proportion of ED use across the baseline and demonstration period (9.3 percent to 11.3 percent).

- Among rural Medicare-Medicaid beneficiaries with any SNF use, the number of stays per 1,000 eligible months declined from 156.0 to 121.5 visits from the baseline to the demonstration period. This trend was seen in the comparison group.

- Despite this decline, rural Medicare-Medicaid beneficiaries expended $285–$294 per eligible month on skilled nursing each year, compared to $171–$222 per month among their urban counterparts.

- Rural Medicare-Medicaid beneficiaries in Washington appeared to have greater skilled nursing expenditures per 1,000 eligible months among users than their urban counterparts (e.g., $2,393 vs. $1,888 in baseline period 1) across each period. In contrast, rural Medicare-Medicaid beneficiaries in the comparison group had less spending per 1,000 eligible months among users than their urban counterparts (e.g., $1,553 vs $1,344 in baseline period 1) across each period.

- In Washington, home health expenditures among rural Medicare-Medicaid beneficiaries declined from $519 per 1,000 eligible month among users to $406 during the demonstration period. A similar trend was observed in the comparison group, but to lesser extent ($507 to $413 per eligible month among users from baseline period 1 to the demonstration period).

7.10.5 Disability Status

Beneficiaries were defined as having a disability if it was indicated as the original reason for entitlement to Medicare benefits.

- In both Washington and the comparison states, there were no notable trends in the percentage of disabled Medicare-Medicaid beneficiaries using inpatient admissions, ED use, observation stays, skilled nursing facility visits, hospice, or home health use.

- In Washington, the count of inpatient admissions, ED visits, and SNF stays per 1,000 eligible months remained approximately level through the baseline and demonstration periods. In the comparison group, inpatient admissions and ED visits per 1,000 eligible months among users declined over the baseline and demonstration periods (e.g., inpatient admissions declined from 200.8 to 155.8 per 1,000 eligible months among users; ED visits declined from 397.8 to 254.5 per 1,000 eligible months among users).

- In both Washington and the comparison group, there was a small increase in the count of observations stays (10.7 to 12.3 per 1,000 eligible months for Washington, and 14.4 to 16.2 per 1,000 eligible months for the comparison groups).

- There was also a small uptick in the count of hospice use in the comparison group (6.4 to 9.4 per 1,000 eligible months), while there was no notable change in Washington.

- In both Washington and the comparison group, there was in increase in the percentage of disabled Medicare-Medicaid beneficiaries having E&M visits (62.8 to 67.5 percent in Washington, and 65.5 to 66.8 percent in the comparison group). Additionally, in both Washington and comparison states, E&M visits per 1,000 eligible months increased for each year. For example, disabled Medicare-Medicaid beneficiaries in Washington had an approximately 8 percent increase in E&M visits with a primary care physician from baseline period 2 to the demonstration period.

- The increase in E&M visits in Washington corresponded with a small increase in expenditures per month ($81 to $94 per eligible month).

- In Washington, the number of outpatient therapy events per 1,000 eligible months among users declined by approximately 16 percent from the baseline to the demonstration period. Expenditures per eligible month also declined during that period. However, the number per 1,000 eligible months increased during that period, which may suggest a decrease in the intensity of services per outpatient therapy visit.

7.10.6 Alzheimer's and other Dementias Diagnosis

We defined Alzheimer's and other dementias using diagnosis codes from inpatient and outpatient claims data.

- In Washington, the percentage of beneficiaries diagnosed with Alzheimer's who had an inpatient admission increased from 4.9 percent to 5.7 from the baseline to the demonstration period. This trend was not present in the comparison group.

- In both Washington and the comparison group, there was a small decline in the inpatient admissions per 1,000 eligible months among users from the baseline period through the demonstration period (e.g., 184.0 to 153.9 among those in Washington).

- The percentage of those with Alzheimer's with a primary care E&M visit in Washington increased from 59.5 percent to 64.8 during the demonstration period. The count of primary care E&M visits also increased from 952.5 per 1,000 eligible months among users to 1,109.5 during the same period. A similar trend was present in the comparison group.

- While the percentage of those with Alzheimer's in Washington using home health services remained mostly unchanged, expenditures per eligible month among users declined from $516 to $421 from the baseline to the demonstration period. This trend was also evident in the comparison group

7.10.7 Hierarchical Condition Category

We categorized beneficiaries into four groups: those with HCC scores less than 1, 1 < 2, 2 < 4, and 4 or greater.

- As expected, in both Washington and the comparison group, those with HCC scores greater than 4 had a higher percentage with any inpatient admissions compared to those with HCC scores less than 1. For example, in Washington, 16.7 percent of those with HCC scores greater than 4 in baseline period 1 had an inpatient admission, compared to only 2.3 percent with scores less than 1.

- Among those with an HCC score greater than 4, the percentage of Washington eligible beneficiaries with any inpatient admissions declined from 16.7 to 10.9 percent between the baseline and demonstration periods. This trend was observable in the comparison group as well. HCC scores are correlated with the PRISM scores used by Washington State.

- In Washington, the decline in the share with an inpatient admission among those with HCC scores greater than 4 corresponded with a small decline in the percentage with ED visits (14.3 to 13.3 percent) and ED visits per 1,000 eligible months from the baseline period through the demonstration period (207.2 to 175.5 visits). A similar trend occurred in the comparison group.

- In Washington, the percentage with HCC scores greater than 4 who used a skilled nursing facility declined from 5.8 percent to 3.0 percent from the baseline period through the demonstration period. Payments for skilled nursing facility use per month declined as well from $2,142 to $1,618 per 1,000 eligible months among users from the baseline through the demonstration period. These trends were similar to trends in the comparison group.

- Those with the highest HCC score in Washington showed a decline in the percentage using hospice between the first baseline period (2.6 percent) and the demonstration period (2.0 percent). The percentage using hospice in the comparison group remained relatively unchanged.

- In Washington, there was a small decline in the percentage of those with HCC scores greater than 4 with primary care E&M visits (76.9 to 71.8 percent from baseline period 1 through the demonstration period).

- Additionally, those in Washington with the highest HCC scores had a 100 percent greater number of primary care E&M visits per 1,000 eligible months than those with an HCC score less than 1 in baseline period 1. This is as expected, but the difference decreased to approximately 43 percent by the demonstration period, in part because the number of primary care E&M visits for those with HCC scores less than 1 increased from 847.5 per 1,000 eligible months in baseline period 1 to 1,085.6 in the demonstration period. This trend was similar for those with any primary care E&M use. The comparison group experienced a similar trend in primary care E&M visits across HCC categories in the baseline and demonstration years for both eligible months and eligible months among users

- In Washington and the comparison group, the percentage of those with HCC scores greater than 4 using home health services declined about 2 percentage points from the baseline to the demonstration period (e.g., 8.7 percent to 6.8 percent among those in Washington). Payments per month declined from $247 to $179 from the baseline period to the demonstration period.

- Despite this decline, the percentage using home health among those with the highest HCC scores was greater than among those with the lowest HCC scores in both Washington and the comparison group.

7.10.8 High-Cost Users

We defined "high cost users" as those in the 90th percentage of total Medicare spending during the baseline and demonstration periods. As expected, across each year, those who were in the 90th percentage of total Medicare spending appear to have greater inpatient, ED utilization, skilled nursing use, E&M visits, and home health episodes relative to those with lower spending

- In Washington, 21.0–23.7 percent in the high-cost group had an inpatient admission compared to 3.3–4.9 percent among their lower spending counterparts cross the three periods. Additionally, the count of inpatient admissions per 1,000 eligible months in the high-cost group in Washington declined from 268.6 to 243.6 from the baseline to the demonstration period.

- The percentage of high-cost beneficiaries in Washington with primary care E&M visits was consistently around 9 percentage points higher than beneficiaries with lower spending across three periods. In contrast, there was only about a 2 percentage point difference in primary care E&M visits between high-cost users and those with lower spending in the comparison group during the baseline periods.

- In Washington and in the comparison group, expenditures on ED visits (non-admit) among high cost beneficiaries increased each year from baseline period 1 to the demonstration period ($139 per month to $166 per eligible month). A similar trend was observed in the comparison group.

- In Washington and in the comparison group, there was no meaningful trend in the percentage of high-cost Medicare-Medicaid beneficiaries using skilled nursing.

- In Washington and in the comparison group, there was no meaningful change in the percentage of high-cost Medicare-Medicaid beneficiaries using home health. Additionally, there was not a noticeable trend in the count of home health episodes per 1,000 eligible months over the baseline and demonstration years.

7.10.9 Death

We categorized those who died as having died in during the year of observation.

- Among those who died in Washington, there was an increase in the proportion who had an inpatient admission from the baseline to the demonstration period (15.1 to 17.7 visits). There was not a notable trend in the rate of use in the comparison group.

- As expected, among those who died, the percentage having an inpatient admission was 10.1 to 13.1 percentage points higher than those who did not die. This difference was also observable in the comparison group. In contrast with inpatient admissions, there was little to no difference in the percentage of those who died with ED visits or observation stays compared to those who did not die.

- The percentage using hospice in Washington declined from 9.9 to 8.6 percent from the baseline to the demonstration period. This decline translated to a 16.5 percent relative decrease in the number of hospice episodes per 1,000 eligible months. There was a similar trend in the comparison group where the percentage of use increased from 13.3 to 19.4 percent from baseline period 1 to 2, but declined to 12.4 percent during the demonstration period.

- Among those who died in Washington, there was a moderate increase in the percentage using primary care E&M visits from baseline to the demonstration period (62.1 percent to 69.8). The increase in the rate of use corresponding with an increase in the number of primary care E&M visits from the baseline to the demonstration period (1,158.1 to 1,438.1 visits). This might suggest that more primary care is being delivered near the end of life relative to previous years. A similar, but less pronounced, trend was observed in the comparison group.

- The percentage of those who died in Washington and the comparison group who had outpatient therapy was consistently greater than those who did not die during the observation periods (e.g., 4.3 to 5.2 percentage point difference from baseline period 1 through the demonstration period). Indeed, in baseline period 1, those who died in Washington had 1,633.3 visits per 1,000 eligible months compared to 767.9 per 1,000 eligible months for those who did not die. This difference persisted through the demonstration period, and was similar for the comparison group.

7.11 Minimum Data Set Results by Sex, Race, Age, and Rural Status

The following section provides descriptive statistics on nursing facility use stratified by sex, race, age group, and rural status. Subgroup definitions are consistent with those used for the Medicare service utilization results. Differences present for all time periods are described, as well as additional notable disparities. To address small sample size, cells with fewer than 30 weighted subjects are not presented. Measures with fewer than two subpopulations of sufficient sample size are also excluded. ***Tables A.2-1*** to ***A.2-13*** in ***Appendix 2*** provide the detailed results.

7.11.1 By Sex

Table A.2-1 presents the admission rate per 1,000 eligibles and characteristics at admission for the Washington and comparison groups by sex.

- In Washington, men had a higher long-stay nursing facility admission rate per 1,000 eligibles compared to women during baseline period 1 and the first demonstration period. In the comparison group, women had a higher rate of admissions for all time periods.

- Characteristics of new long-stay nursing facility beneficiaries at admission in both Washington and the comparison group did not differ consistently between men and women, with the exception of functional status.

    - In Washington, women had slightly worse functional status (higher mean on RUG-IV ADL scale) and a lower percentage with serious cognitive impairment compared to men during all time periods. Men had a higher percentage of residents with SPMI during baseline period 1 and demonstration period 1.

    - In the comparison group, during all time periods, women had slightly worse functional status compared to men, and men had a higher percentage of residents with SPMI. Men also had a higher percentage of residents with low care need during baseline period 1 and the first demonstration period.

Table A.2-2 reports the admission rate per 1,000 eligibles for the Washington eligible and enrollee groups by sex.

- The admission rate for male and female eligibles and enrollees during the demonstration period was similar, if slightly higher among male eligibles compared to female eligibles.

- Characteristics of new long-stay nursing facility residents at admission are unavailable due to the small sample size of male and female Washington enrollees.

Table A.2-3 displays the percentage of long-stay users, characteristics, and quality measure of long-stay nursing facility residents.

- In Washington, a higher percentage of men were long-stay nursing facility users compared to women; in the comparison group this trend was reversed.

- In both Washington and the comparison group, the following sex differences were present for all time periods:

  - Women had worse functional status (higher RUG-IV ADL score).

  - Women represented a higher percentage of residents with severe cognitive impairment.

  - In the comparison group only for all three time periods, men represented a higher percentage of residents with SPMI.

- In both Washington and the comparison group, the following sex differences in quality measures for long-stay nursing facility residents were observed for all time periods:

  - A higher percentage of men were physically restrained.

  - A higher percentage of long-stay high-risk male residents had pressure ulcers.

  - In Washington only, a higher percentage of men received antipsychotic medications. This was present in the comparison group for two time periods (baseline periods 1 and 2); there were no differences during the demonstration period 1.

Table A.2-4 presents the percentage of long-stay users, characteristics, and quality measures of long-stay nursing facility residents for the Washington eligible and enrollee groups by sex.

- A slightly higher percentage of men compared to women were long-stay users in both the Washington eligible and enrollee group during the demonstration period.

- Consistent with ***Table C-3***, women had worse functional status compared to men in both the eligible and enrollee groups, as well as greater care need (men represented a much higher percentage of residents with low level of care need). A higher percentage of women also had severe cognitive impairment.

- While sex differences in the percentage of residents with antipsychotic medication were inconsistent in the eligible and enrollee groups, male residents represented a higher percentage of long-stay high-risk residents with pressure ulcers. Since no enrollees were physically restrained, sex differences could not be evaluated.

7.11.2 By Race (White, African American, Hispanic, Asian/Pacific Islander)

Table A.2-5 displays the long-stay nursing facility admission rate per 1,000 eligibles for the Washington eligible and comparison group by race.

- In Washington and the comparison group, for all three time periods, Whites consistently had the highest admission rate, while Asians had the lowest admission rate. Differences between African American and Hispanic beneficiaries were less consistent.
  - In Washington, for all three time periods, African American beneficiaries had a higher rate of admissions compared to Hispanic beneficiaries.
  - In the comparison group, African American beneficiaries' higher admissions rate was true only for baseline period 2 and the first demonstration period; in baseline period 1, African American beneficiaries had a lower admission rate relative to Hispanic beneficiaries.
- Notably, the comparison group has a much lower percentage of Hispanic and Asian/Pacific Islander beneficiaries (about 1 percent each) than Washington (about 5 percent each). While Washington's Hispanic beneficiaries' admission rate remained somewhat stable over time (15.6; 13.7; 21.5 per 1,000 eligibles), the comparison group experienced a sharp decline (23.8; 13.7; 2.3). Asians' admission rate was consistently much lower than all groups, with greater variation for both Washington (8.1; 6.0; 18.8) and the comparison group (4.0; 6.4; 2.1).
- Characteristics of new long-stay nursing facility residents at admission are unavailable due to the small sample size of African American, Hispanic, and Asian beneficiaries who were admitted.

Table A.2-6 presents the admission rate for Washington eligibles and enrollees by race.

- During the demonstration period, White beneficiaries had a higher long-stay nursing facility admission rate per 1,000 eligibles compared to African American, Hispanic, and Asian beneficiaries in both the eligible and enrolled groups. Asian beneficiaries had the lowest admission rate. While African American beneficiaries had a higher admission rate compared to Hispanic beneficiaries in the eligible group, Hispanic beneficiaries had a higher admission rate in the enrolled group.

- Characteristics of new long-stay nursing facility residents at admission are unavailable due to the small sample size of African American, Hispanic, and Asian beneficiaries who were enrolled.

Table A.2-7 reports the percentage of long-stay users, characteristics, and quality measures of long-stay nursing facility residents for the Washington eligible and comparison groups, by race.

- In both Washington and the comparison group during all time periods, the percentage of long-stay users differed by race as follows:
  - A higher percentage of demonstration eligibles were White long-stay nursing facility users relative to African American, Hispanic, and Asian users.
  - A higher percentage of eligibles were African American long-stay nursing facility users relative to Hispanic users.
- In Washington only, a higher percentage of eligibles were Hispanic long-stay nursing facility users relative to Asian users.
- Health characteristics are available for all races during all time periods for the Washington group only.
  - White and Asian residents had better functional health compared to the African American and Hispanic residents.
  - Asians had the highest percentage of severe cognitive impairment.
- Due to small sample size of the Hispanic and Asian subgroups, all health characteristics are available only for the white and African American residents.
  - Compared to African Americans, White residents had better functional status, a lower percentage of cognitive impairment, a lower percentage with SPMI, and a higher percentage with low level of care need.
- Overall, quality measures did not differ consistently among all races. However, due to the small sample size of the Hispanic and Asian subgroups, all quality measures for all time points are available only for the White and African American long-stay users. Restricting discussion to the White and African American subpopulations only:
  - In Washington, a higher percentage of White residents received antipsychotics.
  - In the comparison group, a higher percentage of White residents were physically restrained or received an antipsychotic medication. A higher percentage of African American high-risk residents had pressure ulcers.

Table A.2-8 presents the long-stay percentage of Washington eligibles and enrollees by race.

- In both the eligible and enrollee groups during the demonstration period, the percentage of long-stay users among all races was the highest for White beneficiaries, and the lowest for Asian beneficiaries. While the percentage of long-stay users was similar among Hispanic and African American enrollees, it was higher for African Americans eligibles.

- Characteristics of new long-stay nursing facility residents are unavailable due to the small sample size of African American, Hispanic, and Asian residents who were enrolled.

- Quality measures for long-stay nursing facility residents are unavailable due to the small sample size of African American, Hispanic, and Asian residents who were enrolled.

7.11.3 By Age Group (Younger than 65, between 65 to 74, Older than 74)

Table A.2-9 presents the admission rate per 1,000 eligibles and characteristics of new long-stay nursing facility residents at admission for the Washington and comparison groups by age group.

- For all time periods, in both Washington and the comparison group, being in an older age group was associated with a much higher admission rate.

- In Washington and the comparison group, there was some evidence that older age was associated with worse health characteristics.

  - In Washington, residents older than 74 had worse functional status compared to either residents aged 65–74 or residents younger than 65 for all time periods. In the comparison group, older age was associated with worse functional status across all age groups.

  - In both Washington and the comparison group, higher age was associated with a higher percentage of severe cognitive impairment in baseline period 2 and demonstration period 1.

  - In the comparison group, higher age was associated with a lower percentage of SPMI for all time periods; in Washington, this only occurred in baseline period 1 and demonstration period 1.

  - Age trends for low level of care need were inconsistent.

Table A.2-10 reports the admission rate per 1,000 eligibles and characteristics of new long-stay nursing facility residents at admission for the Washington eligibles and enrollees by age group.

- Similar to ***Table A.2-9***, being in an older age group was associated with a higher admission rate for Washington demonstration period eligibles and enrollees.

- Enrolled and eligible Washington residents generally had a similar age pattern of health characteristics. Higher age was associated with greater cognitive impairment and less mental illness; functional status was worse in the oldest age group compared to the two younger age groups; and there was no pattern for low level of care need.

Table A.2-11 displays the percentage of long-stay users, characteristics, and quality measures of long-stay nursing facility residents for the Washington and comparison groups by age group.

- In both Washington and the comparison group, for all time periods, being in an older age group was associated with being a larger percentage of long-stay users.

- There is some evidence of older age being associated with worse health characteristics. While some patterns extended across all age groups, others held only when comparing residents older than 74 to those 74 or younger, not for those aged 65–74 compared to those younger than 65.
  - In Washington, being in an older age group was associated with worse functional status. In the comparison group, residents older than 74 had worse functional status compared to residents who were 74 or younger.
  - For nearly all time periods and groups, being in an older age group was associated with a higher percentage of severe cognitive impairment.
  - In Washington, residents older than 74 had a lower percentage of SPMI compared to residents who were 74 or younger. In the comparison group, the direction of this finding held for all age groups.
  - For nearly all time periods and groups, being in an older age group was associated with greater care need (lower percentage of low level of care need).

- Except for an inverse association between increasing age and pressure ulcers in both Washington and the comparison group, there were few differences by age group for most quality measures.
  - In Washington, there were no other consistent differences by age group for other quality measures.
  - In the comparison group, a lower percentage of residents older than 74 received an antipsychotic medication compared to those 74 or younger. There were no other consistent differences by age group for other quality measures.

Table A.2-12 presents the percentage of long-stay users, characteristics, and quality measures of long-stay nursing facility residents for the Washington eligibles and enrollees by age group.

- As in ***Table A.2-11***, being in an older age group was associated with a higher percentage of long-stay users for Washington eligibles and enrollees.

- Enrolled and eligible Washington residents generally had a similar age pattern of health characteristics. Higher age was associated with worse functional status, greater cognitive impairment, less mental illness, and greater care need. These patterns echo the findings from ***Table A.2-11***.

- A higher percentage of eligible and enrolled residents younger than 65 received antipsychotics compared to those 65 or older. There was no consistent pattern for pressure ulcers. Since no enrollees were physically restrained, age group difference could not be evaluated.

7.11.4 By Rural Status (Rural, Urban)

Table A.2-13 reports the annual nursing facility utilization for Washington eligible and comparison groups by rural status. Due to the small number of rural beneficiaries, most measures are not available.

- In the comparison group, rural residents had a higher admission rate compared to urban residents for all time periods.

- In Washington, urban residents had a higher admission rate during the baseline period, but a lower rate during the first demonstration period. Rural residents in Washington had markedly more variable admission rates (16.9; 20.1; 78.6) compared to urban residents (24.7; 27.0; 36.1). This may have been due to much smaller sample sizes (rural range of 142–167, compared to urban range of approximately 16,000–18,000).

- In both Washington and the comparison group, for all time periods, a higher percentage of rural eligibles were long-stay users compared to urban eligibles.

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8. Conclusion

8.1 Successes, Challenges, and Lessons Learned

Washington's targeting of a high-cost, high-risk population and the State's focus on patient engagement have the potential to support improved beneficiary outcomes at lower cost. Previous state research has found that these factors correlate with improved beneficiary outcomes and lower costs. The Washington MFFS demonstration uses multiple policy levers, such as contract provisions, payment methodology, and capacity building, to direct health home care coordinators to engage enrollees into taking actions to self-manage their health. The State's contacts with health homes specify a wide range of required activities designed to advance patient engagement. In addition, health homes cannot start providing care coordination to an enrollee until a health action plan (HAP) is finalized. As part of its capacity-building efforts, the State is providing health homes with training on motivational interviewing so they can improve their skills in promoting self-action by enrollees. The State believes that these patient engagement activities will achieve the greatest benefits for the population it had decided to target in this demonstration: high-cost, high-risk beneficiaries.

The State's care coordination model is perceived by stakeholders and State officials as adding value to existing service delivery systems.

Care coordinators in Washington's health homes have no authority to authorize services, and they are not associated with a primary care practice, either of which would give them more direct influence over the services received by enrollees. However, they are performing two functions that existing case managers embedded in service delivery systems have acknowledged they cannot typically do. One is to work across delivery systems to identify gaps in care and maintain communication with all of an enrollee's providers and service-specific case managers. The second is to focus on enrollees' health needs, risks, and goals, which was not being addressed in a systematic way before the demonstration by any of the existing delivery systems. State officials responsible for service-specific delivery systems reported that their case managers are supportive of the health home care coordinators' roles and see them as complementing their functions.

As was described in ***Section 3***, the State faced delays in enrolling beneficiaries with health homes, and experienced further delays in engaging beneficiaries with health home providers and creating health action plans. While the limited reach of the health home intervention made it unlikely that any successes would be observed during the first demonstration year, some patterns are worth noting. First, the State targeted beneficiaries to enroll and engage in health homes who, on average, were using services more intensively than the average demonstration eligible beneficiary. This focus is reflected across multiple types of services and in the quality of care measures for health home service users, for example, with beneficiaries with SPMI. This prioritization makes sense if program administrators are looking for the largest opportunities for health care improvement, or alternatively, beneficiaries with the greatest health care or LTSS or behavioral health needs. Future Annual Reports as well as the Final Report on the demonstration will help identify whether these strategies are successful as the demonstration matures.

Second, health and long term care systems in Washington rely less on institutional settings for delivering services than do their counterparts in the comparison states. As more beneficiaries become engaged in the health home model, if the model is successful, we may see even more divergence between beneficiaries in Washington and those in the comparison group. Although State officials did not suggest the demonstration would affect the balance of LTSS institutional and community-based services, there is the potential that persons who do use institutional services may have higher frailty than before the demonstration; this may occur if health home services help LTSS beneficiaries remain in the community longer than might have been possible before the demonstration (beneficiaries may be able to delay the need for institutional care and therefore be more frail when they actually enter the nursing facility).

8.2 Preliminary Findings

Compared to nonenrollees, enrollees were more frequent users of most services, including inpatient hospitals, emergency departments, skilled nursing facilities, and ambulatory care. Prior research has shown that Medicare-Medicaid enrollees tend to have poorer access to care, and thus may be underserved. Exceptions were in the use of inpatient psychiatric, substance abuse care, and hospice services, where enrollees used fewer services than the larger eligible population. Fewer inpatient psychiatric admissions may be the result of higher use of behavioral health outpatient services for enrollees and health home users. Lower use of substance abuse care services potentially may be due to lack of care coordination for enrollees. Beneficiaries who entered hospice during the demonstration were disenrolled; thus, the engaged population had fewer hospice services than the enrolled but not engaged population.

Similarly, enrollees contacted by their assigned care coordinator and who had begun receiving health home services were more frequent users of various services than those enrollees who had yet to be contacted by the end of the first demonstration year. This suggests that health homes were prioritizing those enrollees who were likely to use services more intensively.

8.3 Next Steps

The RTI evaluation team will continue to collect information on a quarterly basis from Washington State officials through the online State Data Reporting System, covering enrollment statistics and updates on key aspects of implementation. The evaluation team will continue conducting quarterly calls with the Washington demonstration State staff and request the results of any evaluation activities conducted by the State or other entities, such as results from the MFFS Consumer Assessment of Healthcare Providers and Systems (CAHPS) and State-specific demonstration measures the State is required to report to CMS. During the demonstration, additional site visits and focus groups will take place.

The purpose of the quantitative analyses was to understand the characteristics of the Washington demonstration group, and separately, the comparison group for the evaluation conducted by the RTI evaluation team. Quantitative results were presented for each group for each of the two baseline period years, and for the 18-month demonstration period, in order to understand the service use and cost patterns of these two groups before they are directly compared in future analyses. This report also provided results for important sub-populations of interest, including demonstration enrollees, those with any health home service use in Washington, those with any LTSS, and those with SPMI. These analyses in this report focused on the time trend within each group, and the demonstration was slow to begin; therefore, differences over time were generally not large.

As noted previously, the State has decided to extend the demonstration for 2 additional years, which will provide further opportunities to evaluate the demonstration's performance. The second Annual Report on the Washington Health Homes MFFS demonstration will include information about the State's decision to extend the duration of the demonstration and add two more counties. In addition, the next report will include qualitative information on the status of the demonstration and descriptive analyses of quality, utilization, and cost measures for those eligible for the demonstration and an out-of-state-comparison group. The quantitative analyses will cover the time period from January 2015 through December 2015. Qualitative information will be updated through June 30, 2016.

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Appendix A
Identification of the Washington State Comparison Group

The Washington demonstration area consists of all counties in the state except for King and Snohomish, encompassing 13 Metropolitan Statistical Areas (MSAs) and one Rest-of-State area. The comparison area is based on 14 MSAs and 3 Rest-of-State areas drawn from 3 states (282 counties): Arkansas, Georgia, and West Virginia. These MSAs are listed in ***Table A-1***.

Table A-1
Metropolitan Statistical Areas for the demonstration and comparison groups, by State

Washington MSAs (demonstration area)	Arkansas MSAs	Georgia MSAs	West Virginia MSAs
Bellingham	Pine Bluff	Albany	Beckley
Spokane-Spokane Valley	Fort Smith	Valdosta	Hagerstown-Martinsburg
Kennewick-Richland	Memphis	Athens-Clarke County	Charleston
Lewiston	Fayetteville-Springdale-Rogers	Augusta-Richmond County	Rest of State
Walla Walla	Rest of State	Columbus	
Seattle-Tacoma-Bellevue		Gainesville	
Portland-Vancouver-Hillsboro		Warner Robins	
Mount Vernon-Anacortes		Rest of State	
Longview			
Bremerton-Silverdale			
Olympia-Tumwater			
Yakima			
Wenatchee			
Rest of State			

Beneficiaries in the demonstration group during the demonstration period were previously identified by Washington on quarterly finder files submitted to RTI. To identify beneficiaries in the comparison group and the demonstration group baseline period, RTI developed a scoring algorithm (analogous to Washington's PRISM algorithm) and required beneficiaries to have RTI scores of 1.5 or greater for at least one quarter in order to qualify in an analysis period (a single year in the analysis). The RTI algorithm was created by (1) applying the State's eligibility criteria to CMS administrative and Medicare claims data in the areas identified, (2) identifying all diagnosis and national drug codes in Medicare claims data for the 15 month period preceding 2 months prior to each quarter of interest, (3) using the PRISM documentation received from Washington to identify the highest ranking diagnosis within 21 categories using 58 different diagnostic codes listed in the documentation and collecting all the relevant national drug codes, (4) applying the scalar weights for children and adults received from Washington that reflect the relative contribution of given disease conditions and demographic categories to costs, and (5) calculating an RTI score for beneficiaries in each quarter by adding the weights associated with each beneficiary's highest ranking diagnoses, their national drug codes of interest, and age/gender characteristics. Although Medicaid claims data were not used, RTI identified similar beneficiaries in Medicare claims data, including those with behavioral health issues, at prevalence rates similar to those found by Washington State when it included Medicaid claims data in its PRISM algorithm.

Table A-2 below shows the distribution of beneficiaries by comparison state. Arkansas and Georgia were the two largest state contributors to the comparison group. Following our comparison group methodology, because at least three states were included, and no state contributed more than half of the total comparison beneficiaries, it was not necessary to do any sampling to reduce the influence of a single state so that no single state comprises a much greater contribution that any other.

Table A-2
Distribution of comparison group beneficiaries for the Washington Demonstration, by comparison state

	Percent of comparison beneficiaries		
Comparison state	**Baseline year 1**	**Baseline year 2**	**Demo period**
Arkansas	33.2%	32.3%	33.5%
Georgia	41.9%	40.2%	36.2%
West Virginia	25.0%	27.5%	30.3%
Number of beneficiaries	64,278	61,240	60,852

RTI's methodology uses propensity scores to examine initial differences between the demonstration and comparison groups and then to weight the data to improve the match between them. The comparability of the two groups is examined with respect to both individual beneficiary characteristics as well as the overall distributions of propensity scores. A propensity score (PS) is the predicted probability that a beneficiary is a member of the demonstration group conditional on a set of observed variables. ***Table A-3*** displays the means of beneficiary and area-level characteristics used in the propensity model after applying the propensity score weights to balance the distribution of the demonstration and comparison group members' characteristics. The distributions of the demonstration and comparison groups on these characteristics are similar after weighting. The propensity score weights were used in all Annual Report analyses.

Table A-3
Washington dual eligible beneficiary covariate means by group before and after weighting by propensity score, demonstration period 1: 7/1/2013–12/31/2014

	Demonstration group	Unweighted comparison group	PS-weighted comparison group
Demonstration period 1	**Mean**	**Mean**	**Mean**
Age	65.460	68.583	65.205
Died	0.115	0.171	0.116
Female	0.645	0.665	0.642
White	0.814	0.766	0.812
Disabled	0.628	0.574	0.630
ESRD	0.054	0.053	0.056
Share mos. eligible during period	0.656	0.717	0.642
HCC score	1.771	1.806	1.768
MSA	0.792	0.340	0.812
% of population living in married household	72.057	69.310	72.560
% of households w/member >= 60	36.005	39.352	35.061
% of households w/member < 18	32.309	31.487	32.420
% of adults w/college education	19.817	14.624	21.412
% of adults w/self-care limitation	3.604	4.947	3.434
Distance to nearest hospital	10.282	12.337	9.828
Distance to nearest nursing home	7.788	9.630	7.639

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Appendix B
Additional Methodological Details

Minimum Data Set Analysis Methods

Estimates of nursing facility outcomes are presented for the demonstration and comparison groups. We developed estimates for these two groups for each of the 2 years preceding demonstration implementation, referred to as baseline periods 1 and 2 (12 months each), and demonstration period 1 (18 months). RTI matched data on the two groups with the Nursing Home Minimum Data Set Version 3.0 (MDS 3.0). The MDS 3.0 includes assessment data from all Medicare- and Medicaid-certified nursing facilities for every resident (regardless of individual payment sources) upon admission and at least quarterly thereafter. We first constructed a population of beneficiaries who were demonstration-eligible for each corresponding time period, split into demonstration and comparison groups. We used these groups to calculate our annual nursing facility utilization measures, which include new long-stay nursing facility admissions per 1,000 eligibles, and the percentage of all long-stay nursing facility users as a percentage of demonstration eligibles. The numerators of these annual nursing facility utilization measures became the admissions and long-stay samples for their respective analyses. For the admissions sample, we report characteristics of new long-stay nursing facility residents at admission. For the long-stay resident sample, we report user characteristics and measures of quality for all long-stay nursing facility residents. Detailed specifications for each measure are described in ***Appendix C***.

In addition to the propensity score weights that are applied to all results to adjust the composition of comparison group eligibles to that of Washington state eligibles, the nursing home measures also incorporate an eligibility fraction weight. This accounts for the fraction of months during a given time period a beneficiary was demonstration-eligible, or in some tables, an enrollee. Because the MDS results are presented on a per-person basis, the weights account for partial eligibility over a given period.

Washington already has an extensive home and community-based services (HCBS) system; therefore, we did not expect to see a large nursing home population in the demonstration. The State has spent the past several decades funding HCBS, monitoring nursing facility admissions, and facilitating discharges, all of which have reduced the nursing facility population. Furthermore, a few data nuances could have influenced our count of nursing facility residents. The first row of each table presents the unweighted number of beneficiaries eligible for the demonstration, specific to each time period, demonstration group, and admission or long-stay set of measures. Next, we calculated the weighted number of beneficiaries after matching to MDS data; this produced the weighted number of beneficiaries that served as the population of eligibles for the denominator for our two measures of annual nursing facility utilization. For the new admission and all long-stay resident groups, a beneficiary was often simply not matched to an MDS record indicating they had been admitted or were long-stay. In addition, for the long-stay nursing facility admission rate, we excluded beneficiaries who were already long-stay. A reduction in the number of weighted beneficiaries could also be due to not having been enrolled or eligible for the entire period. Finally, RTI's algorithm for identifying demonstration eligibles in these analyses was not able to exclude those who qualified for Medicaid as medically needy but who otherwise qualified for the demonstration. Inclusion of those who qualified for Medicaid in the Washington demonstration period on the basis of being medically needy effectively decreases any effect of the demonstration on the nursing home use rate in the Washington demonstration period, but the characteristics of residents in our analyses samples would likely not be different had we been able to exclude those who were medically needy. Therefore, results on resident characteristics and nursing home quality are likely reasonable.

The MDS descriptive statistics provide an understanding of the time trend of the health care experience of the Washington State demonstration group, and separately, its comparison group. Because no multivariate analyses were conducted to control for differences between these two groups over time, these estimates should not be used to draw inferences or conclusions about any differences between the two groups. Multivariate results that control or adjust for any differences will be reported after additional years of demonstration period data are available.

Appendix C
Detailed Measure Definitions

Population, Subpopulation, and Utilization and Cost Measure Definitions

Population Definitions

Demonstration eligible beneficiaries. Beneficiaries are identified in a given month if they were a Medicare-Medicaid enrollee and met any other specific demonstration eligibility criteria (e.g., qualifying PRISM score). Beneficiaries in the demonstration period are identified from quarterly State finder files, whereas beneficiaries in the 2-year baseline period preceding the demonstration implementation date are identified by applying the eligibility criteria in each separate baseline quarter.

Additional subpopulations were identified for the analyses as follows:

- *Enrollee.* A beneficiary was defined as being enrolled in the demonstration if they were enrolled in a health home at any month during the demonstration period.

- *Health home service user*. A beneficiary was defined as having used Health Home services if they were enrolled in the demonstration and had any Health Home Service use during the demonstration period.

- *Age*. Age was defined as a categorical variable where beneficiaries were identified as *under 65*, *65 to 74*, and *75 years and older* during the observation year (e.g., baseline period 1, baseline period 2, and demonstration period.)

- *Gende*r. Gender was defined as binary variable where beneficiaries were either male or female.

- *Race*. Race was defined as a categorical variable where beneficiaries were categorized as *White*, *African American*, *Hispanic*, or *Asian*.

- *Hierarchical condition categories* (HCC). HCC score was defined as a categorical variable where the beneficiary was identified as having a score *less than one*, between *one and two*, between *two and four*, or *four and greater*.

- *Died*. We categorized a beneficiary as having died if there was a date of death during the observation year.

- *High cost.* We categorized beneficiaries as being *high cost* if the sum of all institutional and non-institutional claims were in the top 90th percentile of total Medicare Parts A and B payments made within the beneficiary group.

- *Rural*. We defined *rural* as a dichotomous indicator using Rural-Urban Continuum Codes (RUCC). The RUCCs are a 9-item measure that classifies metropolitan counties by the population size of their metro area, and nonmetropolitan counties by population size and adjacency with other metro areas. To ensure sufficient sample size we defined *rural* has having a RUCC code of 6, 7, 8, or 9.

- *Disability*. Disability was defined as a dichotomous indicator using the Original Reason for Entitlement Code (OREC) from the state Medicaid enrollment files. The beneficiaries is defined as disabled during the observation year the OREC = 1.

- *Long-term care services and supports (LTSS*). A beneficiary was defined as using LTSS if there was any use of institutional or home and community based services during the observation year.

- *Severe and persistent mental illness (SPMI).* A beneficiary was defined as having a SPMI if there were any inpatient or outpatient mental health visits for schizophrenia or bipolar disorders during the observation year.

- *Alzheimer's disease and other dementias*. A beneficiary was defined as having Alzheimer's disease or other dementias if there were at least two inpatient or outpatient diagnosis during the observation year.

Utilization and Expenditure Measure Definitions

For any health care service type, the methodology for estimating average monthly utilization, the percentage of users, and spending during the year (for managed fee-for-service [MFFS] States) takes into account differences in the number of eligibility months across beneficiaries. Because full-benefit dual eligibility status for the demonstration can vary by month over time for any individual, the methodology used determines dual eligibility status for the demonstration for each person on a monthly basis during a baseline or demonstration period. That is, an individual is capable of meeting the demonstration's eligibility criteria for 1, 2, 3, or up to 12 months during the observation year. The methodology adds the total months of full-benefit dual eligibility for the demonstration across the population of interest and uses it in the denominator in the measures in ***Section 1.3***, creating average monthly utilization and expenditure information for each service type. The methodology effectively produces average monthly use and expenditure statistics for each year that account for variation in the number of dual eligibles in each month of the observation year. Months where dual eligibles were enrolled in Medicare Advantage are excluded because of the lack of encounter data to use in developing the utilization and cost measures

The utilization and costs measures, below, were calculated as the aggregate sum of the unit of measurement (counts, payments, etc.) divided by the aggregated number of eligible member months [and eligible months among users] within each group (*g*) where group is defined as (1) Washington Base Year 1, (2) Comparison Base Year 1, (3) Washington Base Year 2, (4) Comparison Base Year 2, (5) Washington Demonstration Period, and (6) Comparison Demonstration Period.

We calculated the average number of services per 1,000 eligible months and per 1,000 eligible months among users by beneficiary group (*g).* We defined *user month* as an eligible month among those where the number of units of utilization used [for a given service] was greater than zero during the period. We weight each observation using yearly propensity weights. The average yearly utilization outcomes are measured as:

$$Y_g = \frac{\Sigma_{ig} Z_{ig}}{\left(\frac{1}{1{,}000}\right) * \Sigma_{ig} n_{ig}}$$

Where

$Y_g =$ average count of the number services used [for a given service] per eligible or user month within group g.
$Z_{ig} =$ the total units of utilization [for a given service] for individual i in group g.
$n_{ig} =$ the total number of eligible/user months for individual i in group g.

The denominator above is scaled by $\frac{1}{1{,}000}$ such that the result is interpreted in terms of average monthly utilization per 1,000 eligibles. This presentation is preferable, compared with per eligible, because some of the services are used less frequently and would result in small estimates.

The average percentage of users [of a given service] per eligible month during the baseline or demonstration year is measured as follows:

$$U = \frac{\Sigma_{ig} X_{ig}}{\Sigma_{ig} n_{ig}} \quad \text{x } 100$$

Where

$U_{ig} =$ average percentage of users [for a particular service] in a given month among beneficiaries in group g.
$X_{ig} =$ the total number of eligible months of service use for an individual i in group g
$n_{ig} =$ the total number of eligible or user months for an individual i in group g.

The average yearly expenditures for a given services per eligible month [and user month] was calculated as

$$S = \frac{\Sigma_{ig} V_{ig}}{\Sigma_{ig} n_{ig}}$$

Where

$S_{ig} =$ average Medicare expenditures per eligible [or user] month for a given service among beneficiaries in group g.
$V_{ig} =$ the total amount of Medicare expenditures for in individual i in group g.
$n_{ig} =$ the total number of eligible or user months for an individual i in group g.

Quality of Care and Care Coordination Measures

Similar to the utilization and expenditure measures, the quality of care and care coordination measures were calculated as the aggregated sum of the numerator divided by the aggregated sum of the denominator for each respective outcome within each beneficiary group.

Average 30-day all-cause risk standardized readmission was calculated as follows:

$$30 - Risk\ Standardized\ Readmission\ = \frac{\left(\frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} \mathrm{n}_{ig}} X\ C\right)}{Prob_g}$$

Where

C = the national average of 30-day readmission rate, .238.
X_{ig} = the total number of readmissions for individual i in group g.
n_{ig} = the total number of hospital admissions for individual i in group g.
$Prob_g$ = the annual average adjusted probability of readmission for individuals in group g. The average adjusted probability equals:

Average Adjusted Probability of Readmission by Demonstration Group

Demonstration Group	Average Adjusted Probability of Readmission
Baseline Period 1	
Washington	0.231713283
Comparison	0.220171257
Baseline Period 2	
Washington	0.231703099
Comparison	0.220802089
Demonstration Period	
Washington	0.220549052
Comparison	0.21633023

Average 30-day follow-up in a physician or outpatient setting after hospitalization for mental illness was calculated as follows:

$$MHFU\ = \frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} \mathrm{n}_{ig}}$$

Where

MHFU = the average rate of 30-day follow up care after hospitalization for a mental illness for individual*s in* group *g*.
X_{ig} = the total number of discharges from a hospital stay for mental health that had a follow-up for mental health within 30 days of discharge for individual i in group g.

n_{ig} = the total number of discharges from a hospital stay for mental health for individual *i* in group *g*.

Average Ambulatory Care Sensitive Condition admissions per 1,000 eligibles, overall and chronic composite (PQI #90 and PQI #92) was calculated as follows:

$$ACSC_{ig} = \frac{\Sigma_{ig} x_{ig}}{\left(\frac{1}{1000}\right) * \Sigma_{ig} \mathrm{n}_{ig}}$$

Where

$ACSC_g$ = the average number of Ambulatory Care Sensitive Condition admissions per 1,000 eligible months for overall/chronic composites for individuals in group *g*.
X_{ig} = the total number of discharges that meet the criteria for AHRQ PQI #90 [or PQI #92] for individual *i* in group *g*.
n_{ig} = the total number of eligible months for individual *i* in group *g*.

Preventable ER visits per 1,000 eligible month was calculated as follows:

$$ER_{ig} = \frac{\Sigma_{ig} x_{ig}}{\left(\frac{1}{1000}\right) * \Sigma_{ig} \mathrm{n}_{ig}}$$

Where

ER_g = the average number of preventable ER visits per 1,000 eligible months for individuals in group *g*.
X_{ig} = the total number ER visits that are considered preventable based in the diagnosis for individual *i* in group *g*.
n_{ig} = the total number of eligible months for individual *i* in group *g*.

Average number of beneficiaries who received a pneumococcal vaccination during the observation year was calculated as follows:

$$PN_{ig} = \frac{\Sigma_{ig} x_{ig}}{\left(\frac{1}{1000}\right) * \Sigma_{ig} \mathrm{n}_{ig}}$$

Where

PN_g = the average number of pneumococcal vaccinations per 1,000 eligible months among individuals in group *g*.
X_{ig} = the total number eligible beneficiaries age 65+ who ever received a pneumococcal vaccination in group *g*.
n_{ig} = the total number of eligible months among beneficiaries 65 years and older in group *g*.

Average number of beneficiaries per 1,000 eligible months who received depression screening during the observation year was calculated as follows:

$$D_g = \frac{\Sigma_{ig} x_{ig}}{\left(\frac{1}{1000}\right) * \Sigma_{ig} \mathrm{n}_{ig}}$$

Where

D_g = the average number of beneficiaries per 1,000 eligible months who received depression screening in group *g*

X_{ig} = the total number eligible beneficiaries age 65+ who ever received depression screening in group *g*.

n_{ig} = the total number of eligible months among beneficiaries in group *g*.

Average rate of beneficiaries per positive depression screening who received a follow-up plan during the observation year was calculated as follows:

$$PD_g = \frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} \mathrm{n}_{ig}}$$

Where

PD_g = the average number of beneficiaries per positive depression screening who received a follow-up plan among beneficiaries in group *g*.

X_{ig} = the total number beneficiaries who received a positive depression screen and a follow up plan in group *g*.

n_{ig} = the total number of beneficiaries who received a positive depression screen in group *g*.

Average number of beneficiaries per 1,000 eligible months, aged 65 and older, who received a fall screening assessment during the observation year was calculated as follows:

$$F_g = \frac{\Sigma_{ig} x_{ig}}{\left(\frac{1}{1000}\right) * \Sigma_{ig} \mathrm{n}_{ig}}$$

Where

F_g = the average number of beneficiaries per 1,000 eligible months who received a fall screening assessment among beneficiaries in group *g*.

X_{ig} = the total number eligible beneficiaries age 65+ who received a fall screening assessment among individuals in group *g*.

n_{ig} = the total number of eligible months among beneficiaries aged 65 and older in group *g*.

Average rate of beneficiaries in each year who were age 65 and older and had a history of falls within the preceding 12 months, and had a plan of care for falls within the preceding 12 months.

$$PF_g = \frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} \mathrm{n}_{ig}}$$

Where

PF_g = the average rate of care plans after falls among beneficiaries in group *g*.
X_{ig} = the total number beneficiaries, aged 65 and older, and had a history of falls within the preceding 12 months and a care plan in group *g*.
n_{ig} = the total number of beneficiaries who were 65 and older and had a history of falls with the preceding 12 months in group *g*.

Minimum Data Set Analysis Measure Definitions

RTI produces MDS-based outcome measures for long-term services and supports (LTSS) on both a quarterly and annual basis. Two quarterly measures track the impact of the demonstration on nursing facility utilization patterns: (1) new long-stay nursing facility admissions per 1,000 eligibles, and (2) long-stay nursing facility users as a percentage of the eligible population. The annualized version of these measures are presented in this Annual Report.

The rate of new long-stay nursing facility admissions is calculated as the number of nursing facility admissions for whom there is no record of nursing facility use in the 100 days prior to the current admission and who subsequently stay in the nursing facility for 101 days or more. Individuals are included in this measure only if their nursing facility admission occurred after their first month of demonstration eligibility.

The percentage of long-stay nursing facility users is calculated as the number of individuals who have stayed in a nursing facility for 101 days or more, who were long-stay after the first month of demonstration eligibility.

RTI also analyzes characteristics of new long-stay nursing facility residents at admission to monitor nursing facility case mix and acuity levels, as well as these same characteristics for the overall long-stay nursing facility population, from the most recently available quarter of data during the demonstration. We also include quality measures of nursing facility care for the long-stay users.

Resident characteristics include functional status determined by Resource Utilization Groups Version IV (RUG-IV), activities of daily living (ADL) score, level of care need, severe cognitive impairment, and serious and persistent mental illness (SPMI).

RTI uses the RUG-IV classification system to measure both resident ADL score and level of care need. RUG-IV is used for Medicare reimbursement of skilled nursing facility care and consists of 66 groups based on the resident's ADL score and the amount of care time a nursing resident receives (Mor et al., 2007; Walsh, Greene, & Kaganova, 2006). ADL score is based on level of dependence in the four late-loss ADLs (i.e., bed mobility, transferring, using the toilet, and eating) and is used as a summary measure of long-term care need (Walsh, Greene, & Kaganova, 2006).

Previous studies on LTSS rebalancing have focused on residents with low levels of care need who are the best candidates for transitioning from institutional care to HCBS. A 2007 study by Mor et al. found that residents with low care needs make up about 12 percent of the long-stay nursing home resident population (2007). Based on definitions of low care need used by previous studies, RTI defines residents with low care needs as those who did not require physical assistance in any of the four late-loss ADLs and who were in the three lowest RUG-IV categories (i.e., behavior symptoms and cognitive performance, reduced physical function, and clinically complex) (Ikegami, Morris, and Fries, 1997; Irvin et al., 2013; Mor et al., 2007; Ross, Simon, Irvin, & Miller, 2012).

In addition to functional status and level of care need, RTI is also measuring the percentage of individuals with severe cognitive impairment and SPMI. Individuals with SPMI are at increased risk of being placed in a nursing facility and may be unable to transition from nursing facilities to community care, hindered by a lack of safe and affordable residential options and community supports (Aschbrenner, Cai, Grabowski, Bartels, & Mor, 2011). Consistent with other studies, RTI limits its definition of SPMI to schizophrenia and bipolar disorder, as these conditions are considered to be the most disabling and most frequently associated with serious mental illness and institutionalization (Fullerton, McGuire, Feng, Mor, & Grabowski, 2009; Grabowski, Aschbrenner, Feng, & Mor, 2009). RTI measures cognitive impairment using the Brief Interview for Mental Status (BIMS), or poor short-term memory or severely impaired decision-making skills.

RTI also produces several annual quality measures to indicate the initiative's impact on quality of care that eligible individuals receive in nursing facilities. Most measures are for long-stay residents (those in facilities for 101 days or more and thus receiving LTSS) who experienced an adverse outcome for at least one quarter during the corresponding time period. These include: percentage of residents who were physically restrained, percentage of residents who received an antipsychotic medication without appropriate clinical indications, and percentage of high-risk residents with pressure ulcers (Stages II–IV). We also plan to include the percentage of residents who experienced one or more falls with major injury and the percentage of residents who self-report moderate to severe pain. These measures were selected based on CMS and RTI's review of each measures' mean score and variation. They are also aligned with other CMS and partners' initiatives including Nursing Home 5-Star Rating System, Advancing Excellence and Value-Based Purchasing Demonstration.

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