# Measurement, Monitoring, and Evaluation of the Financial Alignment Initiative for Medicare-Medicaid Enrollees

# **Preliminary Findings from the Washington MFFS Demonstration**

**January 4, 2016** 

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CMS Contract No. HHSM500201000021i TO #3

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by

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RTI Project Number 0212790.003.002.033

This project was funded by the Centers for Medicare & Medicaid Services under contract no. HHSM500201000021i TO #3. The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services. RTI assumes responsibility for the accuracy and completeness of the information contained in this report.

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#### Introduction

The Medicare-Medicaid Coordination Office (MMCO) and Innovation Center at the Centers for Medicare & Medicaid Services (CMS) have created the Medicare-Medicaid 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 Home Program, 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

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 report provides preliminary data for the first performance period for the Washington MFFS demonstration from July 1, 2013, through December 31, 2014, and includes the following sections: description of the Washington Health Home MFFS demonstration, preliminary findings on eligibility and enrollment in the demonstration, characteristics of the demonstration eligible population, selected early results on quality and utilization, and an estimate of Medicare savings.<sup>1</sup>

States implementing an MFFS model demonstration under the Financial Alignment Initiative will be eligible for performance payments from CMS based on achieving statistically significant savings and meeting or exceeding quality requirements. The basic approach to the savings calculation is to compare the trend (as opposed to the level) of per member per month (PMPM) expenditures of those beneficiaries in the demonstration to the trend of the PMPM of those beneficiaries in a comparison group. The preliminary results of the Medicare savings calculation presented here (subject to final updates) are based on the first performance period of the demonstration. A separate Medicaid savings calculation will be performed and included in a report when data become available. The savings calculations will be performed annually. The *Appendix* provides details of the savings calculation methodology and results.

This report does not include comparison data to determine whether the changes in utilization and quality measures observed in Washington are due to the demonstration or other factors, and it does not include perspectives of State officials, stakeholders, or beneficiaries about the progress of the demonstration to provide context for results. Annual evaluation reports on the Washington

<sup>&</sup>lt;sup>1</sup> More information about the evaluation design for the Washington MFFS demonstration can be found in the evaluation design plan at https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/WAEvalPlan.pdf.

MFFS demonstration will include both qualitative information on the context and status of the demonstration as well as descriptive analyses of quality, utilization, and cost measures for individuals eligible for the demonstration and for an out-of-State comparison group. A final report will include all elements of the annual report as well as multivariate difference-in-differences analyses of quality, utilization, and cost measures using the out-of-State comparison group.

### **Methodologies, Caveats, and Limitations**

The information used in the summary of the Washington MFFS demonstration included in this report relies on several sources: the Centers for Medicare & Medicaid Services<sup>2</sup> (CMS) website, the State of Washington "Memorandum of Understanding Regarding a Federal-State Partnership to Test a MFFS Financial Alignment Model for Medicare-Medicaid Enrollees," "Final Demonstration Agreement between CMS and the State of Washington,"<sup>4</sup> contact with Washington State staff, and information provided on relevant State websites. The data obtained for this report were generated by the State Data Reporting System (SDRS) of the Financial Alignment Initiative, developed by RTI as the tool for collecting and storing information obtained from the States participating in the Initiative. The source of eligibility and enrollment data for this report is the analysis conducted by RTI and the American Institutes for Research (AIR) of State SDRS entries. The source of Quality and Utilization data is RTI, Urban Institute, Actuarial Research Corporation (ARC), and AIR analysis of CMS administrative data, Medicare, and the Nursing Home Minimum Data Set (MDS). A Technical Reference Guide is available upon request to provide more information on the methodology used to produce the data reported in this report. The sources of data for the Medicare savings calculation are CMS's Program Integrity TAP file claims incurred from the start date of each cohort through December 31, 2014, and processed by CMS through July 31, 2015.

The *Eligibility and Enrollment section* of the report presents Washington demonstration eligibility and enrollment data for the first six quarters of implementation. The figures reference demonstration quarters (i.e. quarters of demonstration operations), which also align with calendar quarters. *Table 1* below provides the time periods for the quarters presented in this report.

 $<sup>^2\</sup> https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Washington.html$ 

<sup>&</sup>lt;sup>3</sup> CMS and State of Washington: Final Demonstration Agreement Between CMS and the State of Washington Regarding a Federal-State Partnership to Test a Managed Fee-for-Service Financial Alignment Model for Medicare-Medicaid Enrollees. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/WAMFFSFDA.pdf.

<sup>&</sup>lt;sup>4</sup> CMS and State of Washington: Memorandum of Understanding (MOU) Between CMS and the State of Washington Regarding a Federal-State Partnership to Test a Managed Fee-for-Service Financial Alignment Model for Medicare-Medicaid Enrollees. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/WAMFFSMOU.pdf.

Table 1.

Demonstration quarter dates for Washington

Demonstration quarter (DQ)	Dates
DQ 1	07/01/2013-09/30/2013
DQ 2	10/01/2013-12/31/2013
DQ 3	01/01/2014-03/31/2014
DQ 4	04/01/2014-06/30/2014
DQ 5	07/01/2014-09/30/2014
DQ 6	10/01/2014–12/31/2014

Medicare utilization data are presented for the baseline period and demonstration quarters. The baseline period is a 2-year period preceding the demonstration start date of July 1, 2013; the analysis of baseline data includes beneficiaries who would have been eligible for the demonstration at that time as determined by an RTI-created scoring algorithm resembling Washington's eligibility algorithm. For all figures and tables in this section, the following abbreviations are used: B = Baseline; D = Demonstration; and Q = Quarter.

Although there appear to be differences in descriptive results across demonstration quarters for some utilization measures, these may reflect, at least in part, different amounts of claims data "run-out." Run-out refers to time between the date of the most recent claims being analyzed and the date that data were collected. Longer run-out periods provide more reliable data, as they provide more time for claims to be submitted and adjudicated. All measures are re-run each quarter to reflect updated claims submissions and adjudication, so information from earlier quarters is more complete than information available in the most recent quarter. The latest reporting quarter in this report has only 3 months of run-out before the claims were used to prepare SDRS measures, and no completion factor was applied to estimate how the results might be expected to change once additional run-out is available. Prior quarters have at least 6 months of run-out. As a result, lower service use reported in the most recent quarter compared to prior quarters may be due, in part, to different amounts of time allowed for run-out. Therefore, no testing for differences in results across quarters was conducted. Also, in the earlier quarters of the demonstration, Washington State chose to give priority to enrollment of beneficiaries who had higher acuity levels.

The *Medicare Utilization Data section* of this report provides results on a range of utilization measures for individuals eligible for the demonstration *during each baseline and demonstration quarter*. The population analyzed using actuarial methods in the *Medicare Savings Calculation section* is a subset of the demonstration population included in the *Medicare Utilization Data section* of this report. The population used for the savings calculation includes those who were

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<sup>&</sup>lt;sup>5</sup> Chronic Conditions Data Warehouse: CCW White Paper: Medicare Claims Maturity. Version 1.1. https://www.ccwdata.org/cs/groups/public/documents/training/medicare claims maturity.pdf.

eligible *only* during the 1st, 2nd, and 3rd quarters of implementation, specifically those eligible July 2013 to January 2014. In particular, the SDRS population contains new entrants over time whereas the population used in the actuarial cost savings results does not.

In addition, the preliminary Medicare cost savings results, although calculated with respect to a comparison group using actuarial methods, do not employ the multivariate regression-based difference-in-differences approach to be used in the final evaluation report for this demonstration owing to methodological differences and timing constraints. Unlike the actuarial approach used for the annual savings calculations, the difference-in-differences approach will more adequately control for differences in composition between the demonstration and comparison groups over time. Because of the differences in these methods, the amount of savings to be calculated for the final evaluation of this demonstration using the difference-in-differences approach is likely to differ from the annual savings calculations using the actuarial approach, which include the actuarial results in this report.

Each figure in this report is followed by a table that details the same data but includes actual numeric values represented in the chart.

# **Washington Health Home MFFS Demonstration Summary**

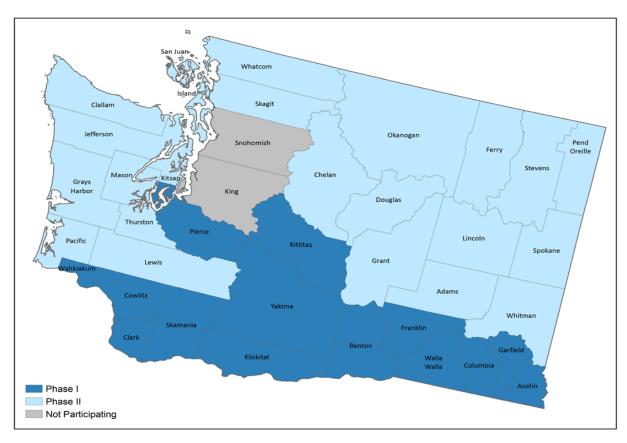
**Demonstration design contract status:** Washington received a Demonstration Design Contract from CMS under the State Demonstrations to Integrate Care for Dual Eligible Individuals

**Demonstration name:** Washington Health Home Program

**Model type:** Managed Fee-For-Service

Implementation date: July 1, 2013

Geographic area after full implementation:



Phase I: Pierce, Clark, Cowlitz, Klickitat, Skamania, Wahkiakum, Asotin, Benton, Columbia, Franklin, Garfield, Kittitas, Walla Walla, Yakima

Phase II: Clallam, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Thurston, Island, San Juan, Skagit, Whatcom, Adams, Chelan, Douglas, Grant, Ferry, Lincoln, Okanogan, Pend Oreille, Stevens, Spokane, Whitman Not participating: Snohomish, King

**Overview of the demonstration:** The Washington Health Home MFFS demonstration leverages Medicaid health homes, established under Section 2703 of the Affordable Care Act, to integrate care for high-cost, high-risk, full-benefit Medicare-Medicaid beneficiaries. It is jointly administered at the State level by the Washington Health Care Authority (HCA), which houses the State Medicaid agency, and the Department of Social and Health Services (DSHS), which in turn houses the State offices responsible for service delivery systems, including LTSS, developmental disabilities, and behavioral health.

Washington has targeted the Washington Health Homes MFFS 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. It 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

<sup>&</sup>lt;sup>6</sup> "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.

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 to be the lead local entities responsible for care coordination under the MFFS demonstration and to serve as the bridge to integrate care across existing health delivery systems. The Affordable Care Act created an optional State Plan benefit for States to establish health homes to coordinate care for people in Medicaid who have chronic conditions.

In the Washington MFFS demonstration, health homes are responsible for organizing enhanced integration of primary, acute, behavioral, and LTSS services for Medicare-Medicaid beneficiaries. The State defines health homes as the central point for directing person-centered care for high-cost, high-risk enrollees. Although the State's existing delivery systems for services 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.

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 services financed by Medicare and Medicaid, including hospitalizations, emergency department visits, and specific medication usage. The health home care coordinator discusses this information with the enrollee, and together they develop a HAP by prioritizing health action goals, specifying personal actions to achieve the goals, and identifying needed interventions and supports.

As a shared savings initiative (i.e., one in which the State may be eligible to share in savings that accrue to Medicare as a result of the demonstration), CMS has worked with the State to align Washington beneficiaries with the demonstration, ensuring that beneficiaries are attributed to only one Medicare shared savings initiative. The State auto-enrolls eligible Medicare-Medicaid beneficiaries who have been attributed to the demonstration into health homes at a rate that can be supported by their care coordination capacity, using zip codes to achieve geographic balance in enrollments. Care coordination capacity of health homes is assessed monthly by the State

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<sup>&</sup>lt;sup>7</sup> For additional information about the attribution process, see pages 50-51 of the MOU.

based on the number of care coordinators either employed by the health home or its contractors and by the percentage of enrollees with HAPs.

**Eligible population:** All ages; Full-benefit Medicare-Medicaid beneficiaries with no other comprehensive public or private health insurance, who reside in a county participating in the MFFS demonstration and meet Washington's health home eligibility criteria.

Individuals meeting health home eligibility criteria include those with one chronic condition and at risk for a second, as defined by a score of 1.5 or higher through PRISM, the State's predictive modeling tool.

**Populations not eligible to enroll:** Medicare Advantage enrollees, PACE enrollees, and beneficiaries receiving hospice services

New services offered: Health Home services covered by Medicaid

**Enrollment options/method:** Eligible individuals are automatically (passively) enrolled into a health home. The number of beneficiaries enrolled in any given month is based on a State assessment of heath home capacity, with priority given to beneficiaries with higher acuity levels.

**Disenrollment method:** Enrolled individuals may disenroll at any time (effective the first day of the following month) from the demonstration care model. Those who disenroll but remain eligible continue to be attributed to the demonstration for the purpose of evaluation and savings calculations.

#### Number of enrollment phases: 2

Table 2. Number of enrollment phases

Characteristics	Phase 1	Phase 2
Start date	07/01/2013	10/01/2013
Eligible Population	Beneficiaries eligible for health home services	Beneficiaries eligible for health home services
Geographic area	14 counties	23 counties
<b>Enrollment method</b>	Auto-enrollment in health homes	Auto-enrollment in health homes
Gradual roll-out	The State enrolls eligible beneficiaries based on health home capacity and zip code	The State enrolls eligible beneficiaries based on health home capacity and zip code

Medicaid managed care program that includes the eligible population in demonstration area: Medicaid mental health services are delivered statewide through a 1915(b) specialty managed care plan, administered through Regional Support Networks. All other Medicaid State Plan and home and community-based waiver services are delivered through

fee-for-service arrangements. Health homes coordinate all Medicaid and Medicare services, including nursing facility services.

Payment methodologies used for providers: The State pays health homes for delivery of health home services on a per member per month (PMPM) basis, using three payment tiers: initial outreach and engagement, intensive care coordination, and low-level care coordination. The first payment is a one-time fee of \$252.93 for initial outreach and engagement, health screening, assessment for self-management, and development of the enrollee's HAP. After the health home has submitted an enrollee's HAP, in succeeding months, it can submit encounters for either intensive or low-level services. Monthly payments are made only for months that an encounter is submitted by the health home. Health homes are paid for intensive care coordination for months in which the highest level of face-to-face care coordination is provided to an enrollee; the rate for intensive care coordination is \$172.61. For any month that low-level care coordination is provided to an enrollee, the health home is paid \$67.50 (Medicaid Health Home State Plan Amendment, 2013a).

One-tenth (10 percent) of the intensive and low-level care coordination per beneficiary per month payments is allocated to health homes for administrative functions, such as overseeing the provision of care coordination services, submitting service encounters to the Medicaid agency, reporting on demonstration progress, and dispersing payments for care coordination services to organizations under contract with the health home.

# **Eligibility and Enrollment**

For the purposes of this report, enrollment in the Washington MFFS demonstration is defined as demonstration-eligible beneficiaries being enrolled in a health home. 8 As of demonstration quarter 6, there were six health homes operating in the demonstration, active in all but two counties.

**Figure 1. Washington MFFS demonstration: Eligible beneficiaries.** 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 enrolled yet. 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, that 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

<sup>&</sup>lt;sup>8</sup> This differs from the process of aligning beneficiaries with the demonstration, discussed in the *Medicare Utilization Data section* of this report. A beneficiary who is not enrolled in a health home but is eligible for the Washington MFFS demonstration may be aligned with the demonstration for purposes of determining whether the State is eligible to share in demonstration savings.

have had their eligibility end during a quarter (e.g., death, moved out of area, loss of Medicaid eligibility, incarceration), shown below as a negative value.

25,000 20,000 Eligible beneficiaries 15,000 □ Eligibility ended during quarter 10,000 ■ Newly eligible during quarter 5,000 ■ Continued eligibility from previous quarter -5,000 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6

Figure 1. Washington demonstration: Eligible beneficiaries

Figure 1 table. Washington MFFS demonstration: Eligible beneficiaries

**Demonstration quarter** 

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

NOTE: The 6th quarter (DQ6) was 10/01/2014-12/31/2014. Each number represents a quarterly value (not cumulative across quarters). Individual numbers may not add up to the total due to rounding or eligibility/enrollment data lags.

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

**Figure 2. Washington MFFS demonstration: Eligible beneficiaries, by enrollment status**. A beneficiary is considered "enrolled" when the State automatically enrolls a beneficiary in a health home. Enrollment was low in the first few quarters due to 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 6. As of December 31, 2014, few beneficiaries have disenrolled from the demonstration health homes.

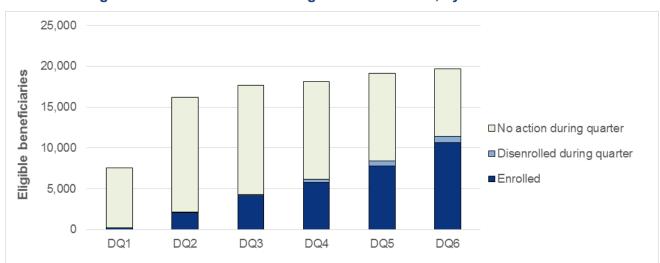


Figure 2. Washington MFFS demonstration: Eligible beneficiaries, by enrollment status

Figure 2 table. Washington MFFS demonstration: Eligible beneficiaries, by enrollment status

**Demonstration quarter** 

Eligibility status	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Enrolled	178	2,045	4,136	5,767	7,801	10,632
Disenrolled during quarter	16	65	203	359	598	791
No action during quarter	7,343	14,066	13,308	12,003	10,723	8,244

NOTE: "No action during quarter" means the beneficiary is eligible but has not enrolled, disenrolled, or opted out during the quarter. "Disenrolled during quarter" includes a small number of individuals that opted out. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. For Washington, enrollment is defined as beneficiaries being enrolled in the care model (i.e., 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.

# **Characteristics of the Eligible Population**

This section provides the demographic profile and chronic condition prevalence for beneficiaries eligible for the demonstration as of December 31, 2014. 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 three options for defining eligibility: having two or more chronic conditions, one chronic condition and at risk of another, or having a serious and persistent health condition. Washington defined eligible individuals as those with one chronic condition and at risk for another. To satisfy Section 2703 statutory criteria, Washington included an expansive list of qualifying chronic conditions in its Medicaid Health Home State Plan Amendment. 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 and identifies high cost/high risk individuals.

Demographic information in *Table 3* includes age group, gender, and race for the total eligible and enrolled populations. Selected chronic conditions include diabetes, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), severe and persistent mental illness (SPMI), and substance use disorder. The eligible population's average hierarchical condition categories (HCC) score is also reported. The Washington MFFS demonstration eligible population includes beneficiaries with multiple/serious chronic conditions; therefore their mean HCC score was expected to be higher than the score for the average Medicare population.

Table 3.

Quarter 6: Beneficiaries eligible for and enrolled in the Washington MFFS demonstration

Characteristics	Eligible (%) (total eligible population = 20,368)	Enrolled (%) (total enrolled population = 11,023)
<b>Age</b> 18–64	47.2	46.0
65+	52.8	53.9
<b>Gender</b> Male	35.2	35.3
Female	64.8	64.7
Race/Ethnicity American Indian or Alaska Native	3.2	1.6
Asian	5.4	4.5
Black or African American	4.1	3.9
White	79.2	80.0
Hispanic	5.0	6.9
Conditions** Diabetes	51.8	57.4
CHF	36.0	43.9
COPD	34.7	39.7
SPMI	26.8	26.4
Substance use disorder	19.0	19.8
Average HCC score	2.0	2.4

CHF=congestive heart failure; COPD=chronic obstructive pulmonary disease; SPMI=severe and persistent mental illness; HCC=Hierarchical Condition Categories.

SOURCE: The demonstration's eligible population data were obtained from Washington via a Demonstration Evaluation "finder" file containing identifying information linked to Medicare enrollment and claims data.

Individuals aged 65 and over represent slightly more than half (52.8 percent) of the eligible population in Washington. Almost 65 percent are female. White beneficiaries were 79.2 percent

<sup>\*</sup>Race categories for the evaluation analysis include White, Black, Asian, Hispanic, North American Native, and Unknown. \*\* Chronic conditions listed are not mutually exclusive.

of the eligible population. The average HCC score (2.00) is double the score for the average Medicare population (1.0); more than half (51.8 percent) of all eligible beneficiaries have diabetes, and more than a quarter (26.8 percent) have been diagnosed with serious and persistent mental illness. With respect to the total eligible population, the enrolled population has similar characteristics in terms of their demographic profile, but has a slightly higher prevalence of diabetes, congestive heart failure, chronic obstructive pulmonary disease, and substance use disorder, and a relatively higher HCC score.

#### **Medicare Utilization Data**

This section of the report presents information on quality and utilization measures for the Washington MFFS demonstration eligible population as of December 31, 2014.

The section on utilization information for each type of service (e.g., inpatient, skilled nursing facility) that follows is presented using two different types of measures:

- Average monthly number of users of the given service type as a percentage of the demonstration eligible population (e.g., on average, 22.7 percent of the demonstration eligible population had at least one inpatient admission in each month of the quarter).
- Average monthly number of events of the given service type per 1,000 demonstrationeligible beneficiaries (e.g., on average, there were 137 inpatient admissions per 1,000 demonstration eligible beneficiaries in each month of the quarter).

The results presented for the utilization measures represent average monthly utilization for each quarter, showing data for the eight baseline quarters prior to demonstration implementation and for the six demonstration quarters for which data were available. Results are weighted to account for variation in the number of Medicare-Medicaid beneficiaries who were eligible for the demonstration in each month of the quarter. Because DQs 5 and 6 have more limited claims run-out, the statistics for those quarters are less reliable than in the baseline quarters and in DQs 1 to 4. To distinguish these quarters from the rest, DQs 5 and 6 are represented by a dotted line on the charts below. Decreases observed in DQs 5 and 6 may reflect, at least in part, delays in claims submission and adjudication rather than actual changes in utilization patterns. A Technical Reference Guide is available upon request for a description of the weighting methodology used to calculate these measures.



Figure 3.

Figure 3 table. 30-day all-cause risk-standardized hospital readmission rate (%)

BQ6

BQ5

BQ4

BQ3

		_						-			· ·				
Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6	
30-day all-cause risk- standardized readmission rate (%)		20.7	18.3	18.3	15.4	17.0	17.5	17.7	16.2	15.5	15.1	17.3	15.6	15.4	

BQ7

Quarter

BQ8

DQ2

DQ1

DQ3

DQ4

DQ5

DQ6

NOTE: The quality measure for 30-day all-cause risk-standardized readmission rate is the risk-adjusted readmission rate among demonstration eligible Medicare-Medicaid beneficiaries at a non-Federal, short-stay, acute-care or critical access hospital, within 30 days of discharge from the index admission included in the denominator, and excluding planned readmissions. For more information on the measures and definition of implementation quarter, see the Technical Reference Guide. The 6th quarter (DQ6) was 10/01/2014–12/31/2014. See Methodologies, Caveats, and Limitations for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

25

20

BQ1

BQ2

standardized readmission rate 30-day all-cause risk—

8

Figure 3 and the accompanying table show the 30-day all-cause risk-standardized hospital readmission rate, which is the risk-adjusted percentage of demonstration eligible Medicare-Medicaid enrollees who were readmitted to a hospital within 30 days following discharge from the hospital for the index admission. During baseline quarters, the rate decreased from 22.9 percent in BQ1 to 15.4 percent in BQ5. There was a small increase to 17.7 percent in BQ8, followed by a decrease through the first three demonstration quarters. A small peak in DQ4 to 17.3 percent may be the result of seasonal trends, and was followed again by a decrease in the rate.

Figure 4. ER visits per 1,000 eligibles (excludes visits resulting in inpatient admission or death)

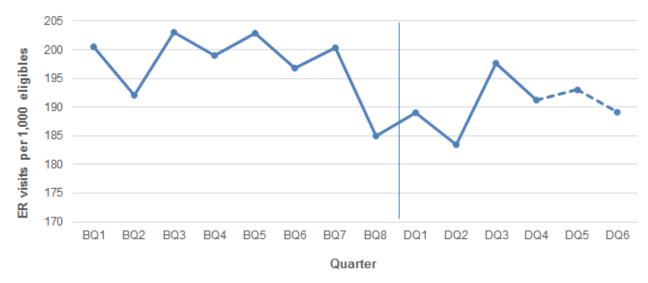


Figure 4 table. ER visits per 1,000 eligibles (excludes visits resulting in inpatient admission or death)

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
ER visits per 1,000 eligibles (excludes visits resulting in inpatient admission or death)	200.5	192.0	203.0	199.0	202.9	196.8	200.4	184.9	189.1	183.4	197.7	191.2	193.0	189.2

ER = emergency room.

NOTE: The quality measure on emergency room visits per 1,000 eligibles is based on the NYU algorithm, which focuses on ambulatory care sensitive conditions. ER visits resulting in an inpatient admission or death are excluded. For more information on the measures and definition of implementation quarter, see the Technical Reference Guide. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

*Figure 4* and the accompanying table show ER visits per 1,000, which is the number of emergency room visits among demonstration-eligible Medicare-Medicaid beneficiaries excluding those that result in death or hospital admission. During baseline quarters, the number declined from 200.5 in BQ1 to 184.9 in BQ8. There was a small increase to 197.7 in DQ3, followed by a decrease in the next three demonstration quarters.

<sup>&</sup>lt;sup>9</sup> Wagner NYU. NYU ED algorithm: background. Available at: http://wagner.nyu.edu/faculty/billings/nyued-background.

Figure 5.

30-day follow-up in a physician or outpatient setting after hospitalization for mental illness (%)

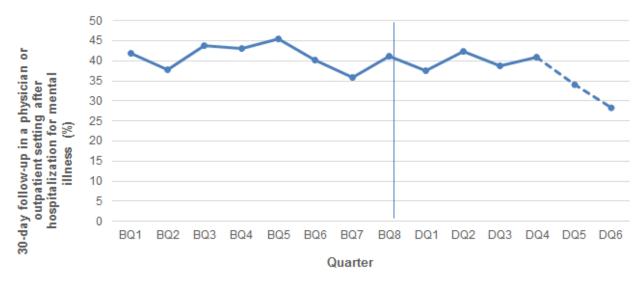


Figure 5 table. 30-day follow-up in a physician or outpatient setting after hospitalization for mental illness (%)

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
30-day follow- up in a physician or outpatient setting after hospitalization for mental illness (%)		37.9	43.7	43.0	45.5	40.3	35.8	41.2	37.5	42.3	38.8	40.8	34.2	28.4

NOTE: The quality measure 30-day follow-up in a physician or outpatient setting after hospitalization for mental illness (%) is the percentage of discharges for demonstration eligible Medicare-Medicaid beneficiaries hospitalized for selected mental health disorders with an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner. Rate is percentage of discharges that received follow-up within 30 days of discharge. For more information on the measures and definition of implementation quarter, see the Technical Reference Guide. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

*Figure 5* and the accompanying table show that during baseline quarters, the 30-day follow-up after hospitalization for mental illness rate decreased from 41.8 percent in BQ1 to 35.8 percent in BQ7. There was an increase to 41.2 percent in BQ8, followed by a decrease in the first demonstration quarter. The rate decreased from 42.3 percent in DQ2 to 28.4 percent in DQ6.

Figure 6.
Ambulatory Care Sensitive Conditions (ACSC) hospital admissions per 1,000 eligibles—
Overall composite (AHRQ PQI#90)

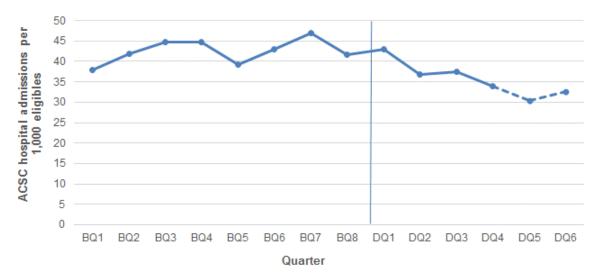


Figure 6 table. Ambulatory Care Sensitive Conditions (ACSC) hospital admissions per 1,000 eligibles—Overall composite (AHRQ PQI#90)

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
ACSC hospital admissions per 1,000 eligibles—Overall composite (AHRQ PQI # 90)	37.82	41.91	44.68	44.65	39.21	43.03	46.88	41.73	42.97	36.69	37.47	33.85	30.34	32.62

NOTE: The ACSC hospital admissions per 1,000 eligibles, derived from the overall composite (AHRQ PQI #90), is an overall composite score per 1,000 population (ages 18 years and older). The measure includes admissions for one of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, angina without a cardiac procedure, dehydration, bacterial pneumonia, or urinary tract infection. For more information on the measures and definition of implementation quarter, see the Technical Reference Guide. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

*Figure 6* and the accompanying table show the ACSC hospital admission count, a combination of 12 individual ACSC diagnoses for chronic and acute conditions. The count increased from 37.82 in BQ1 to 46.88 in BQ7. There was a decrease through the demonstration quarters from 42.97 in DQ1 to 32.62 in DQ6.



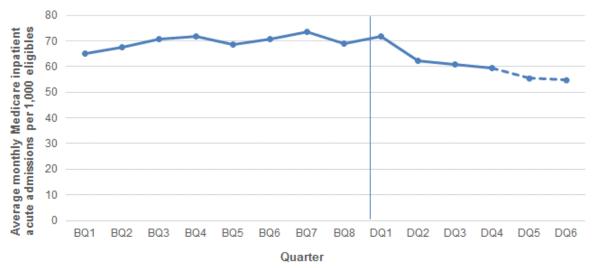


Figure 7 table. Medicare inpatient acute admissions per 1,000 eligibles and acute care users as % of eligibles (excludes observation stays)

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Average monthly Medicare inpatient acute admissions per 1,000 eligibles (excludes observation stays)	64.96	67.47	70.69	71.86	68.63	70.86	73.61	68.95	71.83	62.24	60.97	59.58	55.52	54.92
Average monthly Medicare inpatient acute care users as % of eligibles (excludes observation stays)	5.8	6.0	6.3	6.3	6.2	6.3	6.6	6.2	6.3	5.6	5.6	5.3	5.0	5.0

NOTE: Inpatient acute admissions were defined as having one or more inpatient claims with provider codes in the following ranges: 0001–0879 Acute care Inpatient Prospective Payment System (IPPS) hospitals and 1300–1399 Critical access hospitals. Results are weighted to account for variation in the number of Medicare-Medicaid enrollees in each month of the quarter. The 6th quarter (DQ6) was 10/01/2014–12/31/2014. See *Methodologies*, *Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

During baseline quarters, the average monthly Medicare inpatient acute admissions per 1,000 demonstration-eligible beneficiaries fluctuated, but overall increased from 64.96 in BQ1 to 68.95 in BQ8 (see *Figure 7* and accompanying table). The rate peaked in BQ7 at 73.61. There was a steady decrease from DQ1 (71.83) to DQ6 (54.92). The rate of average monthly Medicare inpatient acute care users increased throughout the baseline quarters from 5.8 percent in BQ1 to 6.2 percent in BQ8. The rate decreased throughout the demonstration quarters from 6.3 percent in DQ1 to 5.0 percent in DQ6.

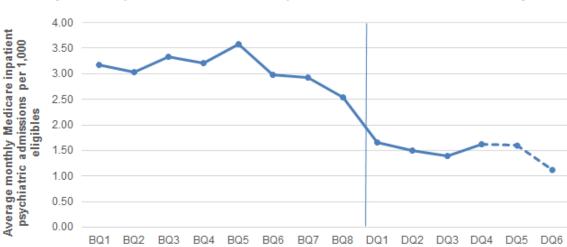


Figure 8. Average monthly Medicare inpatient psychiatric admissions per 1,000 eligibles

Figure 8 table. Average monthly Medicare inpatient psychiatric admissions per 1,000 eligibles and inpatient psychiatric care users as % of eligibles

Quarter

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Average monthly Medicare inpatient psychiatric admissions per 1,000 eligibles	3.17	3.04	3.33	3.21	3.58	2.97	2.92	2.54	1.65	1.49	1.40	1.62	1.61	1.13
Average monthly Medicare inpatient psychiatric care users as % of eligibles	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1

NOTE: Inpatient psychiatric admissions were defined as having one or more inpatient claims with Provider Codes in the following ranges: 4000–4499 (psychiatric hospitals) or claims with "S" (Psychiatric unit) in the third position of the Provider ID variable. Results are weighted to account for variation in the number of Medicare-Medicaid beneficiaries in each month of the quarter. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

*Figure 8* and the accompanying table illustrate that during baseline quarters, average monthly Medicare inpatient psychiatric admissions decreased from 3.17 in BQ1 to 2.54 in BQ8. During the demonstration quarters, average monthly admissions decreased, ranging from 1.65 in DQ1 to 1.13 in DQ6. During the baseline quarters, average monthly Medicare inpatient psychiatric users as a percentage of eligible Medicare-Medicaid beneficiaries decreased slightly from 0.3 percent in BQ1 to 0.2 percent in BQ8. In DQ1–DQ6, the rate was stable at 0.1 percent.

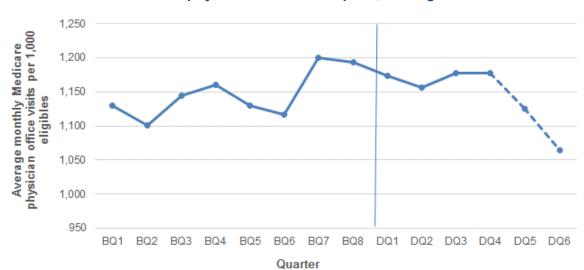


Figure 9. Medicare physician office visits per 1,000 eligibles

Figure 9 table. Medicare physician office visits per 1,000 eligibles and physician office visit users as % of eligibles

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Average monthly Medicare physician office visits per 1,000 eligibles		1,101	1,144	1,160	1,130	1,116	1,200	1,193	1,174	1,156	1,178	1,178	1,126	1,065
Average monthly Medicare physician office visit users as % of eligibles	62.7	62.4	63.5	63.9	62.8	61.9	64.2	63.6	63.8	62.7	63.1	63.4	61.5	59.7

NOTE: Physician visits are defined as evaluation and management visits. Excludes Physical Therapy/Occupational Therapy/Speech Therapy/Rehab, Lab, and X-ray, and visits to inpatient or hospital outpatient departments. Results are weighted to account for variation in the number of Medicare-Medicaid enrollees in each month of the quarter. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

During the baseline quarters, average monthly Medicare physician office visits per 1,000 demonstration eligible Medicare-Medicaid beneficiaries increased from 1,130 in BQ1 to 1,193 in BQ8 (see *Figure 9* and accompanying table). There was a slight decline in BQ6 to 1,116 followed by a small peak at 1,200 in BQ7. In the demonstration quarters, the average monthly number of Medicare physician office visits decreased from 1,174 in DQ1 to 1,065 in DQ6. During baseline quarters, the rate of average Medicare physician office visit users increased slightly from 62.7 percent in BQ1 to 63.6 percent in BQ8. There was a small decrease from DQ1 at 63.8 percent to 59.7 percent in DQ6.





Figure 10 table. Average monthly Medicare post-acute skilled nursing facility admissions per 1,000 eligibles and post-acute skilled nursing facility users as % of eligibles

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Average monthly Medicare post- acute skilled nursing facility admissions per 1,000 eligibles	18.90	20.47	21.45	21.56	20.38	21.53	22.55	20.11	15.26	16.32	16.08	15.19	14.05	12.65
Average monthly Medicare post- acute skilled nursing facility users as % of eligible	1.7	1.8	2.0	1.9	1.9	2.0	2.1	1.8	1.4	1.5	1.5	1.4	1.3	1.2

NOTE: Results are weighted to account for variation in the number of Medicare-Medicaid enrollees in each month of the quarter. The 6th quarter (DQ6) was 10/01/2014–12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

In the baseline quarters, average monthly Medicare post-acute skilled nursing facility (SNF) admissions increased from 18.90 in BQ1 to 20.11 in BQ8. There was a decline in average monthly admissions throughout the demonstration quarters from 15.26 in DQ1 to 12.65 in DQ6. During baseline quarters, the rate of average monthly Medicare post-acute SNF users increased slightly from 1.7 percent in BQ1 to 1.8 percent in BQ8, peaking at 2.1 percent in BQ7. The rate decreased from 1.4 percent in DQ1 to 1.2 percent in DQ6.



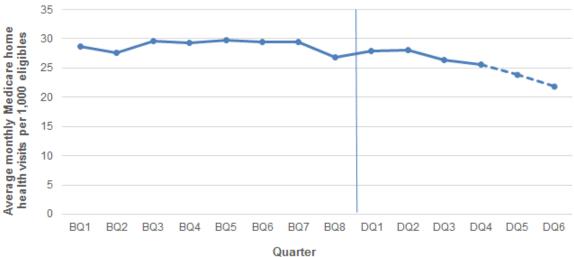


Figure 11 table. Medicare home health visits per 1,000 eligibles and Medicare home health users as % of eligibles

Measure	BQ1	BQ2	BQ3	BQ4	BQ5	BQ6	BQ7	BQ8	DQ1	DQ2	DQ3	DQ4	DQ5	DQ6
Average monthly Medicare home health visits per 1,000 eligibles	28.76	27.65	29.60	29.23	29.79	29.50	29.44	26.85	27.89	28.11	26.35	25.58	23.89	21.85
Average monthly Medicare home health users as % of eligibles	2.8	2.7	2.9	2.9	2.9	2.9	2.9	2.6	2.8	2.8	2.6	2.5	2.4	2.2

NOTE: Results are weighted to account for variation in the number of Medicare-Medicaid beneficiaries in each month of the quarter. The 6th quarter (DQ6) was 10/01/2014-12/31/2014. See *Methodologies, Caveats, and Limitations* for notes on interpretation of utilization data.

SOURCE: Medicare eligibility and claims data.

*Figure 11* and accompanying table show that average monthly Medicare home health visits decreased from 28.76 in BQ1 to 27.65 in BQ2. Beginning in BQ3 and throughout the remainder of the baseline quarters, the number of average monthly visits remained at about 29 until BQ8, when the number decreased to 26.85. There was an increase to 27.89 in DQ1, followed by a decrease through the demonstration quarters to 21.85 in DQ6.

During baseline quarters, the rate of average monthly users of Medicare home health decreased slightly from 2.8 percent in BQ1 to 2.6 in BQ8. There was a small increase in DQ1 and DQ2 to 2.8 percent, followed by decreases throughout the demonstration quarters to 2.2 percent in DQ6.

The health care utilization and cost results presented in this section, although encouraging for some measures, should be interpreted with caution. They do not employ the multivariate regression-based difference-in-differences methodology using a comparison group, discussed in

Methodologies, Caveats, and Limitations and in the evaluation plan for the Medicare-Medicaid Financial Alignment Initiative, that RTI will use in the final evaluation report for the Washington MFFS demonstration. Any decrease or increase, such as a potential decrease in the 30-day inpatient readmission rate over time, may be the result of the Washington Health Homes demonstration, or could reflect other factors, such as seasonal variation or that new entrants in later quarters may not be as ill as entrants in the first quarter. In particular, any decrease in a utilization measure in the last quarter reported potentially could be a result of incomplete run-out of claims data, and should be interpreted with caution. Additional time and similar utilization data on a comparison group will be needed, along with the difference-in-differences methodology, before any utilization results can be attributed to the demonstration.

### **Focus Group Findings**

We conducted focus groups, to hear directly from beneficiaries about their experience with the demonstration. The four focus groups were conducted in September 2015, including one in Bellingham, one in Yakima, and two in Vancouver. A total of 32 beneficiaries, enrolled in three of the State's health homes, took part in these focus groups. The focus group participants were similar in demographic and health conditions to the enrollee population overall. Several issues were highlighted by multiple participants and provide a glimpse into their experiences with the demonstration.

**Overall satisfaction:** More than half of the participants reported that 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. Achieving personal health-related goals often had benefits such as decreasing use of emergency departments and reducing medication use, to increasing physical activity and weight loss.

I was going to the emergency room three or four times a week for little things. Since I started working with [care coordinator] over the last two years, I've been to the ER once in two years.

**Relationship with health home care coordinator:** Participants value the relationship with the health home care coordinator, who is viewed as particularly helpful in setting goals and developing plans to achieve them.

She was coming once a month to my house. We set goals. And since I have so many providers and it looks like I'm doing well at this point, I just talk to her on the phone. If I need help, she's kind of a resource person and helps me set goals.

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.

Relationships with primary care providers: All of the participants reported having a primary care provider (PCP), with many of those relationships predating enrollment in the health home. Participants described frequent visits with their PCPs and specialists, with three-quarters reporting more than six visits in the past 12 months. Many reported positive relationships with their current PCPs. In some cases, participants had changed PCPs, either involuntarily because their PCP left the practice, or voluntarily because they did not like their PCP and felt that the PCP did not listen to them.

I've been seeing my primary doctor for the last few months. Prior to that, I went through three doctors. Not one of them did I like or understood me until I went to [current PCP], and she listened and she understood.

**Access to other services:** Participants typically see one or more specialists in addition to their PCPs. Many see behavioral health professionals, or use attendant services. Some participants in the Bellingham and Yakima groups reported difficulties with access or limited choice of specialists locally, including limited choices for behavioral health professionals and dental care. Several reported traveling to Seattle to gain access to needed specialists.

That's why I chose to go—there's only two diabetes doctors in town...when I got rid of the one, I had heard bad stuff about the other one. So that's why I said I'll just go to Seattle. Even though it takes a day trip, I'm going over there.

Some participants reported improved access to assistive devices and home modifications, although difficulties in obtaining wheelchairs or wheelchair repairs or other equipment were a challenge for others. The role of the care coordinators in facilitating access to services, health information, and other resources was noted by several participants.

Well, like I can go to [care coordinator] if I need some medical equipment, or if something's wrong I can go to her. She actually calls. I don't take pain meds because I was on so many when I was in the nursing home. And they [health home] have gone over and above. I have access to an EMPI machine [pain management system]...They've got me everything for my neck to hold it in place. I have everything that anybody could possibly want.

If you have a problem with falling, they pay for the unit now for you to have a pendant at home so you can get help. Before if you were having that problem, I had to try to get that for myself.

Although some participants reported receiving help obtaining services through their care coordinators, others indicated that they were less likely to call their care coordinators for such help, either because they were accustomed to doing that on their own or because they had already established patterns of calling other agencies for assistance.

**Importance of patient-centered care and patient engagement:** Participants indicated that 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.

I have wanted to get off medicines because I take so many of them. My doctor listens to what I say and she gives me options and she really hears them. She throws out, "We can do this, this and this, and which one would you prefer?" She has to be listening to me to be able to come up with the options.

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 two years, I've been to the ER once in two 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.

**Care coordination:** Most participants who had had a hospital admission or emergency department visit in the past year said that their PCP had been notified. However, the sharing of medical records and test results between physicians was mixed. Physicians who had access to the same medical record system could readily share information, but in other cases participants reported that they needed to be responsible for ensuring that physicians had access to needed information.

**Beneficiary protections:** An ombuds program exists to help beneficiaries who are having problems with services. Some of the participants reported that they were familiar with the ombuds program and had used it successfully. Other participants reported talking with supervisors or changing providers when they had problems with services.

If you're having too much trouble, you might try calling the ombudsman because they help with that kind of stuff. They'll get to the bottom of it, and they'll make them do their job.

#### 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.

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.

# **Medicare Savings Calculation**

This section presents the results of preliminary Medicare savings calculations for the first demonstration period, performed using an actuarial methodology. States implementing an MFFS model demonstration under the Medicare-Medicaid Financial Alignment Initiative will be eligible for performance payments from CMS based on achieving statistically significant savings and meeting or exceeding quality requirements. The actuarial savings calculations will be performed annually and will provide CMS with the resulting Medicare and Medicaid savings for each MFFS State. The results presented here reflect preliminary analyses of Medicare savings for the Washington MFFS demonstration; Medicaid savings analyses will be conducted once data become available.

Note that the results presented here 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 are not yet available. The final calculations will include both Medicare and Medicaid data. Second, only 7 months of claims run-out were available for this calculation. The *Appendix* provides details of the savings calculation methodology and more detailed results.

The basic approach to the savings calculation is to compare the trend (as opposed to the level) of per member per month (PMPM) expenditures of those beneficiaries in the demonstration to the trend of the PMPM of those beneficiaries in a comparison group. This is done by comparing the actual PMPM of those in the demonstration group to a target PMPM, which is determined by projecting the PMPM of the demonstration group experienced in the baseline period to the demonstration period. The projection is based on the experience of the comparison group between the baseline period and the demonstration period.

The basic approach is refined by disaggregating the beneficiaries in the demonstration and comparison groups by characteristics that affect their level of care and costs. The disaggregation is done on three characteristics that result in 12 categories of beneficiaries:

- 1. Basis of Medicare eligibility: Age (65+) or Disability (<65)
- 2. Level of Long-Term Support Services (LTSS): Institution, Home and Community-Based Services (HCBS), or Community
- 3. Presence of Severe and Persistent Mental Illness (SPMI): Yes or no.

The beneficiaries are also disaggregated according to when they become eligible for the demonstration. Thus, they are grouped into "cohorts." There are two main cohorts for the first demonstration period of performance, from July 2013 to December 2014. The first cohort (Cohort 1) consists of those beneficiaries who first became eligible for the demonstration during the months of July 2013 through December 2013 and were also dually eligible for Medicare and Medicaid in July 2013 (the month that the demonstration begins). The second cohort (Cohort 2) consists of those beneficiaries who were eligible for the demonstration in January 2014 and were

not dually eligible for Medicare and Medicaid in July 2013. A third cohort of beneficiaries (Cohort 3) consists of beneficiaries becoming eligible during the remainder of the first demonstration period (February to December 2014). Though the actual amount of any savings achieved for these beneficiaries will not be calculated separately for these beneficiaries until the second demonstration period, savings are attributed to these beneficiaries for the first demonstration period based on the savings observed for beneficiaries in Cohort 2.

The reason for developing these cohorts is to create closed groups of beneficiaries (similarly in the demonstration group and the comparison group) whose monthly expenditures (PMPM) can be tracked to determine the effects of the demonstration. If new entrants were allowed into these groups each month, the new entrants would change the PMPM of the groups for reasons unrelated to the effects of the demonstration, but instead related only to the change in the mix of the groups.

The trend factors from the baseline period to the demonstration period are calculated separately for the demonstration and comparison groups, for each of the 12 categories of beneficiaries, for Cohort 1 and for Cohort 2, and for each month of the demonstration period. For each cohort, cell, and demonstration month, a "target" PMPM is obtained by multiplying the corresponding PMPM of the demonstration group in the baseline period (all 24 months combined) times the ratio of (1) the comparison group PMPM in the demonstration month and (2) the comparison group PMPM in the baseline period. There are additional adjustments to the target PMPMs needed to reflect Federal and State policies that affect the costs in the comparison States differently than in the demonstration States to ensure that calculated savings result only from the demonstration.

Table 4 summarizes demonstration Medicare savings for each cohort and overall. The table reports the number of eligible months, the baseline PMPM from the demonstration group, the target demonstration PMPM calculated by applying the trend observed in the comparison group during the demonstration period to the demonstration group baseline, the actual demonstration PMPM for the demonstration group, PMPM savings, total savings, and percent savings. The table also reports the average geographic adjustment (AGA) factor cost trend from the comparison group, which is an adjustment made to account for Federal policy differences across States. The total savings calculated for Cohort 1 were close to \$23 million after adjusting for outliers. Cohort 2 experienced losses of over \$250,000. Though savings were not calculated separately for Cohort 3, the losses from Cohort 2 were attributed to Cohort 3 resulting in an additional \$1.1 million in losses. In total, the savings for the first demonstration period were \$21.6 million after apply outlier adjustments, representing over 6 percent savings. Savings by cohort and service type are presented in *Table 5*.

Table 4. Summary of demonstration Medicare savings calculation by cohort

Cohort	(a) Number of eligible months	(b) Baseline period PMPM from demonstra- tion group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstra- tion period PMPM	(e) Actual demonstration period PMPM for demonstra- tion group	(f) PMPM savings = (d) - (e)	(g) Total savings = (a) * (f)	(h) Percent savings = (f) / (d)
1	190,719.0	\$1,609.30	1.15141	\$1,852.96	\$1,718.46	\$134.51	\$25,652,707	7.26%
1 Outlier adjusted	190,719.0	\$1,565.03	1.14540	\$1,792.58	\$1,672.08	\$120.50	\$22,981,640	6.7%
2	1,204.2	\$1,442.37	1.04774	\$1,511.22	\$1,738.78	-\$227.56	-\$274,024	-15.1%
2 Outlier adjusted	1,204.2	\$1,442.37	1.05355	\$1,519.61	\$1,738.78	-\$219.18	-\$263,929	-14.4%
1+2	191,923.2	\$1,608.25	1.15083	\$1,850.82	\$1,718.58	\$132.23	\$25,378,683	7.1%
1+2 Outlier adjusted	191,923.2	\$1,564.26	1.14486	\$1,790.87	\$1,672.50	\$118.37	\$22,717,711	6.6%
3	5,077.0					-\$219.18	-\$1,112,756	
1+2+3	197,000.2						\$21,604,955	6.1%

NOTE: Cohort 1 consists of those beneficiaries who are first eligible for the demonstration during the months of July 2013 through December 2013 and are also dually eligible in July 2013 (the month that the demonstration begins). Cohort 2 consists of those beneficiaries are eligible in January 2014 and not dually eligible during July 2013. Cohort 3 consists of beneficiaries becoming eligible during the remainder of the first demonstration period (February–December 2014). Savings are calculated separately for Cohort 1 and Cohort 2. Savings are attributed to Cohort 3 based on observed savings/losses in Cohort 2.

SOURCE: Medicare eligibility and claims data.

Table 5. Medicare savings by cohort and service type

Cohort and type of service	PMPM savings	95% CI <sup>3</sup>	Total savings	Percent savings
Cohort 1 <sup>1</sup> Durable medical equipment	\$17.78	\$10.52 to \$25.04	\$3,390,984	19.2%
Home health agency	\$40.91	\$35.33 to \$46.49	\$7,802,314	37.5%
Hospice	\$22.12	\$17.44 to \$26.80	\$4,218,704	57.2%
Inpatient	\$24.13	-\$17.39 to \$65.65	\$4,602,049	3.5%
Outpatient	-\$32.00	-\$53.46 to -\$10.54	-\$6,103,008	-8.4%
Professional <sup>2</sup>	\$75.46	\$55.45 to \$95.47	\$14,391,656	19.1%
SNF	-\$13.91	-\$30.09 to \$2.27	-\$2,652,901	-9.6%
Total Cohort 1 (outlier adjusted)	\$120.50	\$50.65 to \$190.35	\$22,981,640	6.7%
Cohort 2 <sup>1</sup> Durable medical equipment	\$2.59	-\$58.67 to \$63.85	\$3,107	3.4%
Home health agency	\$30.08	-\$36.11 to \$96.27	\$36,234	32.3%
Hospice	\$31.40	-\$2.51 to \$65.31	\$37,812	73.7%
Inpatient	-\$2.57	-\$571.63 to \$566.49	-\$3,095	-0.4%
Outpatient	-\$287.95	-\$651.98 to \$76.08	-\$346,749	-98.3%
Professional <sup>2</sup>	-\$31.27	-\$164.62 to \$102.08	-\$37,655	-11.3%
SNF	\$30.17	-\$193.94 to \$254.28	\$36,331	24.5%
Total Cohort 2 (outlier adjusted)	-\$219.18	-\$1,099.51 to \$661.15	-\$263,929	-14.4%
Total Cohort 3 <sup>1</sup>	-\$219.18		-\$1,112,756	
Total Cohort 1 + 2 + 3			\$21,604,955	6.1%

#### NOTE:

- 1. Cohort 1 consists of those beneficiaries who are first eligible for the demonstration during the months of July 2013 through December 2013 and are also dually eligible in July 2013 (the month that the demonstration begins). Cohort 2 consists of those beneficiaries eligible in January 2014 and not dually eligible during July 2013. Cohort 3 consists of beneficiaries becoming eligible during the remainder of the first demonstration period (February–December 2014). Savings are calculated separately for Cohort 1 and Cohort 2. Savings are attributed to Cohort 3 based on observed savings/losses in Cohort 2.
- Note that professional services include claims for services submitted on a CMS-1500 claim form including non-institutional providers such as physicians, physician assistants, clinical social workers, and nurse practitioners as well as claims for free-standing facilities such as independent clinical laboratories, ambulance providers, and ambulatory surgical centers.
- 3. Each confidence interval was derived from the weighted standard error of four PMPM values: The PMPM in the baseline period of the intervention group, the PMPM in the baseline period of the comparison group, the PMPM in the demonstration period of the intervention group, and the PMPM in the demonstration period of the comparison group. The standard error of the savings PMPM was calculated as square root of the sum of the square of the four weighted standard errors of the four PMPMs. Finally, the 95% confidence interval was calculated as 1.96 times this weighted standard error.

SOURCE: Medicare eligibility and claims data.

# **Next Steps for the Washington Evaluation**

The evaluation team will continue a wide range of data collection and analysis activities to monitor and evaluate the Washington MFFS demonstration implementation and outcomes. These activities include collecting information on a quarterly basis through the online State Data Reporting System, quarterly calls with Washington demonstration staff, annual site visits to interview a range of stakeholders, beneficiary focus groups, and data analyses using Medicare and Medicaid enrollment, claims and encounter data, and the Nursing Home Minimum Data Set. The evaluation team will produce annual reports for each demonstration performance year; these reports will contain greater detail about the Washington demonstration and its experiences and will be posted on the CMS website.

In addition to monitoring Washington demonstration implementation, the evaluation is also examining the experiences of beneficiaries, their families, and caregivers to assess how closely the demonstration meets the goal of designing person-centered care delivery models. RTI will summarize direct feedback from beneficiaries participating in focus groups to gain insight into how the initiative affects them. RTI is also conducting additional key stakeholder interviews to better understand the level of beneficiary engagement with the demonstration, its perceived impact on beneficiary outcomes, and any unintended consequences.

A detailed quantitative evaluation of quality of care, utilization and access to care, and cost will also be conducted as data become available. RTI's analytic approach for the State's managed fee-for-service (MFFS) model is detailed in the Washington evaluation design report available at www.cms.gov. 10 Medicare and Medicaid claims from CMS will allow examination of utilization and cost of acute and long-term care services as well as key quality of care measures. Because of delays in the availability of Medicaid data, the evaluation will focus on Medicare services initially. As these data become available, the evaluation will proceed with quantitative analyses of LTSS, behavioral health utilization trends, access to care, and quality of services.

The evaluation will also analyze the Nursing Home Minimum Data Set Version 3.0 (MDS 3.0) to determine utilization patterns, characteristics of facility residents at admission, and quality of care in nursing facilities. With these data, the evaluation will be able to track LTSS rebalancing efforts in the demonstrations, and quality of nursing facility care. As Medicaid data become available, RTI will also start tracking State Plan personal care utilization, the balance of HCBS and facility use, and transitions across community and institutional settings.

<sup>&</sup>lt;sup>10</sup> Evaluation design reports available at http://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Evaluations.html.

# **Summary and Conclusions**

The Washington Health Homes demonstration is designed to increase beneficiary quality of care while reducing overall costs to the Medicare and Medicaid programs. This report presents a description of the demonstration model, implementation, and preliminary results through the first six quarters of implementation (July 2013 to December 2014).

After receiving approval to begin the health homes demonstration less than a week before the State planned to begin enrolling beneficiaries, Washington overcame initial problems with capacity by hiring a sufficient number of health care coordinators and by the end of 2013 was able to offer the demonstration to beneficiaries in all 37 counties in which the demonstration now operates. Enrollment increased in every quarter through the end of 2014 when the share of eligible beneficiaries enrolled exceeded 50 percent. Demonstration enrollment progressively grew from 178 Medicare-Medicaid beneficiaries enrolled in health homes in quarter 1 to 10,632 beneficiaries enrolled in health homes by the end of quarter 6. To date, voluntary disenrollment has been minimal. This growth represents a major achievement for the State and was accomplished over two enrollment phases.

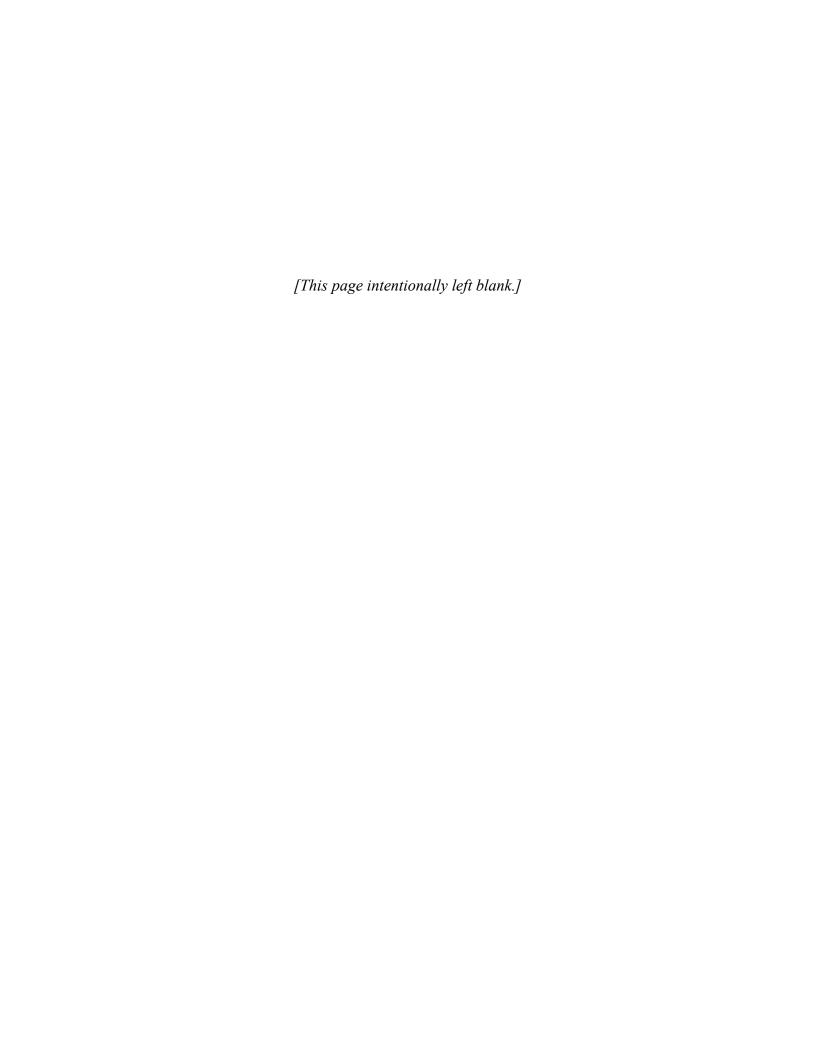
Estimates of cost impact relative to a comparison group based on actuarial analysis of claims data show substantial reductions in per member per month Medicare costs among demonstration-eligible beneficiaries that exceed even the largest monthly payments made for health home services. Further adjustments will be made to account for changes in Medicaid costs, but these initial findings suggest that the health home intervention is achieving at least one of its stated goals.

Whether these savings have been achieved while improving or maintaining quality of care is not yet known. Further research comparing the trends for eligible beneficiaries in Washington presented in the *Medicare Utilization Data* section to similar beneficiaries in States without a financial alignment demonstration will provide more definitive information on the impact of the Washington MFFS demonstration on utilization and quality of care. However, the results reported in the *Medicare Utilization Data* section suggest that for some measures trends observed during the first demonstration period differ from those seen in the baseline period among a population of similarly selected Medicare-Medicaid enrollees in the demonstration areas. Specifically, the rates of inpatient hospital admission in general and ACSC admissions in particular were either flat or increasing during the baseline period and appear to be falling in the demonstration period, even if we discount the final demonstration quarter as incomplete because of the lack of sufficient claims run-out. Physician office visits per 1,000 eligibles was also increasing in the baseline period but appear to have leveled off in the demonstration period. Other measures show either no change in trend during the demonstration period, or simply a continuation of a trend that predates the demonstration. Some of these trends may be related to new demonstration entrants' over time having fewer health care and LTSS needs than those who entered during the first quarter.

In summary, none of the findings reported here suggest that the demonstration is having detrimental effects on eligible beneficiaries or on health care costs. To the extent that any metrics show movement, it is in the direction intended, although for most measures it is too early to attribute that movement to the health home program. However, in the one measure for which we can attribute an effect of the program (PMPM Medicare spending), that effect is also in the intended direction.

# **Appendix A**

Preliminary Savings Report for Washington Managed Fee-for-Service (MFFS) Demonstration Year 1: Medicare-Medicaid Financial Alignment Initiative



# Preliminary Savings Report for Washington Managed Fee-for-Service (MFFS) Demonstration Year 1: Medicare-Medicaid Financial Alignment Initiative

## Prepared for

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# PRELIMINARY SAVINGS REPORT FOR WASHINGTON MANAGED FEE-FOR-SERVICE (MFFS) DEMONSTRATION YEAR 1: MEDICARE-MEDICAID FINANCIAL ALIGNMENT INITIATIVE

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CMS Contract No. HHSM500201000021i TO #3

November 11, 2015

This project was funded by the Centers for Medicare & Medicaid Services under contract no. HHSM500201000021i TO #3. The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services. RTI assumes responsibility for the accuracy and completeness of the information contained in this report. The information in this report is intended for the internal use of CMS and is not intended to benefit any third party. John Wilkin is responsible for the estimates in this memorandum. He is a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries and is qualified to perform this analysis.

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#### 1. Introduction

This is the first savings report for the Washington managed fee-for-service (MFFS) demonstration under the Medicare-Medicaid Financial Alignment Initiative. Washington has enrolled beneficiaries in the demonstration in all but two counties (King and Snohomish) in the State. Washington began enrollment on July 1, 2013, and this first report covers the 18-month period from July 1, 2013, through December 31, 2014. This is referred to as Washington's Demonstration Year 1. There will be a savings report after each Demonstration Year.

The Medicare savings calculation results, and the Medicaid savings calculation results when they are available, will be shared with the Centers for Medicare & Medicaid Services (CMS), which will determine whether Washington is eligible for a performance payment under the MFFS Financial Alignment Model.

The method used to perform the savings calculation is this report will be referred to as the "actuarial method," to distinguish it from the multivariate regression-based method that will be used to estimate the impact of the demonstration on quality and cost outcomes in the final evaluation report for the Washington demonstration. Both methods use beneficiaries from the same comparison group. Because the actuarial method constructs cohorts of beneficiaries from the comparison group (as will be explained later), the actuarial savings calculation uses a subset of the comparison group that was constructed for the other descriptive and regression-based analyses that RTI will perform as part of this evaluation.

The results presented in this report should not be viewed as final for two reasons. First, the calculations in this report cover Medicare Parts A and B expenditures only, because the data needed to perform the calculations on Medicaid expenditures are not yet available. The final savings calculations will include both Medicare and Medicaid data. When Medicaid data become available a revised report will be issued that includes data from both programs. Second, 7 months of claims run-out were available for this report, which includes claims processed for both the demonstration and comparison groups through July 31, 2015. Typically, 9 months of run-out are required for RTI to consider Medicare results complete. When the Medicaid data become available, we will add 2 more months of run-out to the Medicare data. Note that the evaluation report will include an analysis of Medicare Part D data.

<sup>1</sup> For a 1-year period, claims data are generally considered complete after nine months of run-out. After 7 months of run-out, it is expected that at least 98 percent of the claims are complete.

# 2. Data Sources for PMPM Cost Analysis

Medicare payments have been separated into seven claim categories: Inpatient, Skilled Nursing Facility (SNF), Hospice, Outpatient, Home Health, Professional, and Durable Medical Equipment (DME). The data used in creating the results of this report are described in more detail below

# 2.1 Determining Eligibility

As a part of performing cost calculations on a per member per month (PMPM) basis, it was necessary to construct an eligibility timeline for each beneficiary to determine whether claims occurred during periods of eligibility for the demonstration. ARC used beneficiary eligibility information extracted from CMS's Enrollment Database (EDB) on July 8, 2015, to construct an analytic file that contains the date of death; eligibility occurrences for Part A coverage, Part B coverage, and primary payer status; eligibility occurrences for State/county codes of residence and Group Health Organization (GHO) enrollment (e.g., Medicare Advantage [MA] or the Program of All-Inclusive Care for the Elderly [PACE]); and periods of hospice coverage. All of this information was used to construct a historical eligibility record for each beneficiary.

After creating the historical eligibility file, ARC determined the days on which a beneficiary was eligible for the demonstration. Claims were used to calculate the PMPM payments only if the beneficiary was eligible to participate in the demonstration on the admission date (for institutional claims) or service date (for all other types of service) on the claim. For future reports, retroactive changes will be applied so that the daily eligibility file will include updated values for all previous months.

#### 2.2 Claims Data

The primary source of Medicare Parts A and B claims data for this report was CMS's Program Integrity TAP files. For each of the three beneficiary cohorts included in this report, the claims data employed in the analysis were extracted from the TAP files and represent claims incurred from the start date of each cohort through December 31, 2014, and processed by CMS through July 31, 2015 (i.e., the last Friday in July).

# 3. Basic Approach

The basic approach to the savings calculation is to compare the trend (as opposed to the level) of per member per month (PMPM) Medicare expenditures of those beneficiaries in the intervention group (i.e., the demonstration group) with the trend of the PMPM of those beneficiaries in the comparison group. This is done by comparing the actual PMPM of the individuals in the intervention group with a target PMPM, which is determined by projecting forward the PMPM of the intervention group in the baseline period to the demonstration period. The trend used for the projection is based on the actual experience observed in the comparison group during the baseline period and the demonstration period.

The PMPM amounts are calculated by dividing total Medicare Parts A and B expenditures by the number of member months of eligibility. Medicare-paid amounts do not include the amounts for deductibles, coinsurance, or balance billing. For hospital claims, the paid amount is reduced for Medicare Disproportionate Share (DSH) payments and Indirect Medical Education (IME) payments, because these payments are not directly related to the cost of care provided to individual beneficiaries.

## 3.1 Categories of Beneficiaries

The basic approach is refined by disaggregating the beneficiaries in the intervention and comparison groups by characteristics that affect their level of care and costs. The disaggregation is performed using three characteristics that result in 12 categories of beneficiaries:

- 1. Basis of eligibility: Age (65+) or Disability (<65)
- 2. Level of Long-Term Services and Supports (LTSS): Institution, Home and Community-Based Services (HCBS), or Community
- 3. Presence of Severe and Persistent Mental Illness (SPMI): Yes or No.

The intervention group and the comparison group had roughly the same distribution by basis of eligibility and prevalence of SPMI. In the intervention group, 47 percent of individuals were aged 65 or older compared with 41 percent of individuals in the comparison group. Both groups had 27 percent prevalence of SPMI. The distribution by facility status showed more variation. In the intervention group, 43 percent of members used HCBS and 11 percent used facility-based LTSS, whereas the prevalence in the comparison group was 19 percent HCBS and 29 percent facility-based services. Because the savings were calculated for each facility status category separately and weighted according to the intervention group distribution, the savings calculation appropriately takes into account this different distribution.

It is important to note that beneficiaries are placed into categories according to their characteristics at the time that they are first placed in "cohorts," even if these characteristics subsequently change. This is done to ensure that the PMPMs in each category change only from the effects of the demonstration. This will also capture the effect of the demonstration to slow the progression of the use of LTSS. For example, during the demonstration, some of the beneficiaries originally placed in the community category may begin using HCBS or institutional

services, which usually result in increased cost for care. If the rate of beneficiaries in the community category who require more intensive services during the demonstration is higher for the comparison group than for the intervention group, then the PMPM of the comparison group would increase faster and the savings calculation would show demonstration savings.

#### 3.2 Cohorts

The beneficiaries are also disaggregated according to when they become eligible for the demonstration. Thus, beneficiaries are placed into cohorts based on when they first meet the eligibility requirements of the demonstration. Washington has provided CMS with a file that lists the beneficiaries who have been determined to be eligible for the demonstration, including those having a score of 1.5 or greater on the Predictive Risk Intelligence System (PRISM). We performed some eligibility checks on these beneficiaries and exclude them from the savings calculation if, on the date that we place them in cohorts, they meet the following criteria:

- 1. Do not reside in a demonstration county
- 2. Have elected hospice care
- 3. Do not have both Part A and Part B coverage
- 4. Enrolled in a Group Health Organization
- 5. Have Medicare as a secondary payer
- 6. Do not have at least 90 days of experience during the baseline period
- 7. Are in another CMS shared savings initiative.

For beneficiaries in the comparison group, we applied the same checks, except that residence was checked for the appropriate counties in the comparison States. RTI constructed the comparison group from selected Metropolitan Statistical Areas (MSAs) in three States—Arkansas, Georgia, and West Virginia—based on similarities between the demonstration and comparison areas.<sup>2</sup> Each MSA consists of a group of counties. For each State, a non-MSA area was constructed from the counties that do not belong to an MSA. In addition, RTI simulated the PRISM score of each comparison group beneficiary for each quarter of the demonstration period. We checked that the comparison group beneficiaries had an RTI-generated simulated PRISM score of at least 1.5 in the first quarter of the demonstration for Cohort 1 and in the third quarter of the demonstration for Cohort 2.

The tables presented in this report analyze eligibility and Medicare payments for seven populations of beneficiaries separated into two main cohorts. Cohort 1 consists of those beneficiaries who first became eligible for the demonstration during or before the months of July 2013 through December 2013 and who were also dually eligible for both Medicare and Medicaid in July 2013 (the month that the demonstration began). Cohort 1 of the intervention group is subdivided into six subgroups consisting of those first identified as eligible for the demonstration

<sup>&</sup>lt;sup>2</sup> A description of the comparison group selection methodology, will included in the upcoming Washington annual report.

in each of the months July through December 2013, and identified as Cohort 1A through 1F, respectively.

Cohort 2 consists of those beneficiaries who were eligible for the demonstration in January 2014 and who were not dually eligible in July 2013. Those who became eligible for the demonstration in February through December 2014 will form a third cohort that RTI will include in the Demonstration Year 2 savings report. For this report, we will tabulate the size of Cohort 3 and attribute the savings percentage achieved for Cohort 2 to Cohort 3 for this savings calculation.

The reason for employing cohorts for the analysis is to create closed groups of beneficiaries (similarly in the intervention group and the comparison group) whose monthly expenditures (PMPM) can be tracked to determine the effects of the demonstration. If new entrants were allowed into these groups over time, the new entrants would change the PMPM of the groups for reasons unrelated to the effects of the demonstration, but instead related only to the change in the mix of the groups.

When the idea of the cohorts was first conceived, Cohort 1 was to consist of only those beneficiaries first identified as eligible for the demonstration in or before July 2013 (instead of during the period July 2103 through December 2013) and who were also dually eligible in July 2013. However, from those beneficiaries who were dually eligible in July 2013, Washington determined their first month of eligibility for the demonstration in stages over the first 6 months of operations as the demonstration was being rolled out in different areas. That is, RTI did not consider a beneficiary to be eligible for the demonstration for savings calculation purposes until the demonstration had been implemented in the beneficiary's geographic area. It is not possible to re-create this process of rolling entry for the comparison group. Thus, Cohort 1 for the comparison group consists of those beneficiaries who were both dually eligible in July 2013 and deemed eligible for the demonstration in July 2013 by RTI, which simulated the Washington PRISM criteria.

In order to (1) not include the experience of beneficiaries before they become eligible for the demonstration and (2) create closed groups, intervention group Cohort 1 beneficiaries were subdivided into six subgroups; those who first became eligible for the demonstration in each of the 6 months July through December 2013. These subgroups are designated as Cohort 1A through Cohort 1F, respectively.

For Cohort 1, the baseline period consists of the 24 months immediately before the start of the demonstration (i.e., July 1, 2011, through June 30, 2013). For Cohort 2, the baseline experience is the period July through December 2013. The same beneficiaries are in the baseline and the demonstration periods and an individual beneficiary must have 3 months of baseline experience before being included in a cohort for the savings calculation. This means that the beneficiary must have been dually eligible for at least 3 months during the applicable baseline period. Because the savings calculation methodology relies on determining the trend in PMPM expenditures between the baseline period and the demonstration period, it is important that each beneficiary have relevant experience in both of these periods.

The trend factors from the baseline period to the demonstration period are calculated separately for the intervention and comparison groups, each of the 12 categories of beneficiaries, each cohort, and for each month of the demonstration period. For the intervention group, when aggregating across months, cells, or cohorts, expenditures and member months are simply added up and the aggregate PMPMs are obtained by performing division. For the comparison group, however, when aggregating across months, cells, or cohorts, expenditures are obtained by multiplying the PMPM of the comparison group by the member months (MM) of the intervention group, which represents the expenditures that the comparison group would have experienced if it had the same structure as the intervention group. Totals obtained in this way are referred to as "reweighted" in the following tables.

For each cohort, cell, and demonstration month, a "target" PMPM is obtained by multiplying the corresponding PMPM of the intervention group in the baseline period (all 24 months combined) times the ratio of (1) the comparison group PMPM in the demonstration month and (2) the comparison group PMPM in the baseline period. The target is essentially the PMPM in the baseline period of the intervention group projected forward by the trend in the comparison group. When the Medicaid data become available, this same methodology will be applied separately to the Medicaid expenditures.

# 3.3 AGA and Outlier Adjustments

Adjustments to the target PMPMs are needed to reflect Federal and State policies that affect the costs in the comparison States differently from those in the demonstration States, to ensure that calculated savings result only from the demonstration and not from these government policies. For this report, which covers only Medicare expenditures, the only such adjustment is for the Average Geographic Adjustment (AGA) factor. This factor affects the level of Medicare payments to Medicare Advantage plans in each county and measures how the costs in each county vary through time compared with the costs of the entire nation. The AGA changes through time at different rates for each geographic area. The target PMPMs will be adjusted so that the comparison group trend will be what it would have been if the AGA factors in the comparison States had changed by the same percentage amount as the change in the demonstration States during the demonstration period. When the Medicaid savings calculation is conducted, other adjustments will have to be made to the Medicaid expenditures.

Another adjustment made to both the intervention and the comparison PMPMs is for outliers. Average health care expenditures (as represented by the PMPMs) can be significantly affected by a few very high-cost beneficiaries. Although it is possible to "save" by managing the care of such high-cost beneficiaries in the intervention group, this savings cannot be measured unless there are corresponding and similar high-cost beneficiaries in the comparison group. The outlier adjustment is made by combining the intervention and comparison group beneficiaries and ranking them by their Medicare expenditures. A threshold amount will be calculated at the 99th percentile of these beneficiary-level costs. The costs of any individual that are above this threshold amount will be truncated to the threshold amount. The costs above the threshold will be subtracted from the total costs, and the PMPMs will be recalculated by excluding the amounts above the threshold.

# **3.4 Determining Member Months**

Savings will be determined by comparing intervention and comparison group PMPM Medicare expenditures. The first step in determining PMPM amounts is determining the number of member months that will be used in the calculation for each beneficiary. For Cohort 1, member months are calculated for each beneficiary starting on July 1, 2013 (or the first day of demonstration eligibility) and accruing until one of the following dates or the end of the analytic period (i.e., the first day that is not included as a member month):

- 1. January 1, 2015.
- 2. The day after death.
- 3. The day after moving outside of the intervention area or comparison area.
- 4. The day of joining a Group Health Organization (GHO).
- 5. The day that Medicare is no longer the primary payer.
- 6. The day of loss of coverage for either Medicare Part A or Part B.
- 7. The day of loss of Medicaid eligibility.
- 8. For intervention beneficiaries, the day that Washington determines that the beneficiary is no longer eligible for the demonstration.

When one of the above occurs during a month, a prorated number of member months will be calculated, so that the number of member months will contain fractions of whole months. For Cohort 2, the member months are calculated beginning on January 1, 2014 and accrue until one of the above termination events or the end of the analytic period. Also, if a beneficiary meets the demonstration eligibility criteria after being terminated previously, his or her experience would once again be included. Note that a beneficiary is not dropped from the analysis if his or her PRISM score falls below 1.5 or if he elects hospice care. Thus, although having a PRISM score below 1.5 or being in hospice care will prevent a beneficiary from becoming eligible for the demonstration, these events will not cause a beneficiary who is already eligible from losing eligibility.

# 4. Analysis of Cohorts

As described above, the purpose of closed cohorts is to ensure that the trend in per member per month (PMPM) results from changes in spending on beneficiaries initially placed in each category, not from new higher or lower cost beneficiaries joining the category over time. Although no new entrants are allowed into each cohort after it is created, there will be some terminations, and these will affect the mix of beneficiaries slightly. We have calculated the number and rates of termination for each cohort to determine whether these rates are small and similar between the intervention and comparison groups.

Cohort 1 consisted of 13,866 Medicare-Medicaid enrollees in the intervention group and 32,820 Medicare-Medicaid enrollees in the comparison group. After 18 months of operations, there were 10,613 eligible intervention group members and 23,082 eligible comparison group members as of December 31, 2014. The monthly attrition rates for the intervention and comparison groups were 1.71 percent and 1.98 percent, respectively. The most common reason for attrition was death and the monthly death rate for the intervention group was 0.80 percent, lower than the monthly death rate of 1.13 percent for the comparison group. The intervention group also experienced a lower rate of attrition because the beneficiary joined a Group Health Organization (GHO). However, the intervention group experienced higher monthly rates of attrition from (1) loss of dual eligibility (i.e., loss of Medicare or Medicaid eligibility) or (2) when Washington indicated that the beneficiary was no longer eligible for the demonstration (0.52 percent vs. 0.28 percent).

Cohort 1 for the intervention group was divided into six subgroups denoted by 1A through 1F. The six subgroups consist of those beneficiaries that Washington first identified as being eligible for the demonstration in each of the 6 months from July 2013 through December 2013. The following table shows the number of beneficiaries in each subgroup, the monthly death rate, and the total monthly attrition rate for each subgroup.

Subgroup	Number of beneficiaries	Monthly death rate	Total monthly attrition rate
1A	2,202	1.00%	1.86%
1B	3,798	0.61%	1.52%
1C	391	0.73%	1.83%
1D	5,933	0.88%	1.75%
1E	747	0.77%	1.74%
1F	795	0.72%	1.83%

Cohort 2 consisted of 116 Medicare-Medicaid enrollees in the intervention group and 906 Medicare-Medicaid enrollees in the comparison group. After 12 months, there were 88 eligible intervention group members and 581 eligible comparison group members. The monthly attrition rates for the intervention and comparison groups were 2.33 percent and 3.84 percent, respectively.

Table 1.A summarizes the reasons for ineligibility for members of Cohort 1 who became ineligible during the first 18 months of demonstration operations. Table 1.B summarizes the reasons for ineligibility for members of Cohort 2 who became ineligible during the 12 months of demonstration operations.

Table 1.A
Reasons for ineligibility for Cohort 1

	Interven	tion group	Compari	son group
Final ineligibility reason	Number of events	Monthly attrition rate	Number of events	Monthly attrition rate
Death	1,532	0.80%	5,574	1.13%
Loss of Part A or B	19	0.01%	43	0.01%
Loss of eligibility	998	0.52%	1,360	0.28%
GHO enrollment	405	0.21%	1,559	0.32%
Medicare secondary payer	92	0.05%	238	0.05%
Moved out of service area	207	0.11%	964	0.20%
All ineligibles	3,253	1.71%	9,738	1.78%
Beneficiaries as of 1 <sup>st</sup> day of 1 <sup>st</sup> month of eligibility	13,866		32,820	
Beneficiaries as of 12/31/2014	10	),613	23	,082
Total member months	190.	719.02	491,	720.76

GHO = Group Health Organization.

Table 1.B Reasons for ineligibility for Cohort 2

	Interve	ntion group	Comparison group		
Final ineligibility reason	Number of events	Monthly attrition rate	Number of events	Monthly attrition rate	
Death	8	0.66%	149	1.76%	
Loss of Part A or B	0	0.00%	1	0.01%	
Loss of eligibility	12	1.00%	119	1.40%	
GHO enrollment	6	0.50%	23	0.27%	
Medicare secondary payer	1	0.08%	3	0.04%	
Moved out of service area	1	0.08%	30	0.35%	
All ineligibles	28	2.33%	325	3.84%	
Beneficiaries as of 1/1/2014		116		906	
Beneficiaries as of 12/31/2011		88		581	
Total member months	1,204.19 8,470.40				

# 5. Results of PMPM Cost Analysis

The paid claim amounts tabulated for each cohort do not include estimates of incurred-but-not-reported (IBNR) claims for medical services performed during all 18 months but not yet paid by the end of July 2015. We have not included an estimate of the IBNR claims for this report, although the claims run-out is expected to be between 98 percent and 99 percent complete.

Tables 2.A and 2.B show, for the comparison group, the incurred claims, member months, and per member per month (PMPM) costs for Cohort 1 (Table 2.A) and Cohort 2 (Table 2.B) for the baseline period and the demonstration period by category of beneficiary. For Cohort 1, the PMPM increases by 8 percent from \$1,626 during the baseline period to \$1,757 during the demonstration period. For Cohort 2, the PMPM decreases by 28 percent from \$3,424 to \$2,460. One significant difference between Cohort 1 and Cohort 2 is that Cohort 1 represents a cross-section of demonstration-eligible beneficiaries, whereas Cohort 2 represents newly demonstration-eligible beneficiaries. In other words, Cohort 1 beneficiaries could have first met the requirements for demonstration eligibility at any time during the past (perhaps years ago), whereas Cohort 2 beneficiaries first met the requirements for demonstration eligibility very recently (otherwise they would have been included in Cohort 1).

Before comparing with the intervention group, as will be shown in subsequent tables, the PMPMs in each cell (specific category of beneficiary and month) are reweighted by the number of member months in the intervention group. The resulting totals represent the costs that would have occurred in the comparison group if it had the same number and distribution of beneficiaries as the intervention group.

The PMPM costs are adjusted for two reasons: (1) to reflect the difference in the trend in the Average Geographic Adjustment factor between Washington and the comparison States, and (2) to include an adjustment for the trimming of outlier costs above the 99<sup>th</sup> percentile of annual costs of total paid claims.

Table 2.A
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1

	Ва	seline period		Dem	Trend		
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	РМРМ	(D/B)
Facility, age 65+, with SPMI	45,552.9	\$93,797,933	\$2,059.10	31,213.3	\$59,762,749	\$1,914.66	0.92985
Facility, age 65+, no SPMI	125,341.4	\$218,615,972	\$1,744.16	82,576.5	\$136,560,676	\$1,653.75	0.94816
HCBS, age 65+, with SPMI	12,054.8	\$23,117,288	\$1,917.68	8,368.1	\$18,310,064	\$2,188.09	1.14101
HCBS, age 65+, no SPMI	74,395.8	\$130,931,202	\$1,759.93	49,047.4	\$108,755,367	\$2,217.35	1.25991
Community, age 65+, with SPMI	18,185.6	\$26,968,504	\$1,482.96	13,014.2	\$22,359,833	\$1,718.11	1.15857
Community, age 65+, no SPMI	147,604.7	\$183,649,002	\$1,244.19	99,944.1	\$150,844,334	\$1,509.29	1.21306
Facility, age <65, with SPMI	14,632.6	\$35,771,677	\$2,444.66	10,328.3	\$22,682,433	\$2,196.14	0.89834
Facility, age <65, no SPMI	17,491.8	\$42,086,610	\$2,406.08	12,262.9	\$27,820,994	\$2,268.71	0.94290
HCBS, age <65, with SPMI	18,009.0	\$31,257,710	\$1,735.67	12,788.1	\$22,026,159	\$1,722.39	0.99235
HCBS, age <65, no SPMI	33,747.6	\$69,763,819	\$2,067.23	23,947.0	\$56,842,212	\$2,373.67	1.14824
Community, age <65, with SPMI	81,941.2	\$108,633,716	\$1,325.75	57,580.0	\$79,265,379	\$1,376.61	1.03836
Community, age <65, no SPMI	127,018.8	\$199,283,176	\$1,568.93	90,650.8	\$158,568,047	\$1,749.22	1.11491
Total	715,976.1	\$1,163,876,611	\$1,625.58	491,720.8	\$863,798,248	\$1,756.68	1.08065

Table 2.B
Eligible months, incurred claims, and PMPM for the comparison group, baseline period, and the demonstration period, by category of beneficiary: Cohort 2

	Ва	seline period		De	monstration peri	od	Trend
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	РМРМ	(D/B)
Facility, age 65+, with SPMI	321.4	\$1,613,106	\$5,019.70	783.4	\$1,856,308	\$2,369.69	0.47208
Facility, age 65+, no SPMI	966.9	\$3,254,742	\$3,366.05	2,465.1	\$4,490,097	\$1,821.50	0.54114
HCBS, age 65+, with SPMI	60.0	\$87,034	\$1,450.57	157.7	\$355,458	\$2,253.87	1.55379
HCBS, age 65+, no SPMI	349.0	\$802,098	\$2,298.27	971.3	\$2,509,698	\$2,583.88	1.12427
Community, age 65+, with SPMI	68.0	\$155,183	\$2,282.10	171.1	\$436,819	\$2,553.68	1.11900
Community, age 65+, no SPMI	541.4	\$1,947,104	\$3,596.65	1,309.9	\$3,056,074	\$2,333.09	0.64868
Facility, age <65, with SPMI	107.0	\$593,640	\$5,548.03	266.9	\$724,241	\$2,713.87	0.48916
Facility, age <65, no SPMI	123.4	\$860,883	\$6,975.27	312.0	\$1,344,823	\$4,309.92	0.61789
HCBS, age <65, with SPMI	68.0	\$138,239	\$2,032.92	155.3	\$274,959	\$1,770.86	0.87109
HCBS, age <65, no SPMI	148.7	\$462,091	\$3,107.76	382.3	\$1,873,048	\$4,899.57	1.57656
Community, age <65, with SPMI	221.0	\$359,067	\$1,624.97	470.2	\$908,648	\$1,932.53	1.18927
Community, age <65, no SPMI	484.3	\$1,572,328	\$3,246.38	1,025.4	\$3,006,345	\$2,931.84	0.90311
Total	3,459.1	\$11,845,514	\$3,424.49	8,470.4	\$20,836,518	\$2,459.92	0.71833

Tables 3.A–3.H show the development of the trend rates from the baseline period to the demonstration period for the reweighted comparison group and the intervention group by category of beneficiary. The reweighting was done by category of beneficiary month by month. Thus, the comparison group PMPMs in Tables 3.A–3.H do not match exactly the PMPMs in Table 2 by category, because the PMPMs in Table 2 are for all months combined. For example, the Cohort 1 baseline PMPM for the category "Facility, Age 65+, with SPMI" is \$2,059. But in Table 3.A, it is \$2,054, and in Table 3.B, it is \$2,050. This is because in Tables 3.A–3.H, the weighted average PMPM across all months in the baseline period is based on the eligible months of the particular cohort of the intervention group beneficiaries and not that of the comparison group beneficiaries.

Table 3.G, which shows the results for the entire Cohort 1, shows that the PMPM for the comparison group increased by 13 percent from the baseline period to the demonstration period, whereas that of the intervention group increased by only 7 percent, a difference of 6 percentage points. In general, there was a greater difference in these trend factors (i.e., a higher savings percentage) for those that were over 65 than for those that were under 65, especially in the community category. The savings percentage was also higher for those in facilities than for those in HCBS waiver programs and for those with SPMI than for those without SPMI.

Table 3.H shows the results for Cohort 2. The PMPM for the comparison group decreased by 1 percent whereas the PMPM for the intervention group increased by 21 percent. However, because there were less than 400 member months of experience in Cohort 2, the results are not statistically significant.

Table 4 summarizes the results of Tables 3.A–3.H by cohort. Cohort 1A shows the greatest difference in trends in the direction of savings. Cohorts 1C, 1E, 1F, and 2 all show negative savings. The wide variation in the trends by cohort highlights the variability of health care costs. The aggregate experience of all cohorts combined should be considered more reliable than that of the individual cohorts.

Table 3.A
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1A

	В	aseline period		Demo	onstration peri	od	Trend
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	РМРМ	(D/B)
Reweighted comparison group	49,226.8	\$83,385,004	\$1,693.89	33,295.3	\$64,129,236	\$1,926.07	1.137
Facility, age 65+, with SPMI	1,391.6	\$2,858,697	\$2,054.31	817.1	\$1,566,842	\$1,917.55	0.933
Facility, age 65+, no SPMI	2,890.4	\$5,020,887	\$1,737.08	1,636.7	\$2,711,240	\$1,656.48	0.954
HCBS, age 65+, with SPMI	2,308.3	\$4,425,145	\$1,917.08	1,452.4	\$3,178,382	\$2,188.31	1.141
HCBS, age 65+, no SPMI	10,626.4	\$18,728,082	\$1,762.41	7,143.0	\$15,838,882	\$2,217.40	1.258
Community, age 65+, with SPMI	1,039.0	\$1,537,964	\$1,480.29	635.1	\$1,086,234	\$1,710.26	1.155
Community, age 65+, no SPMI	8,719.8	\$10,863,324	\$1,245.82	5,937.6	\$8,959,861	\$1,508.99	1.211
Facility, age <65, with SPMI	487.0	\$1,191,342	\$2,446.14	287.0	\$633,404	\$2,206.98	0.902
Facility, age <65, no SPMI	601.9	\$1,449,124	\$2,407.57	440.8	\$998,727	\$2,265.66	0.941
HCBS, age <65, with SPMI	3,616.5	\$6,275,056	\$1,735.12	2,524.8	\$4,347,178	\$1,721.78	0.992
HCBS, age <65, no SPMI	8,383.4	\$17,330,582	\$2,067.26	6,072.4	\$14,413,223	\$2,373.55	1.148
Community, age <65, with SPMI	2,730.9	\$3,618,327	\$1,324.95	1,897.1	\$2,609,301	\$1,375.43	1.038
Community, age <65, no SPMI	6,431.6	\$10,086,473	\$1,568.26	4,451.1	\$7,785,962	\$1,749.21	1.115
Intervention group	49,226.8	\$129,283,420	\$2,626.28	33,295.3	\$86,048,080	\$2,584.39	0.984
Facility, age 65+, with SPMI	1,391.6	\$4,716,172	\$3,389.12	817.1	\$1,537,410	\$1,881.53	0.555
Facility, age 65+, no SPMI	2,890.4	\$7,123,350	\$2,464.47	1,636.7	\$3,385,157	\$2,068.22	0.839
HCBS, age 65+, with SPMI	2,308.3	\$6,632,419	\$2,873.32	1,452.4	\$3,968,691	\$2,732.44	0.951
HCBS, age 65+, no SPMI	10,626.4	\$24,813,536	\$2,335.08	7,143.0	\$18,732,150	\$2,622.45	1.123
Community, age 65+, with SPMI	1,039.0	\$2,181,429	\$2,099.62	635.1	\$1,195,919	\$1,882.96	0.897
Community, age 65+, no SPMI	8,719.8	\$18,659,929	\$2,139.94	5,937.6	\$12,858,074	\$2,165.52	1.012
Facility, age <65, with SPMI	487.0	\$2,727,399	\$5,600.07	287.0	\$1,192,877	\$4,156.36	0.742
Facility, age <65, no SPMI	601.9	\$2,755,653	\$4,578.23	440.8	\$1,625,842	\$3,688.30	0.806
HCBS, age <65, with SPMI	3,616.5	\$9,998,555	\$2,764.70	2,524.8	\$6,547,995	\$2,593.46	0.938
HCBS, age <65, no SPMI	8,383.4	\$22,339,391	\$2,664.73	6,072.4	\$16,293,408	\$2,683.18	1.007
Community, age <65, with SPMI	2,730.9	\$6,438,832	\$2,357.75	1,897.1	\$4,647,252	\$2,449.69	1.039
Community, age <65, no SPMI	6,431.6	\$20,896,755	\$3,249.05	4,451.1	\$14,063,305	\$3,159.50	0.972

Table 3.B
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1B

	В	aseline period		Dem	Trend		
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	РМРМ	(D/B)
Reweighted comparison group	84,559.8	\$138,597,263	\$1,639.04	56,456.6	\$104,264,821	\$1,846.81	1.127
Facility, age 65+, with SPMI	2,551.2	\$5,230,295	\$2,050.13	1,549.1	\$2,932,173	\$1,892.79	0.923
Facility, age 65+, no SPMI	5,843.4	\$10,168,701	\$1,740.20	3,346.2	\$5,499,190	\$1,643.42	0.944
HCBS, age 65+, with SPMI	3,653.6	\$7,006,845	\$1,917.77	2,430.9	\$5,364,124	\$2,206.67	1.151
HCBS, age 65+, no SPMI	15,981.5	\$28,112,318	\$1,759.06	10,445.8	\$23,364,249	\$2,236.71	1.272
Community, age 65+, with SPMI	2,066.4	\$3,063,900	\$1,482.70	1,350.9	\$2,337,110	\$1,730.03	1.167
Community, age 65+, no SPMI	16,635.3	\$20,690,953	\$1,243.80	11,219.2	\$16,803,144	\$1,497.71	1.204
Facility, age <65, with SPMI	714.2	\$1,745,875	\$2,444.61	489.5	\$1,070,139	\$2,186.40	0.894
Facility, age <65, no SPMI	499.3	\$1,214,304	\$2,431.90	314.1	\$698,605	\$2,224.26	0.915
HCBS, age <65, with SPMI	6,868.7	\$11,923,563	\$1,735.92	4,769.8	\$8,257,501	\$1,731.21	0.997
HCBS, age <65, no SPMI	9,763.5	\$20,181,952	\$2,067.07	6,755.7	\$16,079,769	\$2,380.18	1.151
Community, age <65, with SPMI	8,565.9	\$11,348,810	\$1,324.88	5,880.4	\$8,047,867	\$1,368.60	1.033
Community, age <65, no SPMI	11,416.6	\$17,909,746	\$1,568.75	7,905.1	\$13,810,950	\$1,747.10	1.114
Intervention group	84,559.8	\$109,479,634	\$1,294.70	56,456.6	\$78,181,405	\$1,384.80	1.070
Facility, age 65+, with SPMI	2,551.2	\$3,812,344	\$1,494.33	1,549.1	\$1,905,255	\$1,229.89	0.823
Facility, age 65+, no SPMI	5,843.4	\$9,509,558	\$1,627.39	3,346.2	\$4,644,003	\$1,387.85	0.853
HCBS, age 65+, with SPMI	3,653.6	\$5,125,190	\$1,402.76	2,430.9	\$3,363,324	\$1,383.59	0.986
HCBS, age 65+, no SPMI	15,981.5	\$19,126,725	\$1,196.81	10,445.8	\$14,545,903	\$1,392.51	1.164
Community, age 65+, with SPMI	2,066.4	\$2,427,187	\$1,174.57	1,350.9	\$1,425,692	\$1,055.36	0.899
Community, age 65+, no SPMI	16,635.3	\$16,114,430	\$968.69	11,219.2	\$13,141,109	\$1,171.30	1.209
Facility, age <65, with SPMI	714.2	\$2,293,776	\$3,211.79	489.5	\$963,294	\$1,968.11	0.613
Facility, age <65, no SPMI	499.3	\$1,959,836	\$3,924.99	314.1	\$874,502	\$2,784.29	0.709
HCBS, age <65, with SPMI	6,868.7	\$9,743,808	\$1,418.57	4,769.8	\$6,460,776	\$1,354.52	0.955
HCBS, age <65, no SPMI	9,763.5	\$14,645,723	\$1,500.04	6,755.7	\$12,202,311	\$1,806.23	1.204
Community, age <65, with SPMI	8,565.9	\$9,275,008	\$1,082.78	5,880.4	\$6,583,668	\$1,119.60	1.034
Community, age <65, no SPMI	11,416.6	\$15,446,048	\$1,352.95	7,905.1	\$12,071,567	\$1,527.07	1.129

Table 3.C
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1C

	В	aseline period		Demo	Demonstration period		
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	РМРМ	(D/B)
Reweighted comparison group	8,202.0	\$12,990,466	\$1,583.82	5,366.2	\$9,743,913	\$1,815.81	1.146
Facility, age 65+, with SPMI	77.0	\$160,172	\$2,080.15	48.5	\$91,884	\$1,894.52	0.911
Facility, age 65+, no SPMI	534.6	\$936,360	\$1,751.61	360.0	\$590,210	\$1,639.27	0.936
HCBS, age 65+, with SPMI	417.4	\$801,102	\$1,919.18	258.0	\$563,123	\$2,182.36	1.137
HCBS, age 65+, no SPMI	1,558.8	\$2,743,068	\$1,759.70	1,005.0	\$2,247,376	\$2,236.11	1.271
Community, age 65+, with SPMI	288.0	\$430,990	\$1,496.60	219.0	\$382,424	\$1,746.23	1.167
Community, age 65+, no SPMI	2,323.6	\$2,902,212	\$1,249.01	1,438.0	\$2,153,171	\$1,497.35	1.199
Facility, age <65, with SPMI	53.0	\$129,786	\$2,448.79	31.0	\$69,185	\$2,231.77	0.911
Facility, age <65, no SPMI	27.0	\$67,276	\$2,491.71	40.5	\$88,718	\$2,187.95	0.878
HCBS, age <65, with SPMI	392.1	\$681,342	\$1,737.64	272.0	\$468,650	\$1,722.98	0.992
HCBS, age <65, no SPMI	720.1	\$1,489,731	\$2,068.78	490.7	\$1,175,341	\$2,395.47	1.158
Community, age <65, with SPMI	799.4	\$1,057,930	\$1,323.44	487.8	\$664,146	\$1,361.48	1.029
Community, age <65, no SPMI	1,011.0	\$1,590,497	\$1,573.19	715.5	\$1,249,684	\$1,746.47	1.110
Intervention group	8,202.0	\$8,176,394	\$996.88	5,366.2	\$6,976,386	\$1,300.07	1.304
Facility, age 65+, with SPMI	77.0	\$172,218	\$2,236.60	48.5	\$48,063	\$990.98	0.443
Facility, age 65+, no SPMI	534.6	\$800,920	\$1,498.25	360.0	\$559,859	\$1,554.97	1.038
HCBS, age 65+, with SPMI	417.4	\$342,467	\$820.44	258.0	\$345,599	\$1,339.36	1.632
HCBS, age 65+, no SPMI	1,558.8	\$1,397,716	\$896.65	1,005.0	\$1,318,079	\$1,311.47	1.463
Community, age 65+, with SPMI	288.0	\$508,426	\$1,765.49	219.0	\$228,023	\$1,041.20	0.590
Community, age 65+, no SPMI	2,323.6	\$1,822,519	\$784.35	1,438.0	\$1,675,307	\$1,165.04	1.485
Facility, age <65, with SPMI	53.0	\$209,804	\$3,958.57	31.0	\$127,725	\$4,120.15	1.041
Facility, age <65, no SPMI	27.0	\$179,692	\$6,655.26	40.5	\$88,710	\$2,187.76	0.329
HCBS, age <65, with SPMI	392.1	\$304,261	\$775.96	272.0	\$223,794	\$822.77	1.060
HCBS, age <65, no SPMI	720.1	\$722,444	\$1,003.25	490.7	\$757,455	\$1,543.78	1.539
Community, age <65, with SPMI	799.4	\$758,589	\$948.97	487.8	\$550,236	\$1,127.97	1.189
Community, age <65, no SPMI	1,011.0	\$957,339	\$946.92	715.5	\$1,053,536	\$1,472.35	1.555

Table 3.D
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1D

	Ва	aseline period		Dem	Demonstration period			
Category of beneficiary	Number of eligible months	Incurred claims	PMPM	Number of eligible months	Incurred claims	PMPM	(D/B)	
Reweighted comparison group	131,167.1	\$218,875,118	\$1,668.67	77,420.5	\$145,509,015	\$1,879.46	1.126	
Facility, age 65+, with SPMI	3,456.6	\$7,096,709	\$2,053.11	1,791.3	\$3,375,611	\$1,884.43	0.918	
Facility, age 65+, no SPMI	9,746.4	\$16,995,212	\$1,743.75	5,086.1	\$8,360,241	\$1,643.75	0.943	
HCBS, age 65+, with SPMI	5,721.2	\$10,973,411	\$1,918.02	3,328.1	\$7,320,735	\$2,199.69	1.147	
HCBS, age 65+, no SPMI	24,812.5	\$43,701,500	\$1,761.27	14,191.3	\$31,924,307	\$2,249.57	1.277	
Community, age 65+, with SPMI	3,052.5	\$4,527,309	\$1,483.12	1,925.9	\$3,415,528	\$1,773.44	1.196	
Community, age 65+, no SPMI	19,811.1	\$24,659,890	\$1,244.75	11,567.9	\$17,436,290	\$1,507.30	1.211	
Facility, age <65, with SPMI	865.9	\$2,117,502	\$2,445.34	500.0	\$1,080,312	\$2,160.51	0.884	
Facility, age <65, no SPMI	1,542.0	\$3,720,054	\$2,412.44	943.8	\$2,025,377	\$2,146.09	0.890	
HCBS, age <65, with SPMI	9,038.5	\$15,691,196	\$1,736.04	5,467.5	\$9,299,476	\$1,700.86	0.980	
HCBS, age <65, no SPMI	19,009.1	\$39,300,805	\$2,067.47	11,582.3	\$27,817,819	\$2,401.76	1.162	
Community, age <65, with SPMI	14,064.2	\$18,643,364	\$1,325.59	8,593.8	\$11,728,761	\$1,364.80	1.030	
Community, age <65, no SPMI	20,047.0	\$31,448,165	\$1,568.72	12,442.5	\$21,724,558	\$1,745.99	1.113	
Intervention group	131,167.1	\$223,195,721	\$1,701.61	77,420.5	\$135,448,650	\$1,749.52	1.028	
Facility, age 65+, with SPMI	3,456.6	\$7,967,274	\$2,304.97	1,791.3	\$2,706,190	\$1,510.73	0.655	
Facility, age 65+, no SPMI	9,746.4	\$19,348,742	\$1,985.23	5,086.1	\$7,070,468	\$1,390.16	0.700	
HCBS, age 65+, with SPMI	5,721.2	\$11,660,899	\$2,038.18	3,328.1	\$6,805,845	\$2,044.97	1.003	
HCBS, age 65+, no SPMI	24,812.5	\$41,660,968	\$1,679.03	14,191.3	\$27,122,822	\$1,911.23	1.138	
Community, age 65+, with SPMI	3,052.5	\$4,493,213	\$1,471.95	1,925.9	\$2,206,906	\$1,145.89	0.778	
Community, age 65+, no SPMI	19,811.1	\$26,896,048	\$1,357.63	11,567.9	\$18,576,466	\$1,605.86	1.183	
Facility, age <65, with SPMI	865.9	\$2,815,228	\$3,251.08	500.0	\$859,422	\$1,718.75	0.529	
Facility, age <65, no SPMI	1,542.0	\$7,324,973	\$4,750.22	943.8	\$3,050,048	\$3,231.83	0.680	
HCBS, age <65, with SPMI	9,038.5	\$15,234,322	\$1,685.50	5,467.5	\$9,266,167	\$1,694.77	1.006	
HCBS, age <65, no SPMI	19,009.1	\$35,097,555	\$1,846.35	11,582.3	\$24,059,731	\$2,077.29	1.125	
Community, age <65, with SPMI	14,064.2	\$18,884,613	\$1,342.74	8,593.8	\$11,328,560	\$1,318.23	0.982	
Community, age <65, no SPMI	20,047.0	\$31,811,886	\$1,586.86	12,442.5	\$22,396,025	\$1,799.95	1.134	

Table 3.E Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1E

	В	aseline period		Demo	onstration perio	od	Trend
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	PMPM	(D/B)
Reweighted comparison group	15,785.6	\$25,404,878	\$1,609.37	9,200.0	\$16,690,271	\$1,814.15	1.127
Facility, age 65+, with SPMI	317.0	\$649,923	\$2,050.23	129.2	\$244,492	\$1,892.66	0.923
Facility, age 65+, no SPMI	1,176.7	\$2,059,400	\$1,750.13	665.8	\$1,091,991	\$1,640.02	0.937
HCBS, age 65+, with SPMI	337.0	\$649,426	\$1,927.08	205.0	\$453,014	\$2,209.71	1.147
HCBS, age 65+, no SPMI	3,052.3	\$5,384,147	\$1,763.97	1,708.0	\$3,837,595	\$2,246.88	1.274
Community, age 65+, with SPMI	363.0	\$540,093	\$1,487.86	240.3	\$423,146	\$1,760.67	1.183
Community, age 65+, no SPMI	3,712.4	\$4,618,483	\$1,244.07	2,119.2	\$3,193,791	\$1,507.04	1.211
Facility, age <65, with SPMI	128.2	\$314,534	\$2,452.53	76.0	\$160,372	\$2,110.16	0.860
Facility, age <65, no SPMI	249.0	\$596,324	\$2,394.88	123.9	\$262,306	\$2,116.47	0.884
HCBS, age <65, with SPMI	806.2	\$1,397,188	\$1,733.11	488.0	\$815,909	\$1,671.87	0.965
HCBS, age <65, no SPMI	1,551.8	\$3,207,788	\$2,067.12	958.9	\$2,309,444	\$2,408.51	1.165
Community, age <65, with SPMI	1,815.1	\$2,404,268	\$1,324.56	1,101.0	\$1,505,369	\$1,367.30	1.032
Community, age <65, no SPMI	2,276.9	\$3,583,303	\$1,573.79	1,384.6	\$2,392,843	\$1,728.12	1.098
Intervention group	15,785.6	\$11,511,821	\$729.26	9,200.0	\$10,185,796	\$1,107.15	1.518
Facility, age 65+, with SPMI	317.0	\$442,810	\$1,396.88	129.2	\$78,007	\$603.87	0.432
Facility, age 65+, no SPMI	1,176.7	\$1,022,059	\$868.57	665.8	\$699,059	\$1,049.89	1.209
HCBS, age 65+, with SPMI	337.0	\$257,020	\$762.67	205.0	\$440,376	\$2,148.07	2.817
HCBS, age 65+, no SPMI	3,052.3	\$2,409,285	\$789.34	1,708.0	\$2,537,038	\$1,485.41	1.882
Community, age 65+, with SPMI	363.0	\$270,360	\$744.79	240.3	\$335,083	\$1,394.25	1.872
Community, age 65+, no SPMI	3,712.4	\$2,155,576	\$580.64	2,119.2	\$2,175,890	\$1,026.73	1.768
Facility, age <65, with SPMI	128.2	\$121,535	\$947.65	76.0	\$44,551	\$586.20	0.619
Facility, age <65, no SPMI	249.0	\$465,775	\$1,870.58	123.9	\$137,612	\$1,110.35	0.594
HCBS, age <65, with SPMI	806.2	\$464,777	\$576.52	488.0	\$496,750	\$1,017.88	1.766
HCBS, age <65, no SPMI	1,551.8	\$878,979	\$566.42	958.9	\$1,067,777	\$1,113.58	1.966
Community, age <65, with SPMI	1,815.1	\$1,543,388	\$850.28	1,101.0	\$1,024,460	\$930.50	1.094
Community, age <65, no SPMI	2,276.9	\$1,480,257	\$650.13	1,384.6	\$1,149,192	\$829.95	1.277

Table 3.F
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1F

	Ва	aseline period		Demo	onstration perio	od	Trend
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	РМРМ	(D/B)
Reweighted comparison group	16,557.8	\$26,515,755	\$1,601.41	8,980.4	\$16,345,546	\$1,820.14	1.137
Facility, age 65+, with SPMI	235.4	\$483,847	\$2,055.26	127.1	\$240,812	\$1,895.19	0.922
Facility, age 65+, no SPMI	813.0	\$1,417,213	\$1,743.26	444.1	\$728,718	\$1,641.01	0.941
HCBS, age 65+, with SPMI	482.2	\$930,838	\$1,930.42	306.6	\$693,161	\$2,260.82	1.171
HCBS, age 65+, no SPMI	2,680.6	\$4,740,009	\$1,768.24	1,351.7	\$3,015,769	\$2,231.14	1.262
Community, age 65+, with SPMI	475.8	\$710,484	\$1,493.19	262.9	\$465,648	\$1,771.20	1.186
Community, age 65+, no SPMI	3,954.2	\$4,942,356	\$1,249.90	2,194.6	\$3,326,416	\$1,515.73	1.213
Facility, age <65, with SPMI	99.2	\$242,315	\$2,442.86	59.0	\$125,796	\$2,132.13	0.873
Facility, age <65, no SPMI	104.0	\$245,973	\$2,365.13	65.0	\$138,101	\$2,124.63	0.898
HCBS, age <65, with SPMI	726.8	\$1,265,350	\$1,741.01	414.3	\$693,787	\$1,674.64	0.962
HCBS, age <65, no SPMI	2,061.5	\$4,261,550	\$2,067.17	1,121.9	\$2,696,326	\$2,403.42	1.163
Community, age <65, with SPMI	1,868.3	\$2,477,970	\$1,326.30	960.7	\$1,311,059	\$1,364.70	1.029
Community, age <65, no SPMI	3,056.7	\$4,797,850	\$1,569.63	1,672.6	\$2,909,954	\$1,739.77	1.108
Intervention group	16,557.8	\$9,992,505	\$603.49	8,980.4	\$10,902,191	\$1,214.00	2.012
Facility, age 65+, with SPMI	235.4	\$285,514	\$1,212.79	127.1	\$245,195	\$1,929.69	1.591
Facility, age 65+, no SPMI	813.0	\$641,846	\$789.51	444.1	\$386,979	\$871.45	1.104
HCBS, age 65+, with SPMI	482.2	\$375,775	\$779.30	306.6	\$552,142	\$1,800.87	2.311
HCBS, age 65+, no SPMI	2,680.6	\$1,822,868	\$680.01	1,351.7	\$1,884,775	\$1,394.40	2.051
Community, age 65+, with SPMI	475.8	\$322,170	\$677.09	262.9	\$336,995	\$1,281.84	1.893
Community, age 65+, no SPMI	3,954.2	\$2,022,950	\$511.59	2,194.6	\$2,241,736	\$1,021.48	1.997
Facility, age <65, with SPMI	99.2	\$54,697	\$551.42	59.0	\$85,515	\$1,449.41	2.629
Facility, age <65, no SPMI	104.0	\$43,712	\$420.31	65.0	\$45,807	\$704.72	1.677
HCBS, age <65, with SPMI	726.8	\$464,739	\$639.44	414.3	\$227,085	\$548.13	0.857
HCBS, age <65, no SPMI	2,061.5	\$833,481	\$404.30	1,121.9	\$1,217,171	\$1,084.95	2.684
Community, age <65, with SPMI	1,868.3	\$1,497,019	\$801.26	960.7	\$1,202,121	\$1,251.30	1.562
Community, age <65, no SPMI	3,056.7	\$1,627,734	\$532.52	1,672.6	\$2,476,671	\$1,480.73	2.781

Table 3.G
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 1 Total

	Ва	seline period		Demo	nstration period	ı	Trend
Category of beneficiary	Number of eligible months	Incurred claims	РМРМ	Number of eligible months	Incurred claims	PMPM	(D/B)
Reweighted comparison group	305,499.0	\$505,768,484	\$1,655.55	190,719.0	\$356,682,802	\$1,870.20	1.130
Facility, age 65+, with SPMI	8,028.7	\$16,479,643	\$2,052.58	4,462.3	\$8,451,814	\$1,894.05	0.923
Facility, age 65+, no SPMI	21,004.4	\$36,597,773	\$1,742.38	11,539.0	\$18,981,590	\$1,645.00	0.944
HCBS, age 65+, with SPMI	12,919.8	\$24,786,768	\$1,918.52	7,981.0	\$17,572,539	\$2,201.79	1.148
HCBS, age 65+, no SPMI	58,712.1	\$103,409,124	\$1,761.29	35,844.8	\$80,228,178	\$2,238.21	1.271
Community, age 65+, with SPMI	7,284.7	\$10,810,741	\$1,484.02	4,634.2	\$8,110,090	\$1,750.05	1.179
Community, age 65+, no SPMI	55,156.4	\$68,677,218	\$1,245.14	34,476.6	\$51,872,672	\$1,504.58	1.208
Facility, age <65, with SPMI	2,347.6	\$5,741,355	\$2,445.65	1,442.5	\$3,139,209	\$2,176.26	0.890
Facility, age <65, no SPMI	3,023.3	\$7,293,056	\$2,412.32	1,928.1	\$4,211,834	\$2,184.41	0.906
HCBS, age <65, with SPMI	21,448.8	\$37,233,696	\$1,735.93	13,936.4	\$23,882,501	\$1,713.68	0.987
HCBS, age <65, no SPMI	41,489.5	\$85,772,408	\$2,067.33	26,981.8	\$64,491,922	\$2,390.20	1.156
Community, age <65, with SPMI	29,843.9	\$39,550,669	\$1,325.25	18,920.7	\$25,866,503	\$1,367.10	1.032
Community, age <65, no SPMI	44,239.8	\$69,416,035	\$1,569.09	28,571.6	\$49,873,951	\$1,745.58	1.112
Intervention group	305,499.0	\$491,639,495	\$1,609.30	190,719.0	\$327,742,507	\$1,718.46	1.068
Facility, age 65+, with SPMI	8,028.7	\$17,396,332	\$2,166.76	4,462.3	\$6,520,119	\$1,461.16	0.674
Facility, age 65+, no SPMI	21,004.4	\$38,446,475	\$1,830.40	11,539.0	\$16,745,526	\$1,451.22	0.793
HCBS, age 65+, with SPMI	12,919.8	\$24,393,771	\$1,888.10	7,981.0	\$15,475,978	\$1,939.09	1.027
HCBS, age 65+, no SPMI	58,712.1	\$91,231,098	\$1,553.87	35,844.8	\$66,140,766	\$1,845.20	1.187
Community, age 65+, with SPMI	7,284.7	\$10,202,785	\$1,400.57	4,634.2	\$5,728,617	\$1,236.16	0.883
Community, age 65+, no SPMI	55,156.4	\$67,671,452	\$1,226.90	34,476.6	\$50,668,582	\$1,469.65	1.198
Facility, age <65, with SPMI	2,347.6	\$8,222,439	\$3,502.52	1,442.5	\$3,273,385	\$2,269.28	0.648
Facility, age <65, no SPMI	3,023.3	\$12,729,641	\$4,210.58	1,928.1	\$5,822,521	\$3,019.78	0.717
HCBS, age <65, with SPMI	21,448.8	\$36,210,462	\$1,688.23	13,936.4	\$23,222,567	\$1,666.32	0.987
HCBS, age <65, no SPMI	41,489.5	\$74,517,573	\$1,796.06	26,981.8	\$55,597,852	\$2,060.57	1.147
Community, age <65, with SPMI	29,843.9	\$38,397,448	\$1,286.61	18,920.7	\$25,336,297	\$1,339.08	1.041
Community, age <65, no SPMI	44,239.8	\$72,220,019	\$1,632.47	28,571.6	\$53,210,297	\$1,862.35	1.141

Table 3.H
Eligible months, incurred claims, and PMPM for the reweighted comparison group and the intervention group, baseline period, and the demonstration period, by category of beneficiary: Cohort 2

	Ва	aseline period		Demo	Trend		
Category of beneficiary	Number of eligible months	Incurred claims	PMPM	Number of eligible months	Incurred claims	PMPM	(D/B)
Reweighted comparison group	396.0	\$1,179,761	\$2,979.19	1,204.2	\$3,555,036	\$2,952.23	0.991
Facility, age 65+, with SPMI	0.0	\$0	\$0.00	0.0	\$0	\$0.00	0.000
Facility, age 65+, no SPMI	12.0	\$34,309	\$2,859.11	43.0	\$77,950	\$1,812.80	0.634
HCBS, age 65+, with SPMI	20.0	\$20,504	\$1,025.18	67.0	\$145,849	\$2,176.85	2.123
HCBS, age 65+, no SPMI	56.0	\$129,876	\$2,319.22	178.7	\$461,551	\$2,582.69	1.114
Community, age 65+, with SPMI	6.0	\$14,666	\$2,444.33	24.0	\$64,044	\$2,668.49	1.092
Community, age 65+, no SPMI	73.0	\$272,036	\$3,726.51	226.8	\$527,127	\$2,324.09	0.624
Facility, age <65, with SPMI	7.0	\$38,140	\$5,448.64	16.9	\$46,825	\$2,770.18	0.508
Facility, age <65, no SPMI	6.0	\$43,130	\$7,188.29	24.0	\$103,085	\$4,295.22	0.598
HCBS, age <65, with SPMI	3.0	\$3,514	\$1,171.33	12.0	\$20,887	\$1,740.59	1.486
HCBS, age <65, no SPMI	71.0	\$222,788	\$3,137.86	222.4	\$1,065,335	\$4,789.76	1.526
Community, age <65, with SPMI	40.0	\$66,064	\$1,651.61	103.7	\$204,288	\$1,970.62	1.193
Community, age <65, no SPMI	102.0	\$334,734	\$3,281.70	285.7	\$838,094	\$2,933.71	0.894
Intervention group	396.0	\$571,178	\$1,442.37	1,204.2	\$2,093,818	\$1,738.78	1.206
Facility, age 65+, with SPMI	0.0	\$0	\$0.00	0.0	\$0	\$0.00	0.000
Facility, age 65+, no SPMI	12.0	\$970	\$80.86	43.0	\$37,050	\$861.62	10.655
HCBS, age 65+, with SPMI	20.0	\$8,409	\$420.45	67.0	\$89,609	\$1,337.45	3.181
HCBS, age 65+, no SPMI	56.0	\$112,692	\$2,012.36	178.7	\$375,567	\$2,101.55	1.044
Community, age 65+, with SPMI	6.0	\$7,991	\$1,331.90	24.0	\$25,405	\$1,058.55	0.795
Community, age 65+, no SPMI	73.0	\$87,300	\$1,195.90	226.8	\$352,129	\$1,552.53	1.298
Facility, age <65, with SPMI	7.0	\$43,324	\$6,189.14	16.9	\$13,590	\$803.97	0.130
Facility, age <65, no SPMI	6.0	\$43,096	\$7,182.61	24.0	\$182,948	\$7,622.83	1.061
HCBS, age <65, with SPMI	3.0	\$812	\$270.64	12.0	\$2,596	\$216.34	0.799
HCBS, age <65, no SPMI	71.0	\$108,949	\$1,534.49	222.4	\$445,127	\$2,001.30	1.304
Community, age <65, with SPMI	40.0	\$9,556	\$238.90	103.7	\$72,460	\$698.97	2.926
Community, age <65, no SPMI	102.0	\$148,079	\$1,451.75	285.7	\$497,336	\$1,740.90	1.199

Table 4
Summary by cohort of per member per month (PMPM), baseline versus demonstration period

		В	aseline period		Demo			
Cohort	Group	Number of eligible months (intervention group)	Medicare incurred claims	РМРМ	Number of eligible months (intervention group)	Medicare incurred claims	РМРМ	Cost trend (demonstration period/baseline period)
1A	С	49,226.8	\$83,385,004	\$1,693.89	33,295.3	\$64,129,236	\$1,926.07	1.137
	I	49,226.8	\$129,283,420	\$2,626.28	33,295.3	\$86,048,080	\$2,584.39	0.984
1B	C	84,559.8	\$138,597,263	\$1,639.04	56,456.6	\$104,264,821	\$1,846.81	1.127
	I	84,559.8	\$109,479,634	\$1,294.70	56,456.6	\$78,181,405	\$1,384.80	1.070
1C	C	8,202.0	\$12,990,466	\$1,583.82	5,366.2	\$9,743,913	\$1,815.81	1.146
	I	8,202.0	\$8,176,394	\$996.88	5,366.2	\$6,976,386	\$1,300.07	1.304
1D	C	131,167.1	\$218,875,118	\$1,668.67	77,420.5	\$145,509,015	\$1,879.46	1.126
	I	131,167.1	\$223,195,721	\$1,701.61	77,420.5	\$135,448,650	\$1,749.52	1.028
1E	C	15,785.6	\$25,404,878	\$1,609.37	9,200.0	\$16,690,271	\$1,814.15	1.127
	I	15,785.6	\$11,511,821	\$729.26	9,200.0	\$10,185,796	\$1,107.15	1.518
1F	C	16,557.8	\$26,515,755	\$1,601.41	8,980.4	\$16,345,546	\$1,820.14	1.137
	I	16,557.8	\$9,992,505	\$603.49	8,980.4	\$10,902,191	\$1,214.00	2.012
1 total	C	305,499.0	\$505,768,484	\$1,655.55	190,719.0	\$356,682,802	\$1,870.20	1.130
	I	305,499.0	\$491,639,495	\$1,609.30	190,719.0	\$327,742,507	\$1,718.46	1.068
2	C	396.0	\$1,179,761	\$2,979.19	1,204.2	\$3,555,036	\$2,952.23	0.991
	I	396.0	\$571,178	\$1,442.37	1,204.2	\$2,093,818	\$1,738.78	1.206

# 5.1 AGA Adjustment

The trend in health care costs is not uniform across the United States but varies by geographic area. The purpose of this adjustment is to control for geographic variation in secular cost trends. CMS measures these variations for each calendar year by county with the calculation of the Average Geographic Adjustment (AGA) factors. The factors were not published for 2011, because 2011 Medicare Advantage rates were set by law. The factors measure the difference in average Medicare costs in each county from the national average. The factors are used to vary payment rates to Medicare Advantage plans by county. Hospice expenditures are excluded in the calculation of the AGA factors. We calculated the average AGA factor across all beneficiaries in the intervention group and the comparison group for the baseline period and the demonstration period separately. To determine the average AGA factor, the nonhospice expenditures for each beneficiary were grouped by calendar year and county of residence, and the weighted average AGA factor was calculated for each cohort and for each period (baseline period vs. demonstration period). Table 5 shows the results of the calculations.

For each cohort, the AGA adjustment factor was determined by comparing the trend from the baseline period to the demonstration period for the intervention group versus that of the comparison group. For Cohort 1, the AGA increased from the baseline period to the demonstration period by 1.64 percent (a factor of 1.01640) for the intervention group but decreased 0.24 percent (a factor of .99755) for the comparison group. If the AGA had increased by the same 1.64 percent in the comparison area as it did in the intervention area, instead of the decrease of 0.24 percent, then the trend of the comparison group would have increased by an additional 1.9 percent (1.01640/.00755 = 1.01889), which is the AGA adjustment factor that we apply to the comparison group trend. For Cohort 2, the corresponding AGA adjustment factor is 4.2 percent.

Table 5
Average AGA factor by group and period

Cohort	Group	Baseline period	Demonstration period	Trend in AGA factor	Adjustment to comparison group trend
1 total	С	0.905433	0.903217	0.99755	1.01889
	I	0.886896	0.901440	1.01640	
2	C	0.903590	0.901754	0.99797	1.04178
	I	0.872584	0.907198	1.03967	

Tables 6.A–6.H show the savings calculations for each cohort, taking into account the AGA adjustment factors (but still excluding the outlier adjustment). Column (a) shows the number of member months during the demonstration period for the intervention group for each category of beneficiary. Column (b) shows the PMPM during the baseline period for the

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<sup>&</sup>lt;sup>3</sup> The nonhospice expenditures of each beneficiary were multiplied by the AGA factor for their county and year and the sum of this product was divided by the total nonhospice expenditures of the cohort.

intervention group beneficiaries. This is the starting PMPM to which the trend factor will be applied to determine the target PMPM. Column (c) is the trend factor obtained by multiplying the PMPM trend from the comparison group by the AGA adjustment factor. Column (d) is the target PMPM, which is the baseline PMPM in column (b) times the trends factor in column (c). Column (e) is the actual PMPM for the intervention group in the demonstration period. Column (f) shows the PMPM savings, which is obtained by subtracting the actual PMPM in column (e) from the target PMPM in column (d). Multiplying the number of eligible months in column (a) by the PMPM savings gives the total dollar savings of column (g). Finally, column (h) shows the corresponding percentage savings, which is the PMPM savings divided by the target PMPM.

Table 6.G displays the savings calculation for Cohort 1 in total. The baseline PMPM was \$1,609.30. The AGA adjusted trend from the comparison group was 1.151, resulting in a target PMPM of \$1,852.96. The PMPM costs of the intervention group were actually \$1,718.46, an increase of 6.78 percent over the \$1,609.30 baseline PMPM. Because the intervention group PMPM costs increased at a slower rate (6.78 percent) than the comparison group costs (15.1 percent), we estimate a PMPM savings of \$134.51, or a savings rate of 7.3 percent. The savings dollar amount was \$25,652,707.

The same calculations for Cohort 2 (as shown in Table 6.H) result in a negative PMPM savings of \$227.56, a negative savings percentage of -15.1 percent, and a negative savings dollar amount of \$274,024.

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	33,295.3	\$2,626.28	1.150	\$3,020.58	\$2,584.39	\$436.19	\$14,523,030	14.4%
Facility, age 65+, with SPMI	817.1	\$3,389.12	0.950	\$3,220.12	\$1,881.53	\$1,338.59	\$1,093,775	41.6%
Facility, age 65+, no SPMI	1,636.7	\$2,464.47	0.971	\$2,391.78	\$2,068.22	\$323.56	\$529,582	13.5%
HCBS, age 65+, with SPMI	1,452.4	\$2,873.32	1.163	\$3,340.73	\$2,732.44	\$608.29	\$883,502	18.2%
HCBS, age 65+, no SPMI	7,143.0	\$2,335.08	1.281	\$2,991.79	\$2,622.45	\$369.35	\$2,638,252	12.3%
Community, age 65+, with SPMI	635.1	\$2,099.62	1.177	\$2,470.61	\$1,882.96	\$587.65	\$373,236	23.8%
Community, age 65+, no SPMI	5,937.6	\$2,139.94	1.234	\$2,639.86	\$2,165.52	\$474.34	\$2,816,467	18.0%
Facility, age <65, with SPMI	287.0	\$5,600.07	0.919	\$5,145.45	\$4,156.36	\$989.09	\$283,871	19.2%
Facility, age <65, no SPMI	440.8	\$4,578.23	0.958	\$4,387.81	\$3,688.30	\$699.51	\$308,352	15.9%
HCBS, age <65, with SPMI	2,524.8	\$2,764.70	1.011	\$2,794.63	\$2,593.46	\$201.17	\$507,910	7.2%
HCBS, age <65, no SPMI	6,072.4	\$2,664.73	1.170	\$3,117.00	\$2,683.18	\$433.82	\$2,634,328	13.9%
Community, age <65, with SPMI	1,897.1	\$2,357.75	1.058	\$2,493.66	\$2,449.69	\$43.97	\$83,414	1.8%
Community, age <65, no SPMI	4,451.1	\$3,249.05	1.136	\$3,692.02	\$3,159.50	\$532.53	\$2,370,342	14.4%

Table 6.B Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1B

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) - (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	56,456.6	\$1,294.70	1.135	\$1,469.86	\$1,384.80	\$85.05	\$4,801,818	5.8%
Facility, age 65+, with SPMI	1,549.1	\$1,494.33	0.940	\$1,404.23	\$1,229.89	\$174.34	\$270,071	12.4%
Facility, age 65+, no SPMI	3,346.2	\$1,627.39	0.961	\$1,563.98	\$1,387.85	\$176.14	\$589,386	11.3%
HCBS, age 65+, with SPMI	2,430.9	\$1,402.76	1.172	\$1,644.00	\$1,383.59	\$260.41	\$633,020	15.8%
HCBS, age 65+, no SPMI	10,445.8	\$1,196.81	1.295	\$1,549.64	\$1,392.51	\$157.13	\$1,641,400	10.1%
Community, age 65+, with SPMI	1,350.9	\$1,174.57	1.188	\$1,395.80	\$1,055.36	\$340.44	\$459,906	24.4%
Community, age 65+, no SPMI	11,219.2	\$968.69	1.226	\$1,187.94	\$1,171.30	\$16.64	\$186,716	1.4%
Facility, age <65, with SPMI	489.5	\$3,211.79	0.911	\$2,925.20	\$1,968.11	\$957.09	\$468,452	32.7%
Facility, age <65, no SPMI	314.1	\$3,924.99	0.931	\$3,656.01	\$2,784.29	\$871.71	\$273,791	23.8%
HCBS, age <65, with SPMI	4,769.8	\$1,418.57	1.016	\$1,441.09	\$1,354.52	\$86.57	\$412,926	6.0%
HCBS, age <65, no SPMI	6,755.7	\$1,500.04	1.173	\$1,759.68	\$1,806.23	-\$46.54	-\$314,425	-2.6%
Community, age <65, with SPMI	5,880.4	\$1,082.78	1.052	\$1,139.56	\$1,119.60	\$19.96	\$117,372	1.8%
Community, age <65, no SPMI	7,905.1	\$1,352.95	1.135	\$1,535.06	\$1,527.07	\$8.00	\$63,205	0.5%

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Table 6.C Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1C

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	5,366.2	\$996.88	1.171	\$1,167.06	\$1,300.07	-\$133.01	-\$713,772	-11.4%
Facility, age 65+, with SPMI	48.5	\$2,236.60	0.927	\$2,073.15	\$990.98	\$1,082.16	\$52,485	52.2%
Facility, age 65+, no SPMI	360.0	\$1,498.25	0.952	\$1,426.78	\$1,554.97	-\$128.19	-\$46,155	-9.0%
HCBS, age 65+, with SPMI	258.0	\$820.44	1.158	\$950.23	\$1,339.36	-\$389.13	-\$100,409	<b>-</b> 41.0%
HCBS, age 65+, no SPMI	1,005.0	\$896.65	1.294	\$1,160.24	\$1,311.47	-\$151.24	-\$152,001	-13.0%
Community, age 65+, with SPMI	219.0	\$1,765.49	1.188	\$2,097.96	\$1,041.20	\$1,056.76	\$231,431	50.4%
Community, age 65+, no SPMI	1,438.0	\$784.35	1.221	\$957.62	\$1,165.04	-\$207.41	-\$298,256	-21.7%
Facility, age <65, with SPMI	31.0	\$3,958.57	0.928	\$3,674.06	\$4,120.15	-\$446.09	-\$13,829	-12.1%
Facility, age <65, no SPMI	40.5	\$6,655.26	0.894	\$5,951.52	\$2,187.76	\$3,763.76	\$152,614	63.2%
HCBS, age <65, with SPMI	272.0	\$775.96	1.010	\$783.74	\$822.77	-\$39.03	-\$10,616	-5.0%
HCBS, age <65, no SPMI	490.7	\$1,003.25	1.180	\$1,183.49	\$1,543.78	-\$360.29	-\$176,775	-30.4%
Community, age <65, with SPMI	487.8	\$948.97	1.048	\$994.62	\$1,127.97	-\$133.35	-\$65,049	-13.4%
Community, age <65, no SPMI	715.5	\$946.92	1.131	\$1,070.96	\$1,472.35	-\$401.39	-\$287,213	-37.5%

Table 6.D Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1D

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	77,420.5	\$1,701.61	1.137	\$1,934.84	\$1,749.52	\$185.32	\$14,347,922	9.6%
Facility, age 65+, with SPMI	1,791.3	\$2,304.97	0.934	\$2,153.09	\$1,510.73	\$642.37	\$1,150,685	29.8%
Facility, age 65+, no SPMI	5,086.1	\$1,985.23	0.959	\$1,904.15	\$1,390.16	\$513.99	\$2,614,176	27.0%
HCBS, age 65+, with SPMI	3,328.1	\$2,038.18	1.168	\$2,380.74	\$2,044.97	\$335.77	\$1,117,470	14.1%
HCBS, age 65+, no SPMI	14,191.3	\$1,679.03	1.301	\$2,183.71	\$1,911.23	\$272.49	\$3,866,967	12.5%
Community, age 65+, with SPMI	1,925.9	\$1,471.95	1.218	\$1,792.53	\$1,145.89	\$646.64	\$1,245,394	36.1%
Community, age 65+, no SPMI	11,567.9	\$1,357.63	1.233	\$1,674.24	\$1,605.86	\$68.38	\$791,033	4.1%
Facility, age <65, with SPMI	500.0	\$3,251.08	0.900	\$2,924.95	\$1,718.75	\$1,206.20	\$603,132	41.2%
Facility, age <65, no SPMI	943.8	\$4,750.22	0.906	\$4,303.42	\$3,231.83	\$1,071.58	\$1,011,310	24.9%
HCBS, age <65, with SPMI	5,467.5	\$1,685.50	0.998	\$1,682.08	\$1,694.77	-\$12.70	-\$69,410	-0.8%
HCBS, age <65, no SPMI	11,582.3	\$1,846.35	1.183	\$2,185.15	\$2,077.29	\$107.86	\$1,249,252	4.9%
Community, age <65, with SPMI	8,593.8	\$1,342.74	1.049	\$1,408.47	\$1,318.23	\$90.24	\$775,518	6.4%
Community, age <65, no SPMI	12,442.5	\$1,586.86	1.134	\$1,799.34	\$1,799.95	-\$0.61	-\$7,605	0.0%

Table 6.E Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1E

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	9,200.0	\$729.26	1.128	\$822.86	\$1,107.15	-\$284.29	-\$2,615,434	-34.5%
Facility, age 65+, with SPMI	129.2	\$1,396.88	0.940	\$1,312.39	\$603.87	\$708.52	\$91,526	54.0%
Facility, age 65+, no SPMI	665.8	\$868.57	0.953	\$828.13	\$1,049.89	-\$221.76	-\$147,656	-26.8%
HCBS, age 65+, with SPMI	205.0	\$762.67	1.168	\$890.69	\$2,148.07	-\$1,257.38	-\$257,776	-141.2%
HCBS, age 65+, no SPMI	1,708.0	\$789.34	1.297	\$1,023.78	\$1,485.41	-\$461.63	-\$788,453	-45.1%
Community, age 65+, with SPMI	240.3	\$744.79	1.205	\$897.60	\$1,394.25	-\$496.65	-\$119,360	-55.3%
Community, age 65+, no SPMI	2,119.2	\$580.64	1.234	\$716.32	\$1,026.73	-\$310.41	-\$657,837	-43.3%
Facility, age <65, with SPMI	76.0	\$947.65	0.876	\$830.25	\$586.20	\$244.05	\$18,548	29.4%
Facility, age <65, no SPMI	123.9	\$1,870.58	0.900	\$1,683.47	\$1,110.35	\$573.12	\$71,030	34.0%
HCBS, age <65, with SPMI	488.0	\$576.52	0.983	\$566.49	\$1,017.88	-\$451.39	-\$220,288	-79.7%
HCBS, age <65, no SPMI	958.9	\$566.42	1.187	\$672.35	\$1,113.58	-\$441.23	-\$423,082	-65.6%
Community, age <65, with SPMI	1,101.0	\$850.28	1.052	\$894.23	\$930.50	-\$36.27	-\$39,927	-4.1%
Community, age <65, no SPMI	1,384.6	\$650.13	1.119	\$727.28	\$829.95	-\$102.67	-\$142,158	-14.1%

Table 6.F Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1F

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	8,980.4	\$603.49	1.146	\$691.66	\$1,214.00	-\$522.35	-\$4,690,856	-75.5%
Facility, age 65+, with SPMI	127.1	\$1,212.79	0.938	\$1,138.09	\$1,929.69	-\$791.60	-\$100,584	-69.6%
Facility, age 65+, no SPMI	444.1	\$789.51	0.958	\$756.14	\$871.45	-\$115.31	-\$51,205	-15.2%
HCBS, age 65+, with SPMI	306.6	\$779.30	1.193	\$929.54	\$1,800.87	-\$871.33	-\$267,147	-93.7%
HCBS, age 65+, no SPMI	1,351.7	\$680.01	1.285	\$873.68	\$1,394.40	-\$520.72	-\$703,848	-59.6%
Community, age 65+, with SPMI	262.9	\$677.09	1.208	\$817.96	\$1,281.84	-\$463.88	-\$121,953	-56.7%
Community, age 65+, no SPMI	2,194.6	\$511.59	1.235	\$631.80	\$1,021.48	-\$389.67	-\$855,176	-61.7%
Facility, age <65, with SPMI	59.0	\$551.42	0.889	\$490.07	\$1,449.41	-\$959.34	-\$56,601	-195.8%
Facility, age <65, no SPMI	65.0	\$420.31	0.915	\$384.50	\$704.72	-\$320.22	-\$20,814	-83.3%
HCBS, age <65, with SPMI	414.3	\$639.44	0.980	\$626.50	\$548.13	\$78.37	\$32,470	12.5%
HCBS, age <65, no SPMI	1,121.9	\$404.30	1.184	\$478.88	\$1,084.95	-\$606.06	-\$679,926	-126.6%
Community, age <65, with SPMI	960.7	\$801.26	1.048	\$839.97	\$1,251.30	-\$411.34	-\$395,168	-49.0%
Community, age <65, no SPMI	1,672.6	\$532.52	1.129	\$601.32	\$1,480.73	-\$879.41	-\$1,470,902	-146.2%

Table 6.G Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 1 total

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) - (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	190,719.0	\$1,609.30	1.151	\$1,852.96	\$1,718.46	\$134.51	\$25,652,707	7.3%
Facility, age 65+, with SPMI	4,462.3	\$2,166.76	0.939	\$2,034.40	\$1,461.16	\$573.24	\$2,557,956	28.2%
Facility, age 65+, no SPMI	11,539.0	\$1,830.40	0.958	\$1,753.51	\$1,451.22	\$302.29	\$3,488,128	17.2%
HCBS, age 65+, with SPMI	7,981.0	\$1,888.10	1.160	\$2,190.77	\$1,939.09	\$251.68	\$2,008,659	11.5%
HCBS, age 65+, no SPMI	35,844.8	\$1,553.87	1.304	\$2,026.60	\$1,845.20	\$181.40	\$6,502,317	9.0%
Community, age 65+, with SPMI	4,634.2	\$1,400.57	1.201	\$1,682.55	\$1,236.16	\$446.39	\$2,068,653	26.5%
Community, age 65+, no SPMI	34,476.6	\$1,226.90	1.245	\$1,527.17	\$1,469.65	\$57.52	\$1,982,947	3.8%
Facility, age <65, with SPMI	1,442.5	\$3,502.52	0.906	\$3,172.98	\$2,269.28	\$903.70	\$1,303,573	28.5%
Facility, age <65, no SPMI	1,928.1	\$4,210.58	0.938	\$3,951.39	\$3,019.78	\$931.62	\$1,796,282	23.6%
HCBS, age <65, with SPMI	13,936.4	\$1,688.23	1.015	\$1,713.18	\$1,666.32	\$46.86	\$652,992	2.7%
HCBS, age <65, no SPMI	26,981.8	\$1,796.06	1.195	\$2,145.42	\$2,060.57	\$84.85	\$2,289,373	4.0%
Community, age <65, with SPMI	18,920.7	\$1,286.61	1.060	\$1,364.24	\$1,339.08	\$25.17	\$476,159	1.8%
Community, age <65, no SPMI	28,571.6	\$1,632.47	1.152	\$1,880.75	\$1,862.35	\$18.40	\$525,669	1.0%

Table 6.H
Savings calculation: Intervention and target PMPM, by category of beneficiary: Cohort 2

Category of beneficiary	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Percent savings
Total	1,204.2	\$1,442.37	1.048	\$1,511.22	\$1,738.78	-\$227.56	-\$274,024	-15.1%
Facility, age 65+, with SPMI	0.0	\$0.00	0.000	\$0.00	\$0.00	\$0.00	\$0	0.0%
Facility, age 65+, no SPMI	43.0	\$80.86	0.659	\$53.30	\$861.62	-\$808.32	-\$34,758	-1,516.7%
HCBS, age 65+, with SPMI	67.0	\$420.45	2.203	\$926.41	\$1,337.45	-\$411.04	-\$27,540	-44.4%
HCBS, age 65+, no SPMI	178.7	\$2,012.36	1.159	\$2,331.53	\$2,101.55	\$229.98	\$41,099	9.9%
Community, age 65+, with SPMI	24.0	\$1,331.90	1.137	\$1,513.92	\$1,058.55	\$455.37	\$10,929	30.1%
Community, age 65+, no SPMI	226.8	\$1,195.90	0.649	\$775.86	\$1,552.53	-\$776.67	-\$176,156	-100.1%
Facility, age <65, with SPMI	16.9	\$6,189.14	0.528	\$3,267.73	\$803.97	\$2,463.77	\$41,646	75.4%
Facility, age <65, no SPMI	24.0	\$7,182.61	0.622	\$4,470.52	\$7,622.83	-\$3,152.32	-\$75,656	-70.5%
HCBS, age <65, with SPMI	12.0	\$270.64	1.548	\$418.97	\$216.34	\$202.63	\$2,432	48.4%
HCBS, age <65, no SPMI	222.4	\$1,534.49	1.588	\$2,436.63	\$2,001.30	\$435.33	\$96,826	17.9%
Community, age <65, with SPMI	103.7	\$238.90	1.243	\$296.86	\$698.97	-\$402.12	-\$41,686	-135.5%
Community, age <65, no SPMI	285.7	\$1,451.75	0.931	\$1,351.79	\$1,740.90	-\$389.11	-\$111,161	-28.8%

Table 7 summarizes the savings calculation by cohort. The total savings was \$25 million for Cohort 1, with the largest contributions to savings coming from Cohorts 1A and 1D. The three small cohorts (1C, 1E, and 1F) produced negative savings. Because these cohorts are so small (less than 10,000 members months each), the results are less significant than the savings produced by the larger cohorts.

## 5.2 Outlier Adjustment

To ensure that a disproportionate number of high-cost beneficiaries were not making an undue impact on either the intervention or the comparison group, we tabulated the costs of each beneficiary separately for Cohorts 1 and 2 and separately for the baseline and demonstration period, but for the intervention and comparison groups combined. The beneficiaries were then ranked by total Medicare costs and the costs for the 99th percentile were determined. Table 8 shows the results of this tabulation. These results are used to make the outlier adjustment as shown in Table 9, which has the same column headings as Table 7. Table 9 shows the outlier adjustment for the Total Cohort 1 and for Cohort 2. For the intervention group PMPM in the baseline period and in the demonstration period, the truncated PMPMs are substituted for the untruncated PMPMs.

The comparison group trend is modified by a factor that is derived from the ratio of the trend for the truncated PMPMs to that of the untruncated PMPMs. For Cohort 1, the trend factor from the baseline period to the demonstration period is 1.08065 (= \$1,756.68 / \$1,625.58) for the untruncated PMPMs, and it is 1.07501 (= \$1,712.04 / \$1,592.58) for the truncated PMPMs. The ratio of these trend factors is the outlier adjustment factor .99478 (= 1.07501 / 1.08065) that is to be applied to the comparison group trend. For Cohort 2, the corresponding outlier adjustment factor for the comparison group trend is 1.00555. Both of these outlier adjustment factors modify the results by less than 1 percent indicating that the occurrence of outliers was not significantly different between the comparison and the intervention groups.

## **5.3** Cohort **3**

Cohort 3 consists of those individuals whose experience will be added to the Demonstration Year 2 savings calculation on January 1, 2015, after becoming eligible for the demonstration between February and December 2014. There is not sufficient data yet to analyze the savings for beneficiaries in this cohort. However, there is a desire to take into account savings that may have occurred during 2014 for these beneficiaries. It was agreed to attribute the PMPM savings determined for Cohort 2 to the months of eligibility in 2014 for Cohort 3. Cohort 3 had 5,077 months of eligibility during 2014 and the PMPM savings determined for Cohort 2 was -\$219.18. This results in negative \$1,112,756 savings being attributed to Cohort 3. This is shown in Table 9.

## 5.4 Summary of Total Savings

Table 9 shows the total savings across all cohorts. The total dollar savings was \$21,604,955 (including the attributed Cohort 3 savings). The total PMPM savings was \$118.37 for Cohorts 1 and 2 combined, which represents a 6.6 percent savings rate.

Table 7
Summary of demonstration savings by cohort

Cohort	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstratio n period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Savings percent = f/d
1A	33,295.3	\$2,626.28	1.150	\$3,020.58	\$2,584.39	\$436.19	\$14,523,030	14.4%
1B	56,456.6	\$1,294.70	1.135	\$1,469.86	\$1,384.80	\$85.05	\$4,801,818	5.8%
1C	5,366.2	\$996.88	1.171	\$1,167.06	\$1,300.07	-\$133.01	-\$713,772	-11.4%
1D	77,420.5	\$1,701.61	1.137	\$1,934.84	\$1,749.52	\$185.32	\$14,347,922	9.6%
1E	9,200.0	\$729.26	1.128	\$822.86	\$1,107.15	-\$284.29	-\$2,615,434	-34.5%
1F	8,980.4	\$603.49	1.146	\$691.66	\$1,214.00	-\$522.35	-\$4,690,856	-75.5%
1 total	190,719.0	\$1,609.30	1.151	\$1,852.96	\$1,718.46	\$134.51	\$25,652,707	7.3%
2	1,204.2	\$1,442.37	1.048	\$1,511.22	\$1,738.78	-\$227.56	-\$274,024	-15.1%
Total 1&2	191,923.2	\$1,608.25	1.151	\$1,850.82	\$1,718.58	\$132.23	\$25,378,683	7.1%

Table 8 Outlier adjustment data

Group	Total number of beneficiaries	Number of beneficiaries in the top 1 percentile	Total PMPM	PMPM after truncating costs to the 99 <sup>th</sup> percentile	Truncated PMPM/ total PMPM
		Cohort 1 – Basel	ine period		
Intervention	13,866	164	\$1,609.30	\$1,565.03	97.25%
Comparison	32,820	303	\$1,625.58	\$1,592.58	97.97%
		Cohort 1 – Demonst	ration period		
Intervention	13,866	134	\$1,718.46	\$1,672.08	97.30%
Comparison	32,820	333	\$1,756.68	\$1,712.04	97.46%
Comparison group trend			1.08065	1.07501	.99478
		Cohort 2 – Basel	ine period		
Intervention	116	0	\$1,442.37	\$1,442.37	100.00%
Comparison	906	11	\$3,424.49	\$3,324.54	97.08%
		Cohort 2 – Demonst	tration period		
Intervention	116	1	\$1,738.78	\$1,738.78	100.00%
Comparison	906	10	\$2,459.92	\$2,401.38	97.62%
Comparison group trend			.71833	.72232	1.00555

NOTE: The 99<sup>th</sup> percentile costs were:

Cohort 1 – Baseline period = \$207,585.17

Cohort 1 – Demonstration period = \$172,047.63

Cohort 2 – Baseline period = \$76,998.41

Cohort 2 – Demonstration period = \$146,075.41

Table 9
Summary of demonstration savings by cohort, including the outlier adjustment and Cohort 3

Cohort	(a) Number of eligible months	(b) Baseline period PMPM from intervention group	(c) AGA adjusted cost trend from comparison group	(d) Target demonstration period PMPM	(e) Actual demonstration period PMPM for intervention group	(f) PMPM savings = (d) – (e)	(g) Total savings = (a) * (f)	(h) Savings percent = f/d
Cohort 1 – total	190,719.0	\$1,609.30	1.15141	\$1,852.96	\$1,718.46	\$134.51	\$25,652,707	7.3%
Outlier adjusted	190,719.0	\$1,565.03	1.14540	\$1,792.58	\$1,672.08	\$120.50	\$22,981,640	6.7%
Cohort 2	1,204.2	\$1,442.37	1.04774	\$1,511.22	\$1,738.78	-\$227.56	-\$274,024	-15.1%
Outlier adjusted	1,204.2	\$1,442.37	1.05355	\$1,519.61	\$1,738.78	-\$219.18	-\$263,929	-14.4%
Cohorts 1 + 2	191,923.2	\$1,608.25	1.15083	\$1,850.82	\$1,718.58	\$132.23	\$25,378,683	7.1%
Outlier adjusted	191,923.2	\$1,564.26	1.14486	\$1,790.87	\$1,672.50	\$118.37	\$22,717,711	6.6%
Cohort 3	5,077.0					-\$219.18	-\$1,112,756	
Cohorts $1+2+3$	197,000.2						\$21,604,955	6.1%

## 5.5 Additional Analysis

Tables 10.A and .B, and Tables 11.A and .B, show additional analysis of the savings by month and by type of service, respectively. These tables include the AGA adjustment but not the outlier adjustment (which cannot be applied by month or by type of service). Tables 10.A and .B show, for each month of the demonstration period, the target PMPM, the actual intervention PMPM, and the ratio of the intervention PMPM to the target PMPM (the I/C ratio). A ratio less than 1.00 shows savings, whereas a ratio greater than 1.00 shows negative savings. It can be seen that the I/C ratio is significantly under 1.00 for Cohort 1 in all months. The I/C ratio for Cohort 2 varies widely, reflecting the small size of the cohort.

Tables 11.A and .B show the I/C ratio by type of service. For Cohort 1 (with the most significant experience), the lowest I/C ratio is 0.43 for hospice care, but the most significant savings in dollar terms (more than \$75 PMPM) is for professional services. Home health agency costs are significant both as a percentage (an I/C ratio of 0.63) and in dollar terms (\$41 PMPM). Inpatient services had an I/C ratio of 0.97, but significant dollar savings (\$24 PMPM). The two types of service that showed negative savings were for outpatient services (an I/C ratio of 1.08) and for skilled nursing facility (SNF) services (an I/C ratio of 1.10).

Table 10.A PMPM costs for intervention and comparison groups, by month: Cohort 1

	Intervent	ion group		PMPM		
Month	Incurred claims	Eligible months	Intervention	Comparison	Target	Ratio (I/T)
Baseline	\$491,639,495	305,499.0	\$1,609	\$1,656	\$1,609	1.00
Jul-13	\$5,574,800	2,187.0	\$2,549	\$1,896	\$3,007	0.85
Aug-13	\$10,358,433	5,909.3	\$1,753	\$1,868	\$2,028	0.86
Sep-13	\$10,627,863	6,181.7	\$1,719	\$1,819	\$1,932	0.89
Oct-13	\$23,240,773	12,001.2	\$1,937	\$1,938	\$2,031	0.95
Nov-13	\$21,538,382	12,480.3	\$1,726	\$1,835	\$1,845	0.94
Dec-13	\$21,304,931	12,998.8	\$1,639	\$1,785	\$1,738	0.94
Jan-14	\$21,980,669	12,720.9	\$1,728	\$1,886	\$1,840	0.94
Feb-14	\$20,942,594	12,520.9	\$1,673	\$1,787	\$1,737	0.96
Mar-14	\$21,377,342	12,191.5	\$1,753	\$1,890	\$1,834	0.96
Apr-14	\$21,355,432	11,962.2	\$1,785	\$1,926	\$1,869	0.96
May-14	\$21,039,459	11,724.3	\$1,795	\$1,949	\$1,889	0.95
Jun-14	\$19,586,169	11,559.4	\$1,694	\$1,848	\$1,790	0.95
Jul-14	\$19,779,111	11,431.0	\$1,730	\$1,930	\$1,868	0.93
Aug-14	\$18,224,399	11,275.6	\$1,616	\$1,878	\$1,815	0.89
Sep-14	\$18,193,693	11,110.8	\$1,637	\$1,825	\$1,773	0.92
Oct-14	\$19,262,658	10,979.0	\$1,755	\$1,994	\$1,929	0.91
Nov-14	\$16,044,977	10,818.6	\$1,483	\$1,736	\$1,678	0.88
Dec-14	\$17,310,823	10,666.6	\$1,623	\$1,879	\$1,810	0.90
Total	\$327,742,507	190,719.0	\$1,718	\$1,870	\$1,853	0.93
demonstration						

Table 10.B PMPM costs for intervention and comparison groups, by month: Cohort 2

	Intervention group			Ratio		
Month	Incurred claims	Eligible months	Intervention	Comparison	Target	(D/T)
Baseline	\$571,178	396.0	\$1,442	\$2,979	\$1,442	1.00
Jan-14	\$304,947	115.6	\$2,638	\$3,189	\$1,650	1.60
Feb-14	\$208,584	113.0	\$1,846	\$3,411	\$1,702	1.08
Mar-14	\$199,172	109.0	\$1,827	\$3,677	\$1,875	0.97
Apr-14	\$145,793	106.5	\$1,369	\$3,051	\$1,599	0.86
May-14	\$183,693	103.7	\$1,772	\$2,725	\$1,370	1.29
Jun-14	\$139,978	99.7	\$1,404	\$2,795	\$1,478	0.95
Jul-14	\$166,557	97.4	\$1,710	\$3,024	\$1,599	1.07
Aug-14	\$127,680	95.0	\$1,344	\$2,945	\$1,515	0.89
Sep-14	\$245,758	94.9	\$2,589	\$2,208	\$1,104	2.35
Oct-14	\$123,943	91.7	\$1,351	\$2,842	\$1,395	0.97
Nov-14	\$128,120	89.7	\$1,429	\$2,760	\$1,336	1.07
Dec-14	\$119,592	88.0	\$1,359	\$2,522	\$1,371	0.99
Total demonstration	\$2,093,818	1,204.2	\$1,739	\$2,952	\$1,511	1.15

Table 11.A PMPM costs based on incurred Medicare claims for Cohort 1

Type of service	Incurred claims Intervention	Member months Intervention	PMPM Intervention	PMPM Comparison	PMPM target	Ratio (D/T)
Baseline	\$491,639,495	305,499.0	\$1,609.30	\$1,655.55	\$1,609.30	1.00
Durable medical equipment	\$14,259,704	190,719.0	\$74.77	\$95.10	\$92.55	0.81
Home health agency	\$13,023,567	190,719.0	\$68.29	\$114.66	\$109.20	0.63
Hospice	\$3,150,713	190,719.0	\$16.52	\$39.69	\$38.64	0.43
Inpatient	\$127,433,812	190,719.0	\$668.18	\$699.32	\$692.31	0.97
Outpatient	\$78,509,857	190,719.0	\$411.65	\$380.39	\$379.65	1.08
Professional	\$61,132,127	190,719.0	\$320.54	\$397.18	\$396.00	0.81
SNF	\$30,232,727	190,719.0	\$158.52	\$143.86	\$144.61	1.10
Total	\$327,742,507	190,719.0	\$1,718.46	\$1,870.20	\$1,852.96	0.93

Table 11.B PMPM costs based on incurred Medicare claims for Cohort 2

Type of service	Incurred claims Intervention	Member months Intervention	PMPM Intervention	PMPM Comparison	PMPM target	Ratio (D/T)
Baseline	\$571,178	396.0	\$1,442.37	\$2,979.19	\$1,442.37	1.00
Durable medical equipment	\$88,107	1,204.2	\$73.17	\$149.42	\$75.75	0.97
Home health agency	\$75,858	1,204.2	\$62.99	\$158.82	\$93.08	0.68
Hospice	\$13,468	1,204.2	\$11.18	\$84.90	\$42.58	0.26
Inpatient	\$732,409	1,204.2	\$608.22	\$1,208.65	\$605.65	1.00
Outpatient	\$699,452	1,204.2	\$580.85	\$577.23	\$292.90	1.98
Professional	\$372,264	1,204.2	\$309.14	\$544.23	\$277.87	1.11
SNF	\$112,260	1,204.2	\$93.22	\$228.97	\$123.39	0.76
Total	\$2,093,818	1,204.2	\$1,738.78	\$2,952.23	\$1,511.22	1.15