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Minnesota Demonstration to Align Administrative Functions for Improvements in Beneficiary Experience: Annual Report

First Annual Report

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MINNESOTA DEMONSTRATION TO ALIGN ADMINISTRATIVE FUNCTIONS FOR IMPROVEMENTS IN BENEFICIARY EXPERIENCE: ANNUAL REPORT

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Executive Summary

The Centers for Medicare & Medicaid Services (CMS) have created the State Demonstrations to Integrate Care for Dual Eligible Individuals (SDIC) and the Medicare-Medicaid Financial Alignment Initiative to test integrated care models for Medicare-Medicaid enrollees. The Minnesota Demonstration to Align Administrative Functions for Improvements in Beneficiary Experience is a statewide initiative intended to further strengthen integration of the existing plans participating in the long-running Minnesota Senior Health Options (MSHO), an integrated Medicare-Medicaid program that began in 1997. The demonstration is to implement administrative changes to better align the Medicare and Medicaid operational components of the program (Minnesota Department of Human Services [DHS], 2012; hereafter, Proposal, 2012). The MSHO plans are Medicare Advantage Dual Eligible Special Needs Plans (D-SNPs) that also contract with the State to serve as Medicaid managed care plans. This demonstration began on September 13, 2013, and is currently scheduled to continue until December 31, 2016 (CMS and the State of Minnesota, 2013; hereafter, Memorandum of Understanding [MOU], 2013). The State has indicated interest in pursuing a 2-year demonstration extension that CMS has offered to all SDIC and Financial Alignment Initiative demonstration States, which would change the demonstration end date to December 31, 2018.

Evaluation overview. CMS contracted with RTI International to monitor the implementation of the SDIC and the Medicare-Medicaid Financial Alignment Initiative, and to evaluate their impact on beneficiary experience, quality, utilization, and cost. This first Annual Report analyzes implementation of the Minnesota demonstration from its initiation on September 12, 2013, through the conclusion of the first demonstration year on December 31, 2014. In order to capture relevant qualitative information obtained at the conclusion of the demonstration year or immediately afterward, this report includes updated qualitative information through June 30, 2015.

As the goals of the Minnesota alternative model demonstration are to implement administrative changes meant to better align Medicare and Medicaid processes, it is unlikely that these changes will change quality, use, or costs. However, those outcomes will be monitored to assess the potential for unintended negative consequences under the demonstration in the care provided to Medicare-Medicaid enrollees. In this report, we present preliminary findings on service utilization and quality of care through December 2014. We focus on comparisons of the demonstration-eligible and comparison groups, as well as targeted analyses related to enrollees, health home service users, user of long-term services and supports (LTSS), users of behavioral health services and special populations.

Data sources. Data sources for this report include two site visits to Minnesota conducted by the evaluation team, from April 22 to 24, 2014, and from July 14 to 16, 2015; interviews with staff of the State, CMS, and MSHO plans; quarterly phone calls with State demonstration staff; the MOU between the State and CMS (MOU, 2013); Minnesota's demonstration proposal (Proposal, 2012); a State presentation to stakeholders (Parker, 2013b); State comments on the Request for Information on Opportunities for Alignment under Medicaid and Medicare (Godfrey, 2011); an updated version of the Minnesota MOU Workplan (DHS, 2014b); Minnesota's Integrated Care System Partnership (ICSP) Summary (DHS, 2014a); revised county-level MSHO enrollment materials and plan information (DHS, November 2015); data

and other materials shared by the State during the site visits; and data submitted by Minnesota to the evaluation team through the State Data Reporting System (SDRS).

Overview of the demonstration. This demonstration (1) authorizes a set of administrative activities designed to better align the Medicare and Medicaid policies and processes involved in the MSHO program; and (2) formalizes certain prior informal agreements between CMS and Minnesota that allowed flexibility for the Medicare Advantage Dual Eligible SNPs participating in MSHO, because of the integrated nature of the program. The demonstration does not fundamentally change benefits packages, choice of plans and providers for beneficiaries, or the way in which the MSHO plans contract with either the State or CMS. Nor does it change the prevailing enrollment process for MSHO (MOU, 2013).

Context for the Minnesota Demonstration

As noted above, the Minnesota demonstration builds upon the State's long-running MSHO program, which began providing care to Medicare-Medicare enrollees aged 65 or older in 1997. MSHO is a voluntary program that provides an alternative care arrangement to Medicare-Medicaid enrollees in the State's mandatory Medicaid managed care program—Minnesota Senior Care Plus (MSC+). Recognizing the stability of the MSHO program, the current demonstration focuses on administrative flexibility under MSHO.

Factors that shaped the Minnesota approach. According to State and MSHO plan officials, the factors that shaped the Minnesota approach to this demonstration included the following:

- Need for a joint role with CMS on D-SNP communications and oversight of MSHO. Although the State had been contracting with D-SNPs to coordinate Medicare and Medicaid benefits for almost a decade, it had no established communication channel with CMS on the implications of D-SNP policy on integrated plans.

- Desire to preserve the integrated operational features of the MSHO program and reduce reliance on informal agreements between the State and CMS on exceptions to Medicare D-SNP policy. To overcome barriers to integration, a range of informal agreements between CMS and Minnesota have evolved that address program operations.

- Support for approaches that would help D-SNPs achieve greater administrative efficiency and integration of Medicare and Medicaid policies and procedures.

- Authorization for MSHO plans to participate in State payment and delivery system reforms.

- Maintenance of a seamless beneficiary care experience by having processes to integrate complex business functions so that they are invisible to beneficiaries.

Minnesota Senior Health Options. MSHO, the existing statewide voluntary Medicare-Medicaid managed care program for beneficiaries aged 65 or older, serves as the platform through which the demonstration carries out its administrative Medicare-Medicaid program

alignment activities. Minnesota requires Medicaid managed care enrollment for most Medicare-Medicaid enrollees; MSHO provides an integrated alternative to Medicaid-only plans. Its enrollment was 35,272 in June 2015, or 72 percent of the full-benefit Medicare-Medicaid enrollees aged 65 or older enrolled in Medicaid managed care (SDRS 2nd Quarter, 2015). Enrollees receive all of their Medicare and Medicaid services from one plan with one membership card and one care coordinator.

Minnesota has included Medicare-Medicaid beneficiaries in its managed care programs since the mid-1980s. It became the first State to receive approval from the Health Care Financing Administration, as CMS was known at the time, to operate a managed care program integrating Medicare and Medicaid. The MSHO program was launched in 1997 under the authority of a 1115(a) demonstration and a Section 222 Medicare waiver. From the beginning, it was notable for a high degree of integration between Medicare and Medicaid. In 2005, the previous demonstration ended and MSHO plans became D-SNPs and Medicaid managed care plans. By 2006, a majority of Minnesota's Medicare-Medicaid beneficiaries were enrolled in MSHO. (Parker, 1997; Tritz, 2006).

In 2008, Minnesota established the Special Needs Basic Care Program, an integrated Medicare-Medicaid program serving people under age 65 with disabilities. Initially, eight D-SNPs participated in the program. By 2015, six of the plans had withdrawn from Medicare Advantage, citing an inability to be financially viable due to Medicare payment rates.

MSHO plans operate under two separate contracts, unlike Medicare-Medicaid Plans in capitated model demonstrations under the Financial Alignment Initiative that use three-way contracts with CMS, the State, and the plan. MSHO plans contract with CMS as D-SNPs and comply with Medicare Advantage and SNP requirements. They also contract with the State as Medicaid plans, complying with Medicaid managed care requirements in the MSHO contract (MOU, 2013). MSHO plans provide all Medicare services, including Part D, and Medicaid services, including behavioral health services and home and community-based services under the Minnesota 1915(c) Elderly Waiver, plus the first 180 days of nursing facility services.

Demonstration Medicare-Medicaid Alignment Activities

Demonstration Management Team. The demonstration established a Demonstration Management Team, consisting primarily of the Minnesota State lead in the CMS, a CMS Regional Office representative, and a representative of the Minnesota DHS. This team was originally called the Contract Management Team in the MOU. CMS has renamed it the Demonstration Management Team because, under the demonstration, responsibility for management of the D-SNP contract remains with CMS as a three-way contract does not exist for the Minnesota demonstration. The contract responsibilities continue to separately lie with the State and the Center for Medicare (rather than the Medicare-Medicaid Coordination Office). (The Demonstration Management Team is responsible for overseeing the demonstration, including addressing issues that would reduce integration of Medicare and Medicaid in MSHO, and helping to coordinate, rather than replace, existing oversight by CMS and the State. One key finding of the demonstration is the success of the Demonstration Management Team. State officials reported that the Demonstration Management Team has proven to be an extremely useful vehicle for addressing program misalignment issues. For example, the Demonstration

Management Team facilitated incorporation of new language into the MSHO SNP Model of Care (MOC) matrix, as described below. The Demonstration Management Team has also given the State an identifiable communication channel with CMS that it had never had during the past 9 years of managing an integrated D-SNP Medicare-Medicaid program.

Network adequacy. The demonstration is testing new standards and processes for the Medicare Advantage network adequacy review for all MSHO plans. The new standards aim to more accurately reflect where the Medicare-Medicaid population resides. Also, for the first time, the State has the opportunity to provide input on local health care delivery system considerations and to participate in reviews of MSHO plans' network submissions. In addition, the demonstration envisioned that CMS and the State would conduct Medicare and Medicaid network adequacy reviews concurrently; however, the State needed to proceed with Medicaid network reviews in spring 2014 because these reviews were tied to the 5-year MSHO plan procurement schedule, and CMS was unable to conduct the Medicare review at that time.

SNP Model of Care. The demonstration provided the State with an opportunity to submit to CMS suggested language for incorporation in the D-SNP MOC matrix for MSHO plans that would reflect MSHO requirements and processes. CMS accepted the State's language. One key finding of the demonstration is the success achieved in tailoring the MOC matrix for MSHO plans to emphasize the existing role of MSHO plans in coordinating Medicaid home and community-based services and in conducting needs assessments and developing care plans that address both Medicaid and Medicare services. The State also had the opportunity to review and provide input on the plan responses to additional requirements and processes. The revised matrix language was used by plans in their 2015 MOC submissions, which were all approved by CMS.

Beneficiary materials. The demonstration allows MSHO plans to adopt simplified beneficiary materials—such as a member handbook and provider directory—that better integrate information about Medicare and Medicaid benefits and processes. MSHO plans are using some of the integrated materials developed for capitated model demonstrations under the Financial Alignment Initiative or are adapting them with CMS and State approval. The State convened its existing MSHO Plan Member Materials Workgroup to adapt the model materials. CMS also participated in the Workgroup. The plans have already been using integrated beneficiary materials for many years, including Summary of Benefits, Evidence of Coverage, provider directories, and notices. However, plan officials reported that incorporating information about Medicaid services prior to the demonstration was difficult at times because these materials had to be developed according to D-SNP standards intended to present information about Medicare services. The material development and review process was conducted through the CMS Health Plan Management System during the second demonstration year.[1] This process provided an opportunity for CMS, the plans, and the State to concurrently review and edit materials, which does not occur in the standard review process for D-SNP materials (interviews with MSHO plan officials, April 2014 and July 2015). A key accomplishment of the demonstration is an improved process for development and review of beneficiary materials.

[1] This process will be covered in greater detail in the Minnesota Second Annual Report.

Provider purchasing agreements. The demonstration allows MSHO plans to integrate Medicare and Medicaid primary care payments to certified Health Care Homes, Minnesota's term for medical homes. The demonstration also authorizes adoption of ICSPs, which are purchasing agreements between MSHO plans and providers that build on the HCH model and provide additional options for making performance payments to providers. As of January 1, 2015, MSHO plans had entered into 54 ICSP provider contracts. Minnesota has contracted for an evaluation of the ICSP initiative and the results will be reported in the second annual report.

Grievances and appeals. The State uses an integrated and simplified model notice of denial and explanation of appeal rights developed by CMS for use by all integrated D-SNPs. Prior to the demonstration Minnesota had developed an integrated denial notice, much of which was reflected in the CMS notice. In the demonstration, the 60-day time frame available to beneficiaries for filing Medicare appeals has formally been extended to 90 days via D-SNP contract amendments to align with the Minnesota State Medicaid time frame, providing more flexibility for enrollees. However, recently published Federal Medicaid managed care regulations establish a 60-day time frame for filing appeals, so Minnesota will move to the 60-day timeframe as required by Medicaid regulations which will then align with Medicare timelines.

Quality measures. MSHO plans continue to report quality measures and data as required by their Medicare and Medicaid contracts and continue to participate in the Medicare Advantage Star Ratings system for quality measurement. The MOU specifies that CMS and the State will work together to develop and test measures that could be incorporated into an integrated Star Ratings model for MSHO plans This joint development has not occurred. CMS and the State are negotiating the terms of a collaboration authorized by the MOU to administer a single Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey to MSHO enrollees that meets State and Federal requirements and reflects Medicare and Medicaid services.[2]

Performance improvement. The demonstration eliminates duplicative reporting required through Medicare Quality Improvement Projects (QIPs) and Medicaid Performance Improvement Projects (PIPs). The State adopted language in its 2014 contracts with MSHO plans that permit plans to use Medicare QIPs to meet Medicaid PIP requirements. This alignment of QIPs and PIPs includes using the same measurement standards, reporting timelines, and templates. After the Minnesota MOU was adopted, CMS eliminated requirements for a separate PIP for plans exclusively serving Medicare-Medicaid enrollees. As part of the demonstration agreement, CMS gives the State input on topics selected for QIPs.

Medicare bid process. Under the demonstration, a new provision helps MSHO plans maintain zero member premiums. In situations where strict adherence to the Medicare Advantage bid margin requirements would result in a premium for enrollees, and where margins have a minimum of zero, an MSHO plan can use an aggregate bid margin that is either (1) no greater than 1.5 percent above the plan's margin for non-Medicare health insurance, or (2) less than or equal to the margin for the Medicaid portion of its MSHO rate (MOU, 2013, p. 18). The

[2] CMS, MSHO plans, and the State were able to resolve their differences and jointly administered a CAHPS survey in 2016. This will be discussed in greater detail in the second Annual Report.

results of the 2015 Medicare bid process, conducted in 2014, did not trigger this provision because through the bid process, MSHO plans were able to achieve zero member premiums.

Existing Integrated MSHO Functions Formalized by the Demonstration

Integrated enrollment systems. Through a series of complex manual and automated functions that are invisible to enrollees, State staff, serving as Third Party Administrators for MSHO plans, access enrollment files for both Medicare and Medicaid and achieve simultaneous beneficiary enrollment in both the Medicare and Medicaid components of the MSHO plan, with identical enrollment effective dates for both sets of benefits. The MOU preserves that process as well as the existing exemption for MSHO plans from the D-SNP requirement that beneficiary enrollment requests be submitted to CMS within 7 days of verification of Medicare eligibility. This exemption allows time for verification of a beneficiary's Medicaid eligibility for MSHO, enabling a beneficiary to be enrolled simultaneously in MSHO for Medicare and Medicaid benefits. The State is also permitted to continue to limit MSHO enrollment to Medicare-Medicaid enrollees who meet the State's eligibility criteria for enrollment in Medicaid managed care, consistent with Medicare Improvements for Patients & Providers Act contracting policy.

Integrated grievance and appeals system. Over the past 17 years of MSHO program implementation, the State and CMS have collaborated to integrate the Medicare and Medicaid appeals process in MSHO. Enrollees can choose to file an appeal with one of three entities, each of which simultaneously reviews appeals potentially related to Medicare or Medicaid. Rather than requiring enrollees to first file a Medicare or Medicaid appeal to the plan, the State has provided enrollees with multiple avenues for filing a first-level appeal: to the plan; to the State Department of Health, which is responsible for health plan licensing and certification; or directly to the State Fair Hearings process.

Integrated claims adjudication. MSHO plans can continue to permit providers to bill them for Medicare and Medicaid services delivered, without differentiating Medicare services from Medicaid services. Using an integrated adjudicated claims process, MSHO plans determine whether the expenditure is allocated to Medicaid or Medicare. Under the demonstration, CMS has committed to drafting clear guidance to auditors specifying that integration of Medicare and Medicaid claims adjudication be allowed.

Demonstration Planning and Implementation Support

A demonstration Implementation Support Award from CMS to Minnesota of $1.6 million for a 2-year period has enabled the State to conduct activities that it would otherwise be unable to perform. Generally, these funds are being used to invest in new information technology systems to support additional analysis of data on the State's Medicare-Medicaid enrollees; continue stakeholder engagement activities; conduct actuarial analyses of MSHO data on utilization, costs, and performance; and perform dedicated outreach to culturally specific communities.

Implementation Accomplishments and Challenges

Accomplishments. The Minnesota alternative model demonstration is implementing administrative changes that are meant to better align Medicare and Medicaid processes within

MSHO, the State's long-running integrated Medicare-Medicaid program. Those changes include three types of Medicare-Medicaid alignment activities: (1) joint CMS-State demonstration management activities related to the MSHO program; (2) discrete activities that CMS and the State have agreed to conduct, usually in partnership; and (3) those based on the self-implementing provisions that formalize previous CMS-State agreements related to various MSHO operational policies. To date, the demonstration has made the most progress with the joint CMS-State demonstration management activities and formalizing previous CMS-State agreements related to MSHO operational policies.

With the establishment of the Demonstration Management Team, the State reported that it now has a reliable communication channel with CMS, which it did not have during the 9 years it has been administering an integrated Medicare D-SNP–Medicaid managed care program. Specifically, the Demonstration Management Team has helped address some concrete issues: the withdrawal of a D-SNP plan from the MSHO program, CMS adoption of the State's proposed language for inclusion in the MSHO SNP MOC elements, and resolution of a compliance issue facing an individual MSHO plan. More generally, State officials reported that they appreciate the information the State receives from CMS the Demonstration Management Team members about changing D-SNP policies and the knowledge that it has a resource to help identify and access specific CMS staff when needed.

The demonstration has also established some administrative processes that could be adopted by other Medicare-Medicaid integration programs. Specifically, these include the new pilot for conducting joint CMS-State Medicare network adequacy reviews, collaborative structures for drafting and reviewing beneficiary materials, and integration of State-specific standards into the Medicare MOC.

Challenges. Although some alignment activities were not intended to begin until later in the demonstration, several others encountered delays. Constraints on CMS availability to work on certain provisions, such as concurrent Medicare and State Medicaid network reviews and consolidation of CAHPS surveys have delayed or precluded their implementation. For some alignment activities, such as developing and testing new quality measures, the State has expressed concern that the CMS measure development efforts do not appear to align measure development for plans that deliver Medicare and Medicaid benefits, such as MSHO plans. Not surprisingly, CMS and the State are finding it difficult to address some misaligned Medicare and Medicaid policies. As one Minnesota State official summarized, "It's all about the details."

Service Utilization and Quality of Care under the Demonstration

As noted above, the administrative changes being introduced under the Minnesota demonstration are meant to better align Medicare and Medicaid processes under the existing MSHO program, but are not expected to change quality, use, or costs as the demonstration does not fundamentally change benefit packages, choice of plans and providers for beneficiaries, or care delivery. Thus, the focus of the quantitative component of the evaluation will be on assessing the potential for unintended negative consequences under the demonstration. The analyses to date focus on service trends and quality of care over time in the Minnesota demonstration-eligible and comparison groups so that CMS, the State, and stakeholders can

understand the beneficiary characteristics of these groups and their care patterns before direct group comparisons are made in future reports.

The populations analyzed include all demonstration-eligible and comparison group beneficiaries, enrollees and nonenrollees within the demonstration-eligible group, and the following special populations: those receiving any LTSS, those with severe and persistent mental illness (SPMI), and eight subgroups based on demographic characteristics (age, gender, and race), geography (urban/rural status) and health (disability, presence of Alzheimer's disease or other dementia, hierarchical condition category (HCC) score, and whether the beneficiary died). Because the decision to enroll in MSHO is voluntary, any differences between enrollees and nonenrollees may reflect differences in the characteristics of the enrollees and nonenrollees (including their health care needs) and/or differences in the care that they receive under MSHO (for enrollees) and MSC+ (for nonenrollees).

Comparison of Demonstration-Eligible and Comparison Group Beneficiaries

- The Minnesota demonstration-eligible and comparison group populations were similar in terms of demographic characteristics, disability status, and physical health (as indicated by the HCC scores); however, the demonstration-eligible group had a higher prevalence of SPMI.

Highlights of Analyses of Service Utilization

- As would be expected given the administrative focus of the Minnesota demonstration, the prevalence of Medicare service utilization remained relatively stable for the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed in the comparison group.

- However, there were some changes in the levels of service use over time, with the patterns of change generally similar for the demonstration-eligible and comparison groups. For example, inpatient admissions, emergency department (ED) visits, and skilled nursing facility stays per 1,000 user months declined during the demonstration period for both the demonstration and comparison groups, while the prevalence and the level of primary care evaluation and management visits increased.

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for LTSS users in the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group. There were, however, some declines over time in the level of service use for both groups, including declines in inpatient admissions and hospice use.

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with SPMI in the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group. One exception, however, was the share of SPMI beneficiaries with a behavioral health visit, which declined over time for both the demonstration-eligible and comparison groups.

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries across subgroups of the demonstration-eligible group based on demographic characteristics (age, gender, race), geography (urban/rural) and health status (disability status, HCC scores, dementia, death) over the baseline and demonstration periods, a pattern that was echoed for the comparison group.

Highlights of Analyses of Quality of Care

- As would be expected given the administrative focus of the Minnesota demonstration, quality of care and care coordination remained relatively stable for the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed in the comparison group.

- However, there were some changes over time for both the demonstration-eligible and comparison groups. For example, the rate of 30-day follow up after hospitalization from mental illness increased for the demonstration-eligible group but not the comparison group, while preventable ED visits per 1,000 eligible months increased for the comparison group but not the demonstration-eligible group.

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for LTSS users among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group.

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with SPMI among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group.

Summary of Preliminary Findings on Service Use and Quality of Care

As would be expected given the administrative focus of the Minnesota demonstration, there is little evidence of any changes in Medicare service utilization or quality of care and care coordination in Minnesota over the baseline and demonstration periods. This holds true for the overall demonstration-eligible population and for important population subgroups, including for LTSS users, beneficiaries with SPMI, and a variety of subgroups based on demography, geography, and health. Further, with few exceptions, any changes over time that are observed for the demonstration-eligible population and its subgroups were echoed in the trends for the comparison group, which suggests the effects of factors beyond those introduced under the Minnesota demonstration.

Although we will continue to monitor these outcomes over the course of the demonstration, we will not be conducting an analysis of the impacts of Minnesota's demonstration on MSHO enrollees given the focus on administrative processes under the demonstration. We will, however, conduct an assessment of the potential for unintended consequences under the demonstration. That assessment will need to wait for data on a longer follow-up period and the econometric analyses to be incorporated into future reports.

Conclusion

By formalizing agreements that have been in place between CMS and the State, the demonstration has already addressed important aspects of Medicare and Medicaid alignment in the MSHO program, such as integrated processes for grievances and appeals, for claims adjudication, and for program enrollment. The Demonstration Management Team has been very successful in facilitating policy collaboration between CMS and the State. In addition, the demonstration's Medicare-Medicaid alignment activities produced changes to the MSHO plan's MOCs; improved processes used by MSHO plans, CMS, and the State in developing integrated beneficiary materials; and implemented Integrated Care Systems Partnerships. Minnesota's first quarterly submission of information about the demonstration to the RTI evaluation team summed up the nature of the Medicare-Medicaid program alignment work:

> *It is challenging to describe the Minnesota demonstration to stakeholders and state leadership because it is so related to behind the scenes technical and operational issues between Medicare and Medicaid that most people do not know or care about, even though these are necessary to maintaining and improving integration of service delivery and operation* (SDRS 1st Quarter, 2014).

1. Introduction

The Centers for Medicare & Medicaid Services (CMS) have created the State Demonstrations to Integrate Care for Dual Eligible Individuals (SDIC) and the Medicare-Medicaid Financial Alignment Initiative to test integrated care models for Medicare-Medicaid enrollees. The Minnesota Demonstration to Align Administrative Functions for Improvements in Beneficiary Experience is a statewide initiative intended to further strengthen integration of the existing plans participating in the long-running Minnesota Senior Health Options (MSHO) program, an integrated Medicare-Medicaid program that began in 1997. The demonstration is to implement administrative changes to better align the Medicare and Medicaid operational components of the program (Minnesota Department of Human Services [DHS], 2012; hereafter, Proposal, 2012). The MSHO plans are Medicare Advantage Dual Eligible Special Needs Plans (D-SNPs) that are also under contract with the State as Medicaid managed care plans. MSHO has been serving Medicare-Medicaid enrollees since 1997. This demonstration began on September 13, 2013, and is currently scheduled to continue until December 31, 2016 (CMS and the State of Minnesota, 2013; hereafter, Memorandum of Understanding [MOU], 2013). The State has indicated interest in pursuing a 2-year demonstration extension that CMS has offered to all SDIC and Financial Alignment Initiative demonstration states, which would change the demonstration end date to December 31, 2018.

This first Annual Report analyzes implementation of the Minnesota demonstration from its initiation on September 12, 2013, through the conclusion of the first demonstration year on December 31, 2014. In order to capture relevant qualitative information obtained at the conclusion of the demonstration year or immediately afterward, this report includes updated qualitative information through June 30, 2015.

As the goals of the Minnesota alternative model demonstration are to implement administrative changes meant to better align Medicare and Medicaid processes, it is unlikely that these changes will change quality, use, or costs. However, those outcomes will be monitored to assess the potential for unintended negative consequences under the demonstration in the care provided to Medicare-Medicaid enrollees. In this report, we present preliminary findings on service utilization and quality of care through December 2014. We focus on comparisons of the demonstration-eligible and comparison groups, as well as targeted analyses related to demonstration enrollees and nonenrollees, health home service users, user of long-term services and supports (LTSS), users of behavioral health services and special populations.

1.1 Evaluation Overview

CMS contracted with RTI International to monitor the implementation of the SDIC and demonstrations under the Financial Alignment Initiative, and to evaluate their impact on beneficiary experience, quality, utilization, and cost. The evaluation includes an aggregate evaluation (Walsh et al., 2013) and State-specific evaluations.

The goals of the evaluation are to monitor demonstration implementation, evaluate the impact of the demonstration on the beneficiary experience, monitor unintended consequences, and monitor and evaluate the demonstration's impact on a range of outcomes for the eligible

population as a whole and for special populations (e.g., people with mental illness and/or substance use disorders, LTSS recipients). To achieve these goals, RTI will collect qualitative and quantitative data from Minnesota each quarter; analyze Medicare and Medicaid enrollment, claims, and encounter data; conduct site visits, focus groups with plans; and key informant interviews with State, CMS and MSHO staff; and incorporate relevant findings from any beneficiary surveys conducted by other entities. In addition to this report, monitoring and evaluation activities will also be included in quarterly monitoring reports provided to CMS and the State, annual reports, and a final evaluation report.

As the goals of the Minnesota alternative model demonstration are to implement administrative changes meant to better align Medicare and Medicaid processes, it is unlikely that these changes will change quality, use, or costs. However, those outcomes will be monitored under the evaluation to assess the potential for unintended negative consequences under the demonstration in the care provided to Medicare-Medicaid enrollees.

1.2 Data Sources

This first annual report on implementation of the Minnesota demonstration was informed by a wide range of information sources. Most valuable for understanding the current status of the demonstration's implementation were two site visits to Minnesota by the evaluation team, from April 22 to 24, 2014, and July 14 to 16, 2015. Interviews conducted with State officials and health plan representatives during the site visits were invaluable in gaining an understanding of the State's objectives, the rationale for the Medicare-Medicaid administrative alignment activities being undertaken, and the early operational experiences. Interviews with CMS staff were conducted prior to the site visit. Unless otherwise indicated, views or information attributed to State officials were drawn from interviews conducted during the April 2014 and July 2015 site visits; similarly, observations attributed to MSHO plan officials were drawn from interviews conducted during these visits. When the source of such information appears ambiguous, it is clarified with a parenthetical citation: (interviews with Minnesota DHS officials, April 2014) or (interviews with MSHO plan officials, April 2014).

This report also draws on the official agreement between CMS and Minnesota: the MOU (2013), which specifies the provisions of the demonstration; the State's summary of the demonstration presented to stakeholders (Parker, 2013b); discussions with CMS staff; the State's proposal to CMS to establish a demonstration under the SDIC (Proposal, 2012); and comments submitted by the State to CMS in response to the CMS Request for Information on Opportunities for Alignment under Medicaid and Medicare (Godfrey, 2011); an updated version of the Minnesota MOU Workplan (DHS, 2014b); Minnesota's Integrated Care System Partnership Summary (DHS, 2014a); revised county-level MSHO enrollment materials and plan information (DHS, 2015); and data and other materials shared by the State during the site visits. Finally, RTI used data submitted by Minnesota to the evaluation team through the State Data Reporting System.

1.3 Demonstration Overview

Minnesota was among 15 States that received a $1 million design contract in 2011 to support the development of a demonstration proposal to integrate care and financing for

Medicare-Medicaid enrollees for submission to CMS. Minnesota initially developed and submitted a proposal to implement a capitated model demonstration. However, unlike many States that are testing new delivery systems for integrating care for Medicare-Medicaid enrollees under the Financial Alignment Initiative, Minnesota had already developed a highly integrated delivery system through its MSHO program. Instead of pursuing a capitated model demonstration, Minnesota decided instead to work with CMS to "use its Minnesota Senior Health Options Program (MSHO) as a platform for a demonstration focusing on Medicare-Medicaid alignments in the current Medicare Advantage and State Medicaid contracting structures" (MOU, 2013, p. 3).

The demonstration MOU includes initiatives designed to integrate CMS and State oversight of the MSHO program; clarify and simplify enrollee information; expand available arrangements for supporting State payment and delivery reforms; and make program administration more efficient for CMS, the State, and plans. The demonstration does not fundamentally change benefits packages, choice of plans and providers for beneficiaries, or the way in which the MSHO plans contract with either the State or CMS. Nor does it change the prevailing enrollment process for MSHO or payment methodologies (MOU, 2013, pp. 1, 5).

Instead, the demonstration (1) authorizes a set of administrative activities designed to better align Medicare and Medicaid policies and processes; and (2) formalizes certain informal agreements between CMS and Minnesota that have allowed flexibility for MSHO D-SNPs because of the program's integrated nature.

Minnesota, with its long history of administering a program that integrates Medicare and Medicaid benefits through D-SNPs and Medicaid managed care organizations, could probably identify valuable lessons for other States. One CMS official noted that Minnesota's rich history has informed some of the decisions CMS made in the design of the Financial Alignment Initiative demonstration and in the development of integrated beneficiary materials. The demonstration's alignment activities in areas such as coordinated network adequacy reviews, beneficiary experience surveys, integrated beneficiary materials, and consolidated quality improvement projects/performance improvement projects all hold promise for replication. In a letter to the CMS Administrator, the State Medicaid Directors Association said, "the Memorandum of Understanding between CMS and the state of Minnesota is a promising new development that we hope more states can build upon" (National Association of Medicaid Directors, 2013).

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2. Context for the Minnesota Demonstration

This section summarizes the Minnesota demonstration goals and factors that shaped the demonstration's approach. It also discusses the Minnesota Senior Health Options (MSHO) program, which is the platform for carrying out the demonstration's administrative alignment activities.

2.1 Demonstration Goals

CMS and Minnesota are pursuing these goals through the demonstration: to clarify and simplify information for beneficiaries and their families related to Medicare and Medicaid coverage, better align oversight of MSHO plans by the State and CMS, improve administrative efficiencies for the MSHO plans and government agencies that serve MSHO enrollees, and enhance integration of services for Medicare-Medicaid enrollees in new provider payment models (Memorandum of Understanding [MOU], 2013, p. 1).

2.2 Factors That Shaped the Minnesota Approach

Minnesota decided not to pursue a capitated model demonstration under the Financial Alignment Initiative after assessing its ability to generate savings. It secured actuarial expertise to analyze the bids its Special Needs Plans (SNPs) submitted to CMS for the 2012 contract year and determined that implementing a new capitated model with three-way contracts and capitated payment rates constructed using the Financial Alignment Initiative methodology would not be financially viable. After administering an integrated managed care program for 17 years, the State concluded that it had already largely achieved its potential for program savings. State officials reported that Minnesota has low Medicare Advantage average payment rates, low rates of health care utilization, a balanced long-term services and supports (LTSS) system, high medical loss ratios, the highest Medicare Advantage penetration rate in the country, and is already using Part C rebates generated through the SNP bidding process to buy down Part D premiums.

Recognizing the stability of the MSHO program, the current demonstration focuses on administrative flexibility under MSHO. The State identified challenges it was facing in administering MSHO, primarily due to administrative misalignments between Medicare and Medicaid. Its detailed response to the CMS Request for Information on Opportunities for Alignment under Medicaid and Medicare (Godfrey, 2011) documents the challenges of managing a program that relies on integrating Medicare Dual Eligible Special Needs Program (D-SNP) and Medicaid managed care policy. According to State and MSHO plan officials, the factors that shaped the Minnesota approach to this demonstration included the following:

- Need for a joint role with CMS in D-SNP communications and oversight. Although the State had been contracting with D-SNPs to coordinate Medicare and Medicaid benefits for the past 9 years, it had no established communication channel with CMS on D-SNP policy. It also did not have a vehicle for learning about and helping to resolve problems that individual D-SNPs might be having with a Medicare policy.

- Desire to preserve and enhance the integrated administrative and operational features of the MSHO program and reduce reliance on informal agreements with CMS on exceptions to Medicare D-SNP policy. As noted earlier, CMS and the State had negotiated informal agreements on program operations to overcome barriers to integration. Minnesota was concerned that these agreements could dissolve at any time, at which point the MSHO program's entire structure could collapse.

- Support for greater integrated D-SNP administrative efficiency and alignment. In the State's comments to CMS on opportunities for alignment (Godfrey, 2011), it noted that the volume of new requirements (e.g., Part C and D reporting, structure and process requirements, quality measurement, Medicare Advantage bid process) for D-SNPs has increased dramatically in the past several years. If the Medicare requirements become too burdensome, State officials noted, D-SNPs could lose their capacity to meet both Medicaid managed care requirements and State expectations for management of LTSS.

- Authorization for D-SNPs to participate in State payment and delivery systems reforms. The State has developed Integrated Care System Partnerships to build new models for value-based purchasing, particularly for primary care.

- Maintenance of a seamless beneficiary care experience by having processes that integrate complex business functions that are invisible to beneficiaries.

2.3 Minnesota Senior Health Options

The MSHO program is the platform through which the demonstration carries out its administrative Medicare-Medicaid alignment activities. Minnesota has included Medicare-Medicaid beneficiaries in its managed care programs since the mid-1980s. The Prepaid Medical Assistance Program (PMAP) began operating under an 1115(a) demonstration in 1985 as a mandatory Medicaid managed care program. From the beginning, Medicare-Medicaid beneficiaries age 65 and older were one of the populations required to enroll. PMAP paid their Medicare cost-sharing and covered some Medicaid services such as prescription drugs, but did not cover Medicaid LTSS. In 1990, Minnesota began working on a managed care model to integrate Medicare and Medicaid with the goal of improving care for Medicare-Medicaid enrollees (Parker, 1997).

Minnesota became the first State to receive approval from the Health Care Financing Administration, as CMS was known at the time, to operate a managed care program integrating Medicare and Medicaid under a Medicaid 1115(a) demonstration and a Medicare Section 222 waiver. MSHO was implemented in February 1997 as a voluntary program for Medicare-Medicaid beneficiaries aged 65 or older who would otherwise be required to enroll in a Medicaid-only managed care plan for their Medicaid benefits. The demonstration enabled MSHO to integrate Medicare and Medicaid services at the plan level, to operate a single enrollment process for Medicare and Medicaid, use combined Medicare and Medicaid rate structures, and integrate grievance procedures, quality assurance methods and oversight processes (Parker, 1997).

During the next decade, MSHO expanded from the Minneapolis-St. Paul metropolitan area, adding plans and enrollees. It expanded statewide in 2005. In 2006, the 1115/222 demonstration ended and all nine plans participating in MSHO became D-SNPs, also operating as Medicaid managed care plans. The Medicare Modernization Act of 2003 allowed a one-time passive enrollment of Medicare-Medicaid beneficiaries who were already enrolled in Medicaid managed care into D-SNPs as part of implementation of the Medicare Part D drug benefit. This authority increased MSHO enrollment from 9,800 at the end of 2005 to 33,400 in January 2006 (Tritz, 2006). MSHO enrollment grew to 36,000 by 2008 (Robert Wood Johnson Foundation, 2009). Since that time MSHO enrollment has been relatively stable.

In 2008, Minnesota established the Special Needs Basic Care Program, an integrated Medicare-Medicaid program serving people under age 65 with disabilities. Initially, seven D-SNPs participated in the program. By 2015, five of the plans had withdrawn from Medicare Advantage, citing an inability to be financially viable due to Medicare payment rates.

Today, MSHO plans are also designated by CMS as Fully Integrated Dual Eligible Special Needs Plans. They are among 37 SNPs that in 2015 met the criteria for designation. These plans have a high degree of Medicare and Medicaid integration, are under risk-based financing, contract with the State for management of LTSS, and coordinate delivery of Medicare and Medicaid acute and primary care (Verdier et al., 2015).

MSHO continues to operate statewide as a voluntary Medicare-Medicaid managed care program for beneficiaries aged 65 or older. Minnesota requires Medicaid managed care enrollment for most Medicare-Medicaid enrollees, so MSHO provides an integrated alternative to Medicaid-only plans. Total MSHO enrollment, shown in ***Table 1***, in June 2015 was 35,272 or 72 percent of the full-benefit Medicare-Medicaid enrollees aged 65 or older enrolled in Medicaid managed care. MSHO enrollees receive all of their Medicare and Medicaid services from one plan with one membership card and one care coordinator.

Table 1
Minnesota Senior Health Options (MSHO) enrollment, September 13, 2013–June 31, 2015

Enrollment status	1st quarter	2nd quarter	3rd quarter	4th quarter	5th quarter	6th quarter	7th quarter
Total enrolled in the demonstration	36,012	35,748	35,758	35,756	35,642	35,292	35,272
Disenrolled during the quarter							
Voluntary disenrollment[1]	33	21	18	14	28	14	11
Involuntary disenrollment[2]	2,707	1,977	1,691	1,592	1,827	1,809	1,703
Newly enrolled during the quarter	1,753	1,635	1,795	1,639	1,790	1,921	1,888

[1] Beneficiaries who voluntarily disenrolled from MSHO during the quarter.

[2] Beneficiaries whose enrollment in MSHO ended involuntarily (e.g., died, moved out of area, lost Medicaid eligibility, were incarcerated) during the quarter.

NOTE: MSHO is the platform through which the demonstration's administrative alignment activities are conducted. These enrollment data are provided for context to illustrate the size of program enrollment.

SOURCE: State-reported data to the State Data Reporting System.

MSHO plans operate under two separate contracts: (1) with CMS as D-SNPs, complying with Medicare Advantage and D-SNP requirements, and (2) with the State as Medicaid plans, complying with Medicaid managed care requirements in the MSHO contract (MOU, 2013). Each managed care organization that operates an MSHO plan also offers a Medicaid-only product under Minnesota Senior Care Plus (MSC+), the mandatory Medicaid managed care program that serves both Medicare-Medicaid and Medicaid-only enrollees. In contrast, Medicare-Medicaid Plans participating in capitated model demonstrations under the Financial Alignment Initiative enter into a single three-way contract between CMS, the State, and the plan.

When the demonstration began, eight plans participated in MSHO, but in 2014, one small plan, Metropolitan Health Plan (MHP), declined to offer MSHO coverage for the 2015 plan year. MHP enrollees were offered the option of either choosing another MSHO plan or being enrolled into MSC+, the State's non-integrated Medicaid managed care program.

As of 2015, enrollment in MSHO was spread among seven nonprofit plans. More than three-quarters of MSHO enrollees (80 percent) are in the three largest plans, which each have more than 7,000 enrollees, according to State managed care enrollment reports (Minnesota Department of Human Services [DHS], 2015). MSHO plans provide all Medicare services, including Part D; and Medicaid services, including behavioral health services and home and community-based services (HCBS) under the Minnesota 1915(c) Elderly Waiver, plus the first 180 days of nursing facility services.

MSHO enrollees rely heavily on LTSS, with about a quarter (24.2 percent) using institutional services, and 45.1 percent using HCBS under the Elderly Waiver. An additional 2.5 percent of the community population aged into MSHO and continue to use other fee-for-service HCBS waivers that are not part of the MSHO capitation. The other 28.1 percent of MSHO enrollees live in the community and do not receive HCBS waiver services, but State officials said that many of them rely heavily on Medicaid State Plan Personal Care Attendant services (DHS, 2015).

3. Demonstration Alignment Activities

The Minnesota demonstration authorizes a set of activities designed to achieve better alignment of Medicare and Medicaid policies and operating procedures. For each Medicare-Medicaid alignment activity included in the demonstration, this section summarizes its description in the Memorandum of Understanding (MOU), provides background information on problems resulting from Medicare-Medicaid misalignment, and reports on its implementation status.

This first Annual Report analyzes implementation of the Minnesota demonstration from its initiation on September 12, 2013, through the conclusion of the first demonstration year on December 31, 2014. In order to capture relevant qualitative information obtained at the conclusion of the demonstration year or immediately afterward, this report includes updated qualitative information through June 30, 2015.

3.1 Joint Management of the Demonstration

The Medicare-Medicaid administrative alignment demonstration established the CMS-State joint Demonstration Management Team, consisting of CMS and Minnesota Department of Human Services (DHS) staff. The Demonstration Management Team addresses issues that would promote integration of Medicare and Medicaid in Minnesota Senior Health Options (MSHO), and helps to coordinate, rather than replace, existing oversight by CMS and the State (MOU, 2013, pp. 9, 24–25).

Background. State officials said that even though they have been contracting with Dual Eligible Special Needs Plans (D-SNPs) for 9 years to manage the MSHO program, before this demonstration they had no direct, routine communication with CMS on issues involving D-SNP operational policies and their interface with Medicaid policy. State officials cited multiple examples of having to use informal channels to identify CMS officials to communicate with on problems ranging from getting integrated member materials approved to failed MSHO plan network reviews. Before the demonstration, the State relied on plans as its primary source of information about new D-SNP policies and procedures and about problems any specific MSHO plan was having in complying with D-SNP rules, which created some confusion and challenges with implementing coordinated policies.

State officials offered an example of how the previous lack of communication between the State and CMS on D-SNP policy had the potential to cause major program disruption. In 2012, CMS disapproved seven of eight Medicare Improvements for Patients and Providers Act contracts between the State and MSHO plans without prior consultation with the State, even though the State collaborates with MSHO plans in submitting the contracts to CMS. The State learned of the decision from MSHO plans, not CMS. The contracts were reinstated once the State was able to clarify a particular provision.

Status. Currently, the Demonstration Management Team consists of the State lead at CMS, a CMS Medicare Regional Office representative, and a State official, who meet every other week by phone. The meetings were initially held weekly, but the team agreed that meeting

biweekly would be more efficient. The CMS State lead arranges for other CMS staff to attend the meetings as needed.

The State acknowledged that it took some time for CMS and the State to determine the scope of work for the Demonstration Management Team given that the demonstration's goals involve administrative alignment, not implementation of a new financing model. The State and CMS decided that the Demonstration Management Team should focus on implementing the MOU and facilitating direct and responsive contact between the State and CMS to resolve any questions, issues, or barriers.

State officials noted that establishing the Demonstration Management Team is the component of the administrative alignment demonstration that has had the most significant effect on the State's ability to align Medicare and Medicaid policies. The Demonstration Management Team's impact was immediate, according to State officials, who cited the opportunity to submit additions to the D-SNP Model of Care (MOC) matrix, described in ***Section 3.3***, as an early accomplishment. The officials also said that through the Demonstration Management Team, they learned quickly about problems with an MSHO plan's MOC submission, and the State was able to communicate directly with the Regional Office Demonstration Management Team member, who resolved the issue.

State and plan officials said a formal communications channel between CMS and State officials has enabled the State to connect with the right people at CMS, get questions answered, and resolve issues faced by MSHO plans quickly and effectively. One example of this occurred when CMS was able to quickly intervene to resolve an issue with an MSHO plan's Medicare Part C data report. The CMS-contracted reviewer reported that the plan's data were invalid because the plan incorrectly reported a violation of failing to respond to a grievance within the State's more stringent 10-day time frame, instead of Medicare's longer 30-day time frame. CMS affirmed that the plan's report was valid, averting an adverse finding. State officials said that the plan appreciated the value of having a timely means of engaging CMS through the Demonstration Management Team.

State officials noted another concrete way in which the Demonstration Management Team was able to facilitate CMS-State collaboration on Medicare-Medicaid MSHO policy. In 2014, after Metropolitan Health Plan (MHP) announced that it would terminate its participation in the MSHO program effective January 1, 2015, the Demonstration Management Team and the plans developed materials for MHP enrollees. The materials laid out beneficiary options for obtaining Medicare and Medicaid coverage once MHP ceased operations, and their rights under both programs. The State suggested that the beneficiary closeout materials might provide a model for CMS and States to use in similar circumstances for integrated programs for Medicare-Medicaid enrollees.

The State commented that having a CMS-designated liaison and Demonstration Management Team m member who understands its Medicare-Medicaid program and who facilitates and elevates contact with the right officials at CMS has been a real advantage established by the demonstration. The CMS Demonstration Management Team members often invite key officials to join a briefing call in order to "run the traps" internally to ensure that the State gets a timely CMS decision.

More generally, the State also views the Demonstration Management Team as a vehicle for addressing potential areas of misalignment not addressed by the MOU that may result from new SNP policies adopted during the course of the demonstration. Given their positive experiences to date, State officials suggested that States contracting with SNPs to manage integrated delivery systems would benefit from a Demonstration Management Team to improve communications and resolve areas of misalignment on an ongoing basis, regardless of their participation in a demonstration under the Financial Alignment Initiative.

3.2 Network Adequacy

The MOU states that under the demonstration, no fundamental changes will be made in the State or Medicare Advantage methodology for network adequacy standards. Instead, the MOU proposed that CMS or its contractor work with the State to conduct a new joint network review process for all MSHO plans. The review intends to "test new standards that apply to the existing Medicare Advantage methodology to the Medicare-Medicaid population in order to more accurately reflect where the Medicare-Medicaid population resides." The State will have an opportunity to provide input on how local health care delivery system considerations should factor into provider network adequacy determinations, and to participate in review of MSHO plans' network submissions (MOU, 2013, pp. 6, 20–21).

Background. Both State and MSHO plan officials expressed concern about the existing Medicare Advantage provider network review process outside of the demonstration, citing the application of Medicare Advantage provider, time, and distance standards for rural areas; the geo-mapping used in reviews, which has failed to account for lakes, forests, and other geographic features that enter into the automated access measurement; out-of-date listings in the Medicare provider database that lead reviewers to insist on inclusion of certain providers when they are no longer practicing in the area; and the lack of certain types of specialists in some areas. Plans also cited local patterns of care as another factor that is not considered in some network reviews; in certain rural areas, residents choose to access care outside the plans' service areas, even across the border in another State. Finally, State and plan officials said that the exception request process is burdensome for plans because of extensive documentation required to respond to each deficiency identified in the review.

State and MSHO plan officials said that the existing Medicare Advantage network review process discourages plans from expanding their service areas, particularly to add rural counties, and State officials expressed concern about potentially losing an MSHO plan as a result of a technicality in the review process. Although Medicare Advantage plans can challenge a deficiency notice by submitting exception requests, there is a risk that a plan's entire service area could fail if its exception requests are not accepted. One of the largest MSHO plans failed a review because of outdated and erroneous entries in the Medicare provider database, forcing it to appeal to the CMS Administrator. State officials noted that because they contract with MSHO plans to manage Medicaid services, the loss of a D-SNP would disrupt both the delivery of Medicare-covered services and the integration of Medicaid long-term services and supports (LTSS).

Before the demonstration began, the State had no formal or informal role in Medicare network adequacy reviews of MSHO plans, even though it was contracting with the plans for

management of integrated Medicaid and Medicare benefits. MSHO plan officials indicated that establishing an explicit role for the State in reviewing their network submissions and providing input to CMS on local delivery systems considerations is, in their view, one of the demonstration's most important provisions.

In accordance with Medicaid managed care rules, the State is also required to conduct a review of the adequacy of MSHO's Medicaid provider networks. The MOU calls for CMS and the State to conduct concurrent network reviews under the demonstration; however, CMS was unable to conduct the Medicare review in spring 2014 when the State's 5-year procurement cycle required the State to proceed with its Medicaid network review (interviews with Minnesota DHS officials, April 2014).

Status. Using the Medicare Advantage methodology, CMS developed standards unique to Medicare-Medicaid enrollees and sought input from the State on criteria for defining when a plan does not meet network adequacy standards (exceptions) and how a plan needs to respond. The CMS-developed network adequacy standards that are being tested have revised the Medicare Advantage criteria to apply standards based on the number of Medicare-Medicaid enrollees in an area rather than the number of Medicare beneficiaries. Plans are hoping to be able to submit a single statewide exception per provider type if needed, instead of having to submit separate exceptions for each provider type in each county. Plan representatives reported that CMS indicated that reducing exceptions would lessen administrative burden for its review, but there has been no final decision regarding revision of the standards at the time of the site visit.

CMS and the State have initiated their work to implement CMS-State collaborative Medicare network adequacy reviews for MSHO plans beginning in 2015. Under the new process, plans will submit data to CMS for the first review. Plans are able to see the initial results, which are also shared with the State. These results identify the provider and or facility types passing or failing to meet the MSHO Medicare network standards. Then plans will be able to submit their exception requests including rationales for network adequacy. After the plans' second submission, CMS and the State will review the plans' responses together and make a final determination. Plans began testing their data submissions with two submissions in spring and summer 2015. Plans made their first full data submission in September 2015.

The State believes that this careful review will result in a more efficient process with fewer exceptions needed. Plans reported that trial submissions of data worked well. One plan also believed that CMS's new tool for network adequacy review is more robust than historic instruments, which should allow for a more nuanced review.

3.3 Special Needs Plan Model of Care

Each Medicare Advantage D-SNP is required to have a MOC describing the D-SNP's population, approach to care coordination, network, and quality and performance measurement system. Under this administrative alignment demonstration, CMS provides the State with an opportunity to tailor the MOC elements to reflect MSHO requirements (MOU, 2013, p. 22).

Background. The standard elements of the SNP MOC require plans to describe their approach to managing Medicare services. The elements do not include any functions that

integrate Medicaid services, and, for example, lack any reference to coordination of Medicaid-managed LTSS. MSHO plans have been incorporating their roles in conducting enrollee needs assessments for LTSS, coordinating LTSS, and developing integrated care plans into their MOC submissions. State officials said that all MSHO plans received good reviews and achieved the maximum 3-year approvals for their MOC submissions before the demonstration. Nevertheless, State officials noted that they wanted the MOCs of the State's MSHO plans to legitimize integrated operations, particularly integrated assessments and coordination of LTSS.

This objective was intensified by CMS audits of MSHO plans' MOCs in 2012 and 2013. According to State and plan officials, the audit was not based on the plans' actual MOCs but rather used a standard D-SNP protocol that did not reflect the MSHO plans' integrated functions. The auditors raised issues about the appropriateness of some of the MSHO plans' integrated assessments and care coordination practices, specifically, the less-medical aspects related to LTSS. State and plan officials hope that by incorporating LTSS-related elements into the MSHO MOC, similar problems can be avoided in the future.

Status. After the demonstration MOU was approved, State officials worked though the Demonstration Management Team and quickly submitted language to CMS related to integrated functions for managing LTSS for inclusion in the existing MOC elements. CMS agreed to the State's language. MSHO plans used the revised MOC framework to prepare their 2015 MOC submissions. The State reviewed MSHO plans' MOC submissions, approved their elements, and submitted comments to CMS on the new items. State officials met with the plans to discuss their models of care, identify potential disconnects between Medicare and Medicaid requirements, and discuss any best practices in use by MSHO plans to inform future comments to CMS, if needed. At the time of the second site visit, the plans' MOCs had not yet been audited, so plans could not report on the impact of the amended MOCs.

3.4 Beneficiary Materials

The administrative alignment demonstration allows MSHO plans to adopt more simplified member materials that better integrate information about Medicare and Medicaid benefits and processes. MSHO plans are required to use integrated materials developed for the capitated model demonstrations under the Financial Alignment Initiative or adapt them with CMS and State approval. The State convenes its MSHO Plan Member Materials Workgroup to adapt the model materials. Whether they use model materials or adapted versions, MSHO plans are submitting their materials through the CMS Health Plan Management System (HPMS) Marketing Module, for review by the CMS Regional Office. CMS provided the State with access to the HPMS for a concurrent review of MSHO plan materials by CMS and the State (MOU, 2013, pp. 22–24).

Background. Minnesota has long used a collaborative process using an MSHO Plan Member Materials Workgroup composed of State and plan staff to develop and adapt integrated beneficiary materials. This process became more formal after the State's prior demonstration ended and MSHO plans became D-SNPs. The plans wrote a formal charter for the Workgroup to demonstrate to CMS that they were meeting the D-SNP requirement for working with the State on developing member materials. These materials included Statement of Benefits, Evidence of Coverage, provider directories, and notices. However, because these materials had to be

developed according to D-SNP standards that were primarily intended to present information about Medicare services, incorporating information about Medicaid services was at times difficult.

For example, there were areas where the recommended materials did not accurately represent State Medicaid policy and differed in small but important ways from Medicare rules. For example, Medicare D-SNP policies on beneficiary copayments and balance billing are slightly different from State Medicaid rules on the same topics.

State and plan officials reported that before the demonstration, the MSHO Plan Member Materials Workgroup made incremental progress each year in developing materials that were more integrated and written more clearly. The collaboratively developed beneficiary materials were submitted by all MSHO plans to their distinct CMS Regional Office reviewers, who each made revisions to the materials submitted by individual D-SNP plans. Thus, the statewide consistency reflected in the submitted documents was sometimes lost in the Regional Office review process.

State officials said that their collaborative process, undertaken annually during the decade before the demonstration, resulted in the development of materials that reflected an integrated set of Medicare and Medicaid benefits to the extent possible under Medicare requirements. The MSHO Plan Member Materials Workgroup also developed a set of integrated beneficiary materials it intended to use if the State implemented a capitated model demonstration under the Financial Alignment Initiative. The State did not pursue a capitated model demonstration and therefore was unable to use the new integrated materials it had developed. However, with the adoption of the MOU for the Minnesota demonstration, the State is now able to use those materials, which a CMS official noted had been substantially incorporated into the prototype beneficiary materials that demonstrations are using under the Financial Alignment Initiative.

Status. State officials said their primary priority in working with CMS and plans to further integrate beneficiary materials is to ensure that official materials accurately represent MSHO policy and present a clear description to beneficiaries. State officials believe that partnering with CMS in developing the MOU for this demonstration facilitated CMS approval of revised, MSHO-specific materials in 2013, including an integrated summary of benefits and a simplified drug list summarizing Part D and Medicaid drug benefits available through MSHO plans. Those materials were used in 2014.

In 2014, the MSHO Plan Member Materials Workgroup met biweekly to develop materials for use in 2015. These included an annual notice of change summarizing major changes in plans' benefits compared with the previous year; a combined provider and pharmacy directory listing participating Medicare and Medicaid providers; and a member handbook describing the integrated benefits, to replace the Evidence of Coverage. In addition to working with the capitated model Financial Alignment Initiative materials, the Workgroup reviewed materials adapted by other States' demonstrations to identify any revisions Minnesota might want to adopt (interviews with Minnesota DHS officials, April 2014).

In 2015, State officials reported that CMS was quick to update Minnesota model materials with new CMS information and share the materials with the State as a starting point for

development of joint materials. The State and CMS worked together to craft model materials that fit their respective expectations, then shared the materials with the MSHO Plan Member Materials Workgroup to get plan input. Rather than having to convene through conference calls as they had in 2014, the State, CMS, and plans were able to use the CMS HPMS to concurrently review beneficiary materials on a web-based platform. This process enabled real-time editing of documents by all parties, making the revision process more efficient.

According to plan officials, the concurrent involvement of CMS in this process rather than waiting until the State/plan workgroup has completed its submission of materials to CMS is an improvement that resolves differences among the participants and facilitates a streamlined review of draft model documents. Plan officials also said they thought the process helped provide a consistent message about the MSHO program statewide to beneficiaries, their caregivers or support systems, and the county workers who support beneficiaries in MSHO enrollment.

From this common base of beneficiary MSHO materials, plans add plan-specific information such as the plan logo, contact information, and supplemental benefits, and submit the materials for CMS review. Because CMS is involved with materials development, and all MSHO plans are submitting identical beneficiary materials, any CMS suggestions for revisions apply uniformly to all plans' materials; therefore, a consistent message about the MSHO program is provided statewide.

3.5 Provider Purchasing Agreements

The demonstration allows MSHO plans to integrate Medicare and Medicaid primary care payments to certified Health Care Homes (HCHs), Minnesota's term for medical homes. The demonstration also authorizes adoption of Integrated Care System Partnerships (ICSPs), which are purchasing agreement subcontracts between MSHO plans and providers. The goals of the purchasing agreement are to pay for outcomes, incentivize quality care at a lower cost, and reward high-performing providers. ICSP subcontracts differ based on the population served, geographic area, care coordination models, performance measures, and financial incentives. Under the ICSP program, MSHO plans have great flexibility to design subcontracts to meet their goals for care and payment. State officials implemented these subcontracts to align MSHO plan payment practices with the State's other statewide Medicaid reform efforts to improve performance of primary care and care coordination using value-based payment strategies (Parker, 2013a). Each MSHO plan is required to submit ICSPs to the State for review (MOU, 2013, pp. 5–6, 22).

Background. State officials said that inclusion of the purchasing agreements in the demonstration is important to the MSHO program in two ways. First, it authorizes integration of Medicare and Medicaid primary care payments to HCHs. Second, it enables the State to require all MSHO plans to develop at least one ICSP under the demonstration. State officials said that although some MSHO plans and providers have long been innovators in payment and delivery reform, other plans have been hesitant. Establishing the use of ICSP purchasing agreements enables the MSHO program to actively participate in payment and delivery reform, a State priority, according to State officials.

Status. Implementation of the purchasing provisions began in fall 2013, when the requirement to establish at least one ICSP was incorporated into the MSHO plans' 2014 Medicaid contracts. In January 2014, the State reported that plans were implementing 35 initial ICSPs. For the 2015 plan year, 19 new ICSPs were established, bringing the total to 54 operational ICSP subcontracts.

MSHO plans report annually to the State using a standard template that tracks which payment models, performance measures, and outcomes plans have accomplished and queries about plans' next steps to increase impact of each ICSP. The State has received two reports so far, but data on impact have been limited because plans do not yet have outcome data to share. State officials said they were hopeful that plan data submitted in late 2015 and 2016 will shed greater light on ICSPs' impact on outcomes and care.

MSHO plans may choose from four different payment model types for their ICSP subcontracts:

1. performance rewards including performance pool or pay for performance;

2. primary care coordination of care payment, subcapitation of a limited set of services, or other care coordination with ICSP;

3. subcapitation for total cost of care across multiple services including primary, acute, and long-term care; or

4. alternative payment models, which are mostly of two types: an upfront per member per month care management payment with a potential total cost of care gain share, or a bonus payment linked to quality measures (interview with Minnesota DHS officials, July 2015).

Based on data shared by Minnesota DHS officials on MSHO plans' 2015 ICSP subcontracts, it appears that most plans' subcontracts are either following Type 1, the performance rewards model, or Type 4, an alternative payment model. Remaining subcontracts are nearly evenly split between Type 2, the primary care coordination model, and Type 3, the subcapitation model.

MSHO plans may also select from a list of roughly 25 performance measures to use to incentivize improved outcomes for beneficiaries under their ICSP contracts (DHS, 2013). Based on data shared by Minnesota DHS officials on MSHO plans' 2015 ICSP subcontracts, most MSHO plans are implementing from 2 to 5 performance measures with each ICSP provider subcontract. Plans vary significantly in the performance measures they are targeting for impact, and very few measures are being implemented across all ICSP contracts. Examples of performance measures with the greatest number of participating providers include reducing all-cause readmissions (6 providers), reconciling medications at discharge (5 providers), tracking high-risk medications (4 providers), reducing falls with injuries (4 providers), and monitoring physician orders for life-sustaining treatment rates (4 providers) (interview with Minnesota DHS officials, July 2015).

State officials said that one of their primary goals in implementing ICSPs was to promote system-wide adoption of value-based purchasing strategies by plans and to identify more clearly MSHO plans' use of value-based purchasing arrangements with providers. State officials said they have offered plans flexibility in which measures to choose and how to pay providers, and they were hoping that this approach would produce the greatest synergy between the level of sophistication of the provider and the complexity of the payment incentives chosen.

At the time of the 2015 site visit, State officials said they believed that implementing ICSPs had been a valuable exercise in considering new payment models, and they were beginning to think about possible improvements for 2016. One issue they are considering is the best way to avoid duplicate payments to providers who may have ICSP contracts with several MSHO plans. They are also thinking about possibly expanding from primary care providers to include LTSS providers. State officials acknowledged that they may need to do more training and modeling with providers on value-based purchasing, in general, to have a greater impact.

MSHO plan representatives were positive about their experience with ICSP provider purchasing arrangements so far. Representatives of two plans expressed that the initiative was helping them transition to more of a value-based purchasing approach and that providers were willingly participating.

One plan reported that it was trying to implement similar quality indicators for all ICSP contracts, explaining that it "goes back to people sitting in a boat with the oars. If you are all working towards the same things you have a much greater likelihood of moving forward." That plan had started smaller, and then expanded the number of its ICSP contracts. This plan reported early positive results, saying that preliminary data showed improved outcomes and lower costs. The plan official said that the plan wants to prove success before expanding beyond clinics and primary care, but would like to eventually have all providers using the same quality indicators.

Another plan reported that it liked being able to pick the measures it wanted to use and to show the quality indicator reporting to providers and document the quality of care being provided. This plan also said that it appreciated the interactive approach the State took and the degree of flexibility allowed to plans. One thing it hoped would improve was the level of detail and frequency of reporting, saying that requiring semi-annual reporting so early during implementation was not helpful, and the plan hopes that the State will move to annual reporting in 2016.

3.6 Grievances and Appeals

The State is using an integrated and simplified model notice of denial and explanation of appeal rights developed by CMS for use by all integrated D-SNP plans. The 60-day time frame available to beneficiaries for filing Medicare appeals has been extended to 90 days under the demonstration to align with the State Medicaid time frame and to provide more flexibility for enrollees (MOU, 2013, pp. 7–8).

Background. State officials said that when they encountered differences in Medicare and Medicaid time frames for grievances and appeals, their rule of thumb was to advocate for policy that supports the time frame more beneficial for enrollees, who benefit from more time to appeal.

For many years, Minnesota has been operating an integrated grievance and appeals system, as described in ***Section 4.2***.

Status. During the demonstration's first quarter, the State implemented the 90-day time frame for Medicare appeals to align with Medicaid policy, as permitted under the MOU. This time frame will change to a 60-day time frame for beneficiaries to file both Medicare and Medicaid appeals when the proposed Federal regulations governing Medicaid managed care policy, issued on June 1, 2015, are adopted. They would shorten the Medicaid time frame to 60 days.[3]

The State also adapted and implemented the CMS integrated denial and appeal notice. State officials said that they worked with MSHO plans and the State Managed Care Ombudsman to incorporate State-specific language. State staff are monitoring versions of the notice developed by demonstrations under the Financial Alignment Initiative to identify any improvements that Minnesota might adopt. State officials are also monitoring any needed changes to the denial and appeals notice due to changes in MSHO policy on an ongoing basis. For example, in 2015, the State proposed to CMS changes to the model notice to include revisions in State policy on the definition of nursing facility level of care. State officials said the process for making such changes would have been more difficult before the demonstration.

3.7 Quality Measurement

Under the demonstration, MSHO plans continue to report quality measures and data, including Healthcare Effectiveness Data and Information Set (HEDIS), Consumer Assessment of Healthcare Providers and Systems (CAHPS), and Health Outcomes Survey (HOS) data, as required by their Medicare and Medicaid contracts, and plans continue to participate in the Medicare Advantage Star Ratings system.

State and plan officials expressed concern about duplication and overlap in long-standing measurement requirements that apply to MSHO plans, such as Medicare and Medicaid CAHPS and HEDIS measures, other Medicare Advantage and D-SNP measures, and Medicaid managed care and LTSS measures. They also want to develop new measures that would be more appropriate for enrollees of integrated plans. Among the initiatives included in the MOU are the following:

3.7.1 Star Ratings

The MOU states that the State, CMS, and MSHO plans will collaborate to develop and test integrated care measures that could potentially be incorporated into a Medicare Advantage StarRatings model. During testing and development, MSHO plans would continue to use the existing Star Ratings system (MOU, 2013, pp. 25–26).

Background. State and plan officials noted that Medicare Advantage Star Ratings are important to MSHO plans given that the ratings are linked to Medicare bonus payments. The financial health of MSHO plans is a constant source of concern to State officials, in part because

[3] The Medicaid Managed Care Regulations were finalized April 25, 2016.

Minnesota has lost most of its D-SNPs serving the under age 65 disability population as a result of financial issues.

One factor driving State interest in developing and testing a new Star Rating system designed specifically for integrated programs is differences in the population characteristics of enrollees in integrated SNP plans versus those in other types of Medicare Advantage plans. State and plan officials believe MSHO plans should be compared with other D-SNPs instead of all other Medicare Advantage plans, and some measures should be adjusted for enrollee characteristics such as age, LTSS needs, and social and economic status.

Status. Demonstration work on this joint CMS-State initiative has not progressed.

3.7.2 Consumer Assessment of Healthcare Providers and Systems

CMS and the State will collaborate on administering a single CAHPS survey that meets State and Federal requirements, rather than conducting two surveys for the same population. The MOU says that the State is permitted to add questions to the Federal survey, and CMS will share individual-level data from the survey with the State (MOU, 2013, p. 26).

Background. Currently, the State Medicaid CAHPS and the health plans' Medicare Advantage CAHPS surveys are conducted separately and may sample the same enrollees. State officials say this overlap creates confusion and reduces response rates to the second survey that is fielded, because enrollees often believe they have already responded. To reduce duplication and survey burden on enrollees, State officials agreed to give up their Medicaid CAHPS survey and defer to CMS if they can secure a data-sharing agreement for the State to obtain individual-level data that will enable the State to continue to conduct longitudinal evaluation and analysis.

Status. State and Federal officials have been working to effectuate a jointly administered CAHPS survey, but they initially experienced some barriers to integration. They were unable to administer jointly in 2015 because CMS was fielding the Nationwide Adult Medicaid survey, the first-ever nationwide survey of Medicaid beneficiaries on access and experiences of care across delivery systems. State officials reported during the July 2015 RTI site visit that they were hoping to implement joint administration of CAHPS in 2016, and it was indeed conducted that year.

Over the past year, State and CMS officials have been negotiating over the questions to include in a jointly administered CAHPS survey. The State said it would be willing to use the Federal version with the addition of six State-specific questions. CMS and the State are also negotiating the scope of data sharing: CMS initially wanted to limit sharing to aggregate data, whereas the State wants to receive from CMS plan-specific data to match up age, gender, and risk-adjustment factors for each plan and to continue its longitudinal evaluation. Additional areas of difference include the number of languages in which the survey will be conducted: Minnesota State law requires that any written document including surveys contain a language block and

oversampling of racial and ethnic minorities. Despite these differences, the State is hopeful that an integrated survey will launch in 2016.[4]

Plan representatives were involved in the efforts to integrate the CAHPS surveys through a DHS-formed stakeholder group, which met frequently and worked collaboratively. Plan representatives said they hope that combining the surveys will minimize redundancy and improve response rates by members. Representatives of one plan commented that an outstanding issue for them is how the data will be analyzed once they are collected and whether the State or CMS will prevail on whether there can be plan-level analysis.

3.7.3 Health Outcomes Survey (HOS)

CMS currently administers the HOS to Medicare Advantage enrollees in English and Spanish. If funding is available, additional languages used by the MSHO population will be added (MOU, 2013, p. 26).

Background. State officials said language access for the HOS has been a source of concern since the survey was first fielded in the 1990s because the additional languages used by CMS do not reflect the ethnicity of MSHO enrollees. They were pleased that the MOU included a provision that CMS would administer to MSHO enrollees in additional languages. After consulting with MSHO plans and analyzing demographic data, State officials recommended to CMS that Somali and Russian be secondary languages for Minnesota. Although MSHO has a large Hmong population, it was determined that the written language is not widely used, so translating to Hmong is not a priority.

Status. The State and CMS are continuing to discuss implementation of this change. CMS requested that the State begin with only one additional language for translation, and the State reported back to CMS in March 2014 that it prefers to start with Somali. The State explained during the site visit in 2015 that it believes that many more Russian-speaking enrollees either read English or have English-speaking friends or family to assist them. CMS is determining the timeline for implementation of the HOS in secondary languages (DHS, 2014b).

3.7.4 New Quality Measures

The MOU states that CMS will work with the State to identify ways to measure the extent to which plans are able to facilitate integration of enrollees into community life. The MOU also says that CMS and the State will collaborate to refine quality measures as needed (MOU, 2013, p. 27).

Status. State officials indicated that the Demonstration Management Team had not yet discussed a timetable for developing new quality measures, but as noted previously in the discussion of Star Ratings, CMS appears to be using other vehicles to address these issues.

[4] The joint CAHPS survey was administered in 2016.

3.8 Performance Improvement

The demonstration calls for creating mechanisms for reducing overlapping or duplicative reporting required through quality improvement projects (QIPs), which are a Medicare Advantage requirement, and performance improvement projects (PIPs), which are a Federal Medicaid managed care requirement.

Background. MSHO plans, like all integrated SNPs, are required to undertake two sets of performance improvement projects: one to meet Medicare requirements, another to meet Medicaid requirements. Each type of PIP has its own format and timeline for submission.

Status. In anticipation of CMS approval of the Minnesota demonstration, the State adopted language in its 2014 contracts with MSHO plans permitting them to use Medicare QIPs to meet the Medicaid PIP requirement. This alignment of QIPs and PIPs includes using the same measurement standards, reporting timelines, and templates. As part of this demonstration agreement, CMS permits the State to have input on topics selected for QIPs. State officials noted their interest in topics that will address performance issues relevant to both the Medicare and Medicaid programs as well as broader State health policy priorities. QIPs have a 3-year duration. The next QIPs will be adopted in January 2016.

An MSHO plan official said that plans are grateful for the alignment between Medicare and Medicaid on performance improvement and the opportunity to work collaboratively with other health plans on the same QIP topics. Another plan official commented that it was nice to have the PIP and QIP work aligned because it "eliminated a lot of duplication of efforts and really allows us to focus on the project in a different way." That plan also mentioned that its current QIP on improving care transitions targeted reductions in 30-day readmissions and training for care coordinators on best practices to facilitate transitions.

3.9 Medicare Bid Process

Maintaining zero premiums for Medicare-Medicaid enrollees is critical for the viability of MSHO plans. The lower a plan's Medicare Advantage bid, the more likely it is to have no premiums for enrollees the following year. Under the demonstration, a new provision will help MSHO plans maintain zero premiums for enrollees. In situations where strict adherence to the Medicare Advantage bid margin requirements (the minimum levels for projected gains or maximum levels for projected losses in a plan's bid) would result in a premium for enrollees, and where margins have a minimum of zero, an MSHO plan can use an aggregate bid margin that is either (1) no greater than 1.5 percent above the plan's margin for non-Medicare health insurance, or (2) less than or equal to the margin for the Medicaid portion of its MSHO rate. Other Medicare Advantage bid requirements remain in effect, and MSHO plans are not guaranteed a zero premium (MOU, 2013, pp. 17–18).

Background. As is the case with many of the demonstration's agreements, State officials noted that this provision is intended to protect the continued existence of the integrated MSHO program. It also helps ensure that low income enrollees are not charged premiums. A representative from one of the MSHO plans said that in recent years it has just barely been able to maintain a zero premium bid. Five of the State's seven D-SNPs that participated in the State's

former managed care program for adults under the age of 65 with disabilities stopped offering a Medicare product over the past several years when their recent bids generated enrollee premiums. Medicare-Medicaid enrollees were unable pay premiums. This program, the Special Needs Basic Care program, is comparable to MSHO but serves a different population. As of June, 2015 it has only 832 enrollees, State officials noted that the Medicare Advantage bidding margins rules that are designed to prevent unfair competition among large Medicare Advantage plans can create problems for MSHO plans, especially for small, county-based plans serving rural areas.

Status. This provision was effective for 2015 bid submissions. It was not triggered by any MSHO plan's 2015 bid submission.

4. Existing Integrated Functions Formalized by the Demonstration

In addition to the new Medicare-Medicaid administrative alignment activities authorized by the demonstration, the Memorandum of Understanding (MOU) also formalizes continuation of certain integration functions conducted before the demonstration by the State and Minnesota Senior Health Option (MSHO) Special Needs Plans (SNPs). As the MOU notes, "In some instances existing arrangement between CMS and the State of Minnesota have allowed flexibility for MSHO SNPs because of the integrated nature of the program. However, many of these flexibilities have been developed through informal agreements. The parameters of the demonstration, as outlined in the MOU and appendices set forth the policies by which CMS and the State will operate for the life of the Demonstration" (MOU, 2013, p. 19).

State officials view this aspect of the demonstration as being as significant as, if not more than, the new administrative alignment activities. Together, prior to the demonstration, CMS and the State have developed administrative procedures that overcome some of the barriers to integrating Medicare SNP policies with Medicaid managed care policies. State officials spoke extensively about their fears that without this demonstration, these agreements, which they view as essential to making integration in their program work, could be overturned by new CMS staff unfamiliar with their effect or by a change in SNP policy that would no longer permit these flexibilities. These informal agreements cover a range of integration functions, and this section highlights three of them: integrated enrollment systems, integrated grievance and appeals systems, and integrated claims adjudication.

4.1 Integrated Enrollment Systems

To achieve concurrent beneficiary enrollment into MSHO for Medicare and Medicaid benefits, all but one of the State's MSHO plans contract with the State to serve as their third-party administrator for enrollment of beneficiaries into their plans. As State officials described, through a series of complex functions that are invisible to enrollees, State staff are able to access enrollment files for both the Medicare and Medicaid programs and achieve simultaneous and aligned plan enrollment for beneficiaries with identical enrollment effective dates for both sets of program benefits.

The demonstration MOU formalizes a previous informal agreement between the State and CMS that exempts MSHO plans from the SNP requirement that beneficiary enrollment requests be submitted to CMS within 7 days of verification of Medicare eligibility. This exemption allows time for completion of a beneficiary's eligibility determination for Medicaid, enabling a beneficiary to be simultaneously enrolled in MSHO for both Medicare and Medicaid benefits. The State is also permitted to continue the use of enrollment subsets to limit MSHO enrollment to Medicare-Medicaid enrollees who meet the State's eligibility criteria for enrollment in Medicaid managed care.

4.2 Integrated Grievance and Appeals System

As the MOU indicates, before the demonstration, the State and CMS had already collaborated to integrate elements of the Medicare and Medicaid appeals process in MSHO. The

demonstration makes no changes to this long-standing process, jointly developed by CMS and the State. Enrollees are provided multiple avenues for filing an appeal: to the plan, to the State Department of Health, the Department of Human Services, or directly to the State Fair Hearings process (Proposal, 2012, p. 27). Regardless of the appeal path chosen by an enrollee, each of these vehicles reviews individual appeals that could relate to Medicare and Medicaid coverage.

State officials view their integrated appeals process as grounded in an integrated process for coverage decisions that takes into account instances where either Medicare or Medicaid might cover a benefit when the other program will not. Thus, plan notices to beneficiaries of service denials, terminations, and reductions are streamlined when coverage by each program is considered simultaneously.

State officials reported that sustaining their integrated grievance and appeal system was one of their top priorities in their decision to participate in the demonstration. Officials said they believed that grievances and appeal integration is at the heart of successful payment integration, because it contributes to a more seamless approach to communication with beneficiaries about coverage decisions. Making sure that beneficiaries know that a benefit is covered, regardless of whether it is primarily financed by Medicare or Medicaid, is core to a well-functioning system and reduces the need for unnecessary appeals. As one official said, "You shouldn't be clogging up your system with appeals that don't make any sense, addressing benefits that have already been covered." Having a clear, well-aligned grievance process is central to effectuating that goal.

However, one area State officials discovered was not as well aligned under the MOU language was the grievance process. Although the MOU clearly addresses the requirement for integration of appeals, language regarding grievances was less specific. During implementation, State officials asked and received permission from CMS to allow for more explicit integration. One issue the State flagged is that the time frames within which plans acknowledge a grievance differ for Medicare and Medicaid: Medicare allows plans 30 days, whereas Medicaid requires action within 10 days. This difference created a data validation issue for one plan, as discussed in ***Section 3.1***.

In addition to the grievances and appeals process, the State's Managed Care Ombudsman receives beneficiary complaints, attempts to resolve them, and for broader tracking of systems quality issues, prepares detailed monthly complaint reports for State MSHO staff. Also, as noted in ***Section 3.6***, under the demonstration the State has adopted a new integrated beneficiary appeals notice and has been able to align the time period available to a beneficiary to file a Medicare grievance with the longer time available for filing a Medicaid grievance.

4.3 Integrated Claims Adjudication

The MOU notes that consistent with current practice, MSHO Dual Eligible Special Needs Plans (D-SNPs) can permit providers to bill the D-SNPs for Medicare and Medicaid services delivered without differentiating Medicare services from Medicaid services. Using an integrated adjudicated claims process, the MSHO plans determine whether the expenditure is allocated to Medicaid or Medicare. Under the demonstration, CMS has committed to drafting clear guidance to auditors that integration of Medicare and Medicaid claims adjudication is allowed.

5. Demonstration Planning and Implementation Support

Two significant sources of Federal financial support were made available to Minnesota to design and implement the demonstration: (1) a contract with CMS to support the development of a proposal for State Demonstrations to Integrate Care for Dual Eligible Individuals (SDIC), and (2) an Implementation Support Award.

5.1 CMS Financial Support

Minnesota was among the 15 States that received a $1 million design contract to support the development of a demonstration proposal for submission to CMS under the SDIC. Minnesota used those funds primarily to support extensive stakeholder engagement activities, to contract for actuarial expertise to review the Minnesota Senior Health Options (MSHO) Dual Eligible Special Needs Plan (D-SNP) bids to assess the financial viability of developing a capitated model demonstration under the Financial Alignment Initiative, to contract for the development of an integrated Medicare-Medicaid enrollee claims database, and to support salary costs of two State staff members.

CMS also made funding available to support demonstration implementation for the States that received demonstration design contracts and had finalized Memoranda of Understanding (MOUs) in place. Minnesota received a $1.6 million, 2-year award. These funds are being used to invest in new information technology systems to support additional analysis of data on the State's Medicare-Medicaid enrollees, continue stakeholder engagement activities, conduct actuarial analyses of MSHO data on utilization, costs, and performance, and perform dedicated outreach to culturally specific communities. The contract also provides funding to employ several demonstration staff.

State officials reported during the July 2015 site visit that implementation support funds are allowing the State to make significant progress in each of the identified project areas. Details on the scope of work and impact in these areas, as identified by State officials, are discussed below.

5.1.1 Integrated Medicare and Medicaid Database and Reporting

The Minnesota Integrated Medicare and Medicaid Database and Reporting initiative has been a major State project. Although the State initially started by working through an external vendor to manage data, the State decided in 2014 to instead use grant funds to migrate data to a State-run data warehouse to allow the State greater flexibility in using the data and to lower costs associated with data use. This change also enables the State to use the data to support research that will provide a more comprehensive understanding of Medicare-Medicaid enrollees and their needs. Such research could also be useful for other Minnesota State programs that provide services or programs for this population.

State officials informed CMS in late 2014 of their intent to migrate the Integrated Medicare and Medicaid Database and Reporting initiative to the State data warehouse. At that time, CMS told the State about a related CMS-sponsored Medicare-Medicaid Data Integration

(MMDI) project, under which the State, along with several other States, could receive technical assistance and resources provided by CMS contractors. The State opted to participate and reported that this additional support has been very valuable to its data initiative. To initiate the Integrated Medicare and Medicaid Database and Reporting initiative, the State created a data management plan and security procedures, received CMS approval, and began importing data into the State warehouse.

Data accessed by the State include data from the Chronic Conditions Warehouse, Medicare Parts A and B data, minimum data set, master beneficiary summary files with links to historic data, and Part D data (which were being finalized in July 2015). The State's next step will be to obtain the Coordination of Benefits Agreement (COBA) data feed from the CMS vendor. State officials said their goal is to import a broad scope of data and integrate them with their own Medicaid data to analyze per-person Medicare expenditures and utilization to better understand MSHO beneficiary experience and the program's impact.

Implementing this component of the State's work has involved a number of unexpected challenges. State officials reported that getting data use agreements in place, particularly the COBA feed agreement, has taken more time than expected. They also reported some challenges with restrictions on data sharing among various CMS offices. Hiring and retaining qualified information technology staff has presented another challenge both because it is hard to find and train talented staff with the right skills and because it is hard for the State to compete with higher salaries for comparable work in the private sector.

State officials reported they are already seeing significant benefits from their work in creating an integrated Medicare-Medicaid database. They said that by bringing the work in-house and not having to pay the more expensive vendor for comparable work, they have already saved $50,000 in the first year. State officials said they are hoping for a greater return on investment over time because they can use the data they are gathering in many ways to benefit multiple State programs, not just Medicare or Medicaid. Officials credited the CMS's State Data Resource Center and the MMDI team as providing great support and helpful technical assistance, and specifically mentioned MMDI's role in helping the State understand how to dissect and use the data, and in developing a COBA data crosswalk. They also said the Medicare-Medicaid data matching has been easier than expected once they were able to obtain the data.

In the future, State officials said they intend to create dashboards to share with MSHO plans to help monitor care coordination and are beginning to develop standardized reports. They are especially interested in using the data to monitor chronic conditions, service utilization, hospitalizations and readmissions at 7 and 30 days, depression rates, racial patterns in appeals, enrollment, and the impact of geographic location on utilization and outcomes of care.

5.1.2 Translation Project

The State is also looking to use the implementation support funds for an initiative to improve translation for targeted limited-English proficient populations. Recognizing the significant populations of Hmong refugees and Somali and Russian immigrants among their Medicare-Medicaid eligible population, State officials undertook a project to improve the MSHO program's accessibility and service for these populations. Laying the groundwork for a new

funding initiative to support greater outreach to these communities, State officials undertook qualitative and quantitative research to better understand community needs and how different communities learned about and participated in the program.

As a result of their research, State officials learned that Asian immigrant beneficiaries with limited English proficiency (especially Hmong and Vietnamese beneficiaries) were accessing benefits more often than other limited-English proficient groups, and African Americans were least likely to access benefits. Upon further inquiry with Hmong beneficiary groups, the State learned that the Hmong community, whose language is oral and not written, had made audiotapes with information on the program and how to enroll, an approach that created trust. By contrast, the State believes that African American enrollment may be lower due to the large Somali immigrant population, which may not have comparable trust in the program because of the differences among members in their eligibility status. Specifically, this population may not have understood why some members of their community have satisfied Medicare eligibility criteria whereas others have not.

Additional qualitative research with plans and community-based organizations that serve ethnic and racial minority beneficiaries gave State officials additional insights about how to design a new funding program supported by the implementation award to develop tangible deliverables that are culturally sensitive and will continue to be usable after the demonstration is over. The State published a Request for Proposals in April 2015 for projects that will provide outreach, education, and assistance to targeted communities over the next year. Eligible grantees include a wide range of organizations, such as beneficiary groups, community development organizations, and providers. As of the July 2015 site visit, awards, which are expected to be up to $64,500 for each bidder, had not yet been made.

5.1.3 Stakeholder Conferences

The State has also used implementation support funds to conduct two stakeholder conferences. The first conference, convened in November 2014, focused on care coordination and targeted MSHO and Integrated Care System Partnerships (ICSP) care coordinators. More than 450 care coordinators attended. The second stakeholder conference, titled "New Connections for Self-Advocacy," was convened in August 2015 and was targeted to stakeholders of the MSHO, Minnesota Senior Care Plus, and Special Needs BasicCare programs. It focused on consumer empowerment and beneficiary engagement.

5.2 Stakeholder Engagement

Minnesota conducted extensive stakeholder engagement activities while developing its proposal to conduct a demonstration under the Financial Alignment Initiative (Proposal, 2012, p. 31). The State held 56 workgroup meetings, trainings, or presentations and established a dedicated public website for disseminating information about the demonstration planning process.

Stakeholder engagement activities continued as the State designed its Medicare-Medicaid administrative alignment demonstration. Minnesota holds quarterly meetings of a broad-based group of stakeholders to brief them on demonstration progress and solicit input on planned activities. The SNP Demonstration Workgroup, consisting of State officials and a subset of

MSHO plan directors, has been meeting since 2010 to jointly design the initial demonstration proposal under the SDIC and, now, the activities of the Medicare-Medicaid administrative alignment demonstration.

For several years, the Clinical Quality and Metrics Workgroup (consisting of MSHO plans, medical directors and their quality assurance leadership, the State's Quality Improvement Organization, State Department of Health staff, and State MSHO staff) has been meeting to review the State's quality reporting data. The Workgroup also oversees the performance improvement projects and the ICSPs' quality measures. Also, Minnesota has a long-standing MSHO Plan Member Materials Workgroup consisting of State officials and plan representatives as described in ***Section 3.4***. It annually develops member materials to be submitted to CMS for approval and is charged with carrying out the MOU alignment activities related to materials development.

6. Service Utilization

6.1 Purpose of Service Utilization Analyses

As noted above, the administrative changes being introduced under the Minnesota demonstration are meant to better align Medicare and Medicaid processes under the existing Minnesota Senior Health Options (MSHO) program, but are not expected to change service utilization patterns, as the demonstration does not fundamentally change benefit packages, choice of plans and providers for beneficiaries, or care delivery. The purpose of the analyses in this section is to understand service trends over time in the Minnesota demonstration-eligible and comparison groups so that CMS, the State, and stakeholders can understand the beneficiary characteristics of these groups and their utilization patterns before direct group comparisons are made in future reports.

The analyses in this section compare the Minnesota demonstration-eligible group and comparison group, and demonstration enrollees and eligible-nonenrollees within the demonstration-eligible group. For Minnesota, the demonstration-eligible group is defined as the elderly Medicare-Medicaid beneficiaries who are eligible for MSHO, which includes those who choose to enroll in MSHO and those who remain in Minnesota Senior Care Plus (MSC+). The latter group is referred to in this report as MSHO nonenrollees. Because the decision to enroll in MSHO is voluntary, any differences between enrollees and nonenrollees may reflect differences in enrollees' and nonenrollees' characteristics (including their health care needs) and/or differences in the care they receive under MSHO (for enrollees) and MSC+ (for nonenrollees).

Although we will continue to monitor these outcomes over the course of the demonstration, we will not be conducting an analysis of the impacts of the Minnesota demonstration on MSHO enrollees, given the focus of the demonstration on administrative processes. We will, however, conduct an assessment of the potential for unintended negative consequences of the demonstration. That assessment will need to wait for data on a longer follow-up period and the econometric analyses to be incorporated in future reports.

The focus in this section is on Medicare service trends, as complete Medicaid fee-for service data for Minnesota and its comparison group were not available for this report. Future Annual Reports will also include analyses on Medicaid service use.

Highlights

- The demonstration-eligible and comparison group populations were similar in terms of demographic characteristics, disability status, and physical health (as indicated by the hierarchical condition category [HCC] scores); however, the demonstration-eligible group had a higher prevalence of severe and persistent mental illness (SPMI).
- As would be expected given the administrative focus of the Minnesota demonstration, the prevalence of Medicare service utilization remained relatively stable for the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed in the comparison group.

Highlights (continued)

- However, there were some changes in the levels of service use over time, with the patterns of change generally similar for the demonstration-eligible and comparison groups. For example, inpatient admissions, emergency department (ED) visits, and skilled nursing facility (SNF) stays per 1,000 user months declined during the demonstration period for both the demonstration-eligible and comparison groups, while the prevalence and the level of primary care evaluation and management (E&M) visits increased.
- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for LTSS users in the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group. There were, however, some declines over time in the level of service use for both groups, including declines in inpatient admissions and hospice use.
- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with SPMI in the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group. One exception, however, was the share of SPMI beneficiaries with a behavioral health visit, which declined over time for both the demonstration-eligible and comparison groups.
- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries across subgroups of the demonstration-eligible group based on demographic characteristics (age, gender, race), geography (urban/rural) and health status (disability status, HCC scores, dementia, death) over the baseline and demonstration periods, a pattern that was echoed for the comparison group.
- Within the demonstration-eligible group, MSHO enrollees were somewhat older, more likely to be female, and more likely to have health problems (including higher HCC scores and a greater likelihood of SPMI) than nonenrollees.
- Despite being older and having more health problems, MSHO enrollees tended to use the same or lower levels of institutional care and the same or higher levels of non-institutional care than nonenrollees. For example, MSHO enrollees were less likely to have inpatient admissions (2.5 vs. 4.0 percent) and ED visits (2.9 vs. 4.8 percent) than nonenrollees, and more likely than nonenrollees to have primary care E&M visits (48.5 vs. 46.3 percent) and, among those with a visit, more visits (1,012 vs. 878 visits per 1,000 user months).

6.2 Methods

This section briefly describes the overall evaluation design, the data used, and the populations examined for the entire evaluation, as well as the measures analyzed for the utilization analyses.

6.2.1 Evaluation Design

RTI International is using an intent-to-treat (ITT) approach for the quantitative analyses conducted for the evaluation, comparing the eligible population under each State demonstration with a similar population that is not affected by the demonstration (i.e., a comparison group). ITT refers to an evaluation design in which all Medicare-Medicaid enrollees eligible for the demonstration constitute the demonstration sample, regardless of whether they actively participated in demonstration models. Thus, under the ITT framework, Minnesota analyses include all Medicare-Medicaid beneficiaries eligible to enroll in MSHO and a group of similar individuals in the comparison group.

Results for subpopulations within each of the demonstration-eligible and comparison groups are also presented in this section. For example, results are reported for those with any LTSS use and those with SPMI. Analyses are also presented that compare Minnesota demonstration enrollees—that is, MSHO enrollees—to the entire demonstration-eligible population and to MSHO-eligible nonenrollees in the State. MSHO enrollees make up 75 percent of all demonstration eligible beneficiaries.

6.2.2 Comparison Group Identification

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

Since MSHO is implemented statewide, Minnesota's comparison group is based on areas outside of the State. Demonstration and potential comparison areas were compared on a range of measures, including spending per Medicare-Medicaid enrollee by each program, the shares of LTSS delivered in facility-based and community settings, and the extent of Medicare and Medicaid managed care penetration. Using statistical techniques, the individual comparison areas were selected that most closely match the values found in the demonstration area on the designated measures. Other factors were considered when selecting comparison States, such as timeliness of Medicaid data submission to CMS. A comparison group was identified from selected areas in seven States (Alabama, California, Michigan, New York, Pennsylvania, Texas, and Wisconsin). The comparison group is at least as large as the eligible population in Minnesota. For details of the comparison group identification strategy, see ***Appendix A***.

6.2.3 Data

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

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

6.2.4 Populations and Services Analyzed

Populations Analyzed

The populations analyzed include all demonstration-eligible and comparison group beneficiaries, enrollees and nonenrollees under the demonstration, and the following special populations: those receiving any LTSS, those with SPMI, and eight subgroups based on demographic characteristics (age, gender, and race), geography (urban/rural status), and health (disability, presence of Alzheimer's disease or other dementia, HCC score, and whether the beneficiary died).

Addressing Other Demonstration or Shared Savings Program Enrollment

The populations included in the analyses conducted for this report are those beneficiaries who within any analytic year were *not* part of Medicare shared savings initiatives, such as Medicare Accountable Care Organizations (ACOs). Beneficiaries in each of the populations above were checked for enrollment in other shared savings programs in each analytic year (baseline year 1, baseline year 2, and the demonstration period) using a CMS database. Almost all beneficiaries found to be in other shared savings programs were enrolled in either the Pioneer ACO or the Medicare Shared Savings Program. Beneficiaries who were enrolled in any Medicare shared savings initiative in either the demonstration or comparison groups were then removed from analysis *for that year*. If, during a given analytical year (e.g., the demonstration period) but not in another analytic year (e.g., the first baseline year), a beneficiary was enrolled in a Medicare shared savings initiative that was not part of the Financial Alignment Initiative, he or she is included in analyses in all years for which he or she was *not* enrolled in any Medicare shared savings initiative.

Beneficiaries enrolled in Medicare shared savings initiatives were removed from analyses so that when data used in this first Annual Report are used in analyses in the Final Report, the experiences under the MSHO program will be measured independent of the effects of Medicare shared savings initiatives. Approximately 11 percent of the 63,616 Minnesota demonstration beneficiaries in the first demonstration period were in Medicare shared savings initiatives,

leaving a total of 56,879 eligible (MSHO enrolled plus eligible-nonenrolled) beneficiaries for analysis.

Table 2 provides selected demographic and health characteristics of the Minnesota demonstration-eligible and comparison groups overall and for MSHO enrollees. As shown, the demonstration-eligible and comparison groups were similar across most of the measures examined. For example, the demonstration-eligible and comparison groups had similar age distributions and about two-thirds of the beneficiaries in both groups were female. Similarly, more than 80 percent of both groups were white.

The HCC score is a measure of the predicted relative annual cost of a Medicare beneficiary based on the diagnosis codes present in recent Medicare claims. Beneficiaries with a score of 1 are predicted to have average cost in terms of annual Medicare expenditures. Beneficiaries with HCC scores less than 1 are predicted to have below-average costs, whereas beneficiaries with scores of 2 are predicted to have twice the average annual cost.

Table 2
Descriptive statistics for Minnesota demonstration eligible, enrolled, and comparison groups

	Demonstration period 10/1/2013–12/31/2014		
Characteristic	**Eligibles**	**Enrolled**	**Comparison**
Total beneficiaries	56,879	41,827	190,265
Age			
65 to 74	36.4	32.3	36.4
75 to 84	30.3	32.3	28.7
85 and older	33.3	35.4	34.9
Gender			
Male	31.0	29.0	31.4
Female	69.0	71.0	68.6
Race[1]			
White	82.2	81.3	80.7
African American	7.9	7.6	11.7
Hispanic	1.3	1.2	2.6
Asian/Pacific Islander	8.6	9.9	4.9
Hierarchical condition category			
<1	36.1	34.8	35.1
1 < 2	42.7	42.7	43.6
2 < 4	18.2	19.3	18.2
4+	3.1	3.2	3.1

(continued)

Table 2 (continued)
Descriptive statistics for Minnesota demonstration eligible, enrolled, and comparison groups

	Demonstration period 10/1/2013–12/31/2014		
Characteristic	**Eligibles**	**Enrolled**	**Comparison**
Disability as reason for original Medicare eligibility			
No	91.7	90.8	91.5
Yes	8.3	9.2	8.5
Severe and persistent mental illness diagnosis			
No	75.0	74.3	81.8
Yes	25.0	25.7	18.2

[1] Less than 6 percent of beneficiaries did not fall in these designated race categories for the eligible, enrolled, and comparison groups.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

The distribution of HCC scores was similar for the demonstration-eligible and comparison groups. The two groups were also similar in terms of disability status, as roughly 8 percent of the demonstration-eligible and comparison group beneficiaries were originally eligible for Medicare before age 65 because of their disability status. The two groups differed more on SPMI status, with the demonstration-eligible group more likely to have SPMI than the comparison group (25 vs. 18 percent).

Within the demonstration-eligible population, MSHO enrollees were somewhat older, more likely to be female, and more likely to be initially Medicare-eligible because of a disability than the overall demonstration-eligible group. They were also in somewhat poorer physical health as measured by HCC scores, whereas the prevalence of SPMI was about the same for the enrolled and eligible populations.

Services Analyzed

Three measures of services utilization are included in the analyses:

- The percentage of beneficiaries with any use of a service during the months in which they met demonstration eligibility criteria (a measure of access to care);
- The average count of service use per 1,000 eligible months among the beneficiaries; and
- The average count of service use among users of the service, which is measured as utilization per 1,000 user months.

The 16 service measures analyzed include care in institutional settings (inpatient [including acute, inpatient rehabilitation, and long-term care hospital admissions]; inpatient psychiatric; inpatient nonpsychiatric; ED visits not leading to admission; ED psychiatric visits;

observation stays; SNF; and hospice) and community settings (primary care; behavioral health visits; outpatient and independent physical, speech, and occupational therapy; home health; durable medical equipment; and other hospital outpatient services).

The analyses were conducted for each of the years in the 2-year baseline period (October 1, 2011, to September 30, 2013) and for the first demonstration period (October 1, 2013, to December 31, 2014) for both the demonstration-eligible and comparison group in each of the three periods. Note that because the demonstration began mid-September 2013, this month was excluded from both the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both FFS and encounter data.

See ***Appendix B*** for additional methodological details and ***Appendix C*** for a detailed description of populations analyzed and measure definitions.

6.3 Medicare Utilization for the Demonstration-Eligible and Comparison Groups

Under the Minnesota alternative model demonstration, the State and CMS are implementing administrative changes under MSHO that are meant to better align Medicare and Medicaid processes. The demonstration does not include any changes in the benefits or services available under MSHO or MSC+. Thus, it is unlikely that the demonstration will change utilization patterns. However, the evaluation will monitor utilization to assess whether the demonstration has resulted in any negative unintended consequences in care.

Table 3 presents Medicare service utilization for the demonstration-eligible and comparison groups for the baseline and demonstration periods. Key findings include the following:

- As would be expected given the administrative focus of the Minnesota demonstration, Medicare service utilization remained relatively stable for the demonstration-eligible population over the baseline and demonstration periods, a pattern that was echoed in the comparison group.

- However, there were some changes in the *levels* of service use over time for the demonstration-eligible group, with the patterns of change generally similar for the comparison group.

- For example, the share of beneficiaries in the demonstration-eligible and comparison groups with any inpatient admissions remained at roughly 3 percent over the baseline and demonstration periods. Among those with any inpatient admissions, utilization declined for both groups, from approximately 160 admissions per 1,000 user months during baseline period to about 140 admissions during the demonstration period.

- ED use was also relatively stable for both groups over the baseline and demonstration periods, ranging from 3.2 to 4.0 percent for the demonstration-eligible group and from 3.9 to 4.6 percent for the comparison group. As with inpatient use, there was a decline in utilization for those with any ED visits, from approximately 153–165 visits per 1,000 user months during the baseline period to 140 visits during the

demonstration period for the demonstration-eligible group, and from 170 to 154 visits per 1,000 user months for the comparison group.

- Among beneficiaries in both the demonstration-eligible and comparison groups, the percentage with SNF use remained at roughly 1 to 2 percent over the baseline and demonstration periods. For those with any SNF use, utilization declined from the baseline to demonstration period for both the demonstration-eligible group (from approximately 170 to 175 visits to 147 visits per 1,000 user months) and comparison group (from approximately 155 to 160 visits to 136 visits per 1,000 user months.

- The share of beneficiaries in both the demonstration-eligible and comparison groups experienced increases in primary care visits between the first and second baseline periods, with those levels continuing into the demonstration period. Similarly, among those with any primary care use, utilization increased between the first and second baseline periods, with the increase continuing into the demonstration period for the demonstration-eligible group. For the demonstration-eligible group, utilization increased from 672 visits per 1,000 user months in baseline period 1 to 1,016 visits in the demonstration period, a level very similar to the 1,023 visits for the comparison group in the demonstration period.

  The share of beneficiaries with any behavioral health visits remained relatively stable over time in both the demonstration-eligible and comparison groups, while the level of utilization among those who used care increased. Utilization among those with any visits increased from approximately 450 to 675 visits per 1,000 users over the period for the demonstration-eligible group and from approximately 400 to 610 visits for the comparison group.

Table 3
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Number of beneficiaries	61,428	188,642	60,621	184,393	56,879	190,265
Institutional setting						
Inpatient admissions[1]						
% with use	2.5	3.2	3.3	3.4	2.9	3.3
Utilization per 1,000 user months	157.6	164.6	160.9	164.3	143.1	142.8
Utilization per 1,000 eligible months	27.5	36.0	35.7	37.6	32.4	36.4
Inpatient psychiatric						
% with use	0.1	0.1	0.1	0.1	0.1	0.1
Utilization per 1,000 user months	117.7	126.1	123.4	128.0	118.7	109.5
Utilization per 1,000 eligible months	0.6	0.6	0.8	0.6	0.9	0.7
Inpatient non-psychiatric						
% with use	2.4	3.2	3.2	3.3	2.8	3.2
Utilization per 1,000 user months	156.9	163.4	159.8	163.3	141.3	141.5
Utilization per 1,000 eligible months	26.9	35.4	34.8	36.9	31.4	35.6
Inpatient dementia[2]						
% with use	0.0	0.0	0.0	0.0	0.0	0.0
Utilization per 1,000 user months	102.6	109.5	105.5	104.7	101.0	95.3
Utilization per 1,000 eligible months	0.0	0.0	0.0	0.0	0.0	0.0
Emergency department use (non-admit)						
% with use	3.2	3.9	4.0	4.3	3.4	4.6
Utilization per 1,000 user months	153.3	166.8	165.4	170.8	140.7	154.0
Utilization per 1,000 eligible months	36.9	46.0	47.2	51.0	39.5	53.9

(continued)

Table 3 (continued)
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Emergency department use (psychiatric)						
% with use	0.1	0.1	0.1	0.1	0.1	0.1
Utilization per 1,000 user months	111.3	113.1	114.2	114.2	97.6	99.7
Utilization per 1,000 eligible months	1.2	1.3	1.5	1.4	1.3	1.6
Observation stays						
% with use	0.5	0.6	0.6	0.7	0.6	0.8
Utilization per 1,000 user months	113.7	112.7	121.2	116.2	94.4	98.8
Utilization per 1,000 eligible months	5.1	6.0	6.8	7.6	6.7	8.8
Skilled nursing facility						
% with use	1.8	1.6	2.0	1.7	1.5	1.6
Utilization per 1,000 user months	168.7	156.7	176.4	160.1	147.1	136.2
Utilization per 1,000 eligible months	19.5	17.1	22.0	18.0	16.5	17.0
Hospice						
% with use	2.5	3.1	2.6	3.0	2.5	2.9
Utilization per 1,000 user months	423.7	500.2	434.7	482.3	368.5	419.5
Utilization per 1,000 eligible months	26.3	32.4	27.1	31.2	25.3	29.6
Non-institutional setting						
Primary care E&M visits						
% with use	37.5	48.1	49.2	52.5	48.1	52.5
Utilization per 1,000 user months	671.7	907.6	942.3	1,001.6	1,016.0	1,023.2
Utilization per 1,000 eligible months	610.3	821.8	884.7	922.1	960.6	945.3

(continued)

Table 3 (continued)
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Behavioral health visits						
% with use	2.8	3.0	3.3	2.8	3.2	2.7
Utilization per 1,000 user months	446.3	394.5	580.9	452.6	674.8	609.9
Utilization per 1,000 eligible months	48.6	45.0	68.1	50.8	68.1	55.3
Outpatient therapy (PT, OT, ST)						
% with use	3.3	7.1	3.9	7.2	2.5	7.4
Utilization per 1,000 user months	2,640.0	5,094.1	2,210.0	4,859.7	2,274.3	5,227.2
Utilization per 1,000 eligible months	447.0	1,358.0	429.6	1,335.9	343.6	1,602.7
Independent therapy (PT, OT, ST)						
% with use	0.7	0.7	1.0	0.8	1.1	0.8
Utilization per 1,000 user months	1,287.2	2,107.7	1,454.0	2,130.9	1,415.6	2,147.5
Utilization per 1,000 eligible months	49.7	69.6	71.2	80.2	89.1	95.4
Home health episodes						
% with use	2.2	1.4	3.3	1.5	1.7	1.5
Utilization per 1,000 user months	489.5	197.4	720.9	213.0	394.7	207.8
Utilization per 1,000 eligible months	39.0	16.0	63.0	17.7	30.6	20.3
Durable medical equipment						
% with use	14.8	14.1	23.7	14.5	22.8	13.7
Utilization per 1,000 user months	—	—	—	—	—	—
Utilization per 1,000 eligible months	—	—	—	—	—	—

(continued)

Table 3 (continued)
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Other hospital outpatient services						
% with use	24.3	29.2	32.0	31.6	26.4	32.6
Utilization per 1,000 user months	—	—	—	—	—	—
Utilization per 1,000 eligible months	—	—	—	—	—	—

— Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

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

[2] The percent with use is under 0.05 percent and therefore rounds to 0.0 percent. Admissions for those few beneficiaries with any use are reported in the admissions per 1,000 user months measure.

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

Medicare Advantage encounter data were not fully reported by some plans until January 2012, therefore, utilization for the period September to December 2011, the first 4 months of Baseline Year 1, is underreported; thus Baseline Year 1 results are slightly lower than anticipated.

Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee for service and encounter data.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

6.4 Demonstration Enrollees vs. Nonenrollees

Highlights

- Within the demonstration-eligible population, MSHO enrollees were somewhat older, more likely to be female, and more likely to have health problems, including higher HCC scores and a greater likelihood of SPMI, than nonenrollees.
- Nonetheless, MSHO enrollees tended to use the same or lower levels of institutional care and the same or higher levels of non-institutional care as nonenrollees.
- For example, MSHO enrollees were less likely to have inpatient admissions (2.5 vs. 4.0 percent) and ED visits (2.9 vs. 4.8 percent) than nonenrollees.
- By contrast, MSHO enrollees were more likely than nonenrollees to have primary care E&M visits (48.5 vs. 46.3 percent) and, among those with a visit, more visits (1,012 vs. 878 visits per 1,000 user months).

Table 4 presents selected demographic and health characteristics of the Minnesota demonstration-eligible population by enrollment status, comparing MSHO enrollees and nonenrollees. As compared to nonenrollees, MSHO enrollees were somewhat older (35 vs. 28 percent were ages 85 and older), more likely to be female (71 vs. 64 percent), and had slightly higher HCC scores (23 vs. 18 percent with a HCC score greater than 3). MSHO enrollees were also more likely to have SPMI (26 vs. 23 percent) and to have had disability as their original reason for Medicare entitlement (9 vs. 6 percent).

Table 4
Descriptive statistics for Minnesota demonstration eligibles, by Minnesota Senior Health Options enrollment status

	Demonstration period 10/1/2013–12/31/2014	
Characteristic	**Nonenrolled**	**Enrolled**
Total beneficiaries	15,051	41,827
Age		
65 to 74	47.9	32.3
75 to 84	24.7	32.3
85 and older	27.5	35.4
Gender		
Male	36.5	29.0
Female	63.5	71.0

(continued)

Table 4 (continued)
Descriptive statistics for Minnesota demonstration eligibles, by Minnesota Senior Health Options enrollment status

Characteristic	Demonstration period 10/1/2013–12/31/2014	
	Nonenrolled	Enrolled
Race[1]		
White	84.9	81.3
African American	8.7	7.6
Hispanic	1.6	1.2
Asian/Pacific Islander	4.8	9.9
Hierarchical condition category		
<1	39.4	34.8
1<2	42.9	42.7
2<4	14.8	19.3
4+	2.8	3.2
Disability as reason for original Medicare eligibility		
No	94.0	90.8
Yes	6.0	9.2
Severe and persistent mental illness diagnosis		
No	76.7	74.3
Yes	23.3	25.7

[1] Less than 7 and 5 percent of beneficiaries did not fall in these designated race categories for the nonenrolled and enrolled groups, respectively.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

Table 5 presents Medicare service use by MSHO enrollees and nonenrollees during the demonstration period. Key findings include the following:

- In general, MSHO enrollees tended to use the same or lower levels of institutional care, and the same or higher levels of non-institutional care, as nonenrollees.
- For example, MSHO enrollees were less likely than nonenrollees to have an inpatient admission (2.5 vs. 4 percent) and, among those with an admission, to have fewer admissions per 1,000 user months (132.6 vs. 165.5).
- A similar pattern was found with ED use, with fewer MSHO enrollees having an ED visit compared nonenrollees (2.9 vs. 4.8 percent), and correspondingly fewer visits per 1,000 user months (128.8 vs. 164.0).
- By contrast, MSHO enrollees were more likely than nonenrollees to have primary care E&M visits (48.5 vs. 46.3 percent) and, among those with a visit, more visits per 1,000 user months (1,012 vs. 878).

- MSHO enrollees were less likely to have any outpatient therapy relative to nonenrollees (1.2 vs. 6.1), and much lower rates of use among those with therapy (770 vs. 3,855 visits per 1,000 user months). However, some MSHO plans may contract with health care management firms to manage therapies and, as a result, utilization data for these therapies may be underreported in these estimates.

- MSHO enrollees were more likely than nonenrollees to have Medicare home health use (1.8 vs. 1.3 percent). Among those with any home health use, there was a much higher utilization per 1,000 user months among MSHO enrollees compared to those who were not enrolled (513 vs. 138).

Table 5
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Number of beneficiaries	15,052	41,827
Institutional setting		
Inpatient admissions[1]		
% with use	4.0	2.5
Utilization per 1,000 user months	165.5	132.6
Utilization per 1,000 eligible months	44.9	28.1
Inpatient psychiatric		
% with use	0.1	0.1
Utilization per 1,000 user months	126.4	114.8
Utilization per 1,000 eligible months	1.1	0.8
Inpatient non-psychiatric		
% with use	3.9	2.4
Utilization per 1,000 user months	163.7	130.9
Utilization per 1,000 eligible months	43.9	27.3
Inpatient dementia[2]		
% with use	0.0	0.0
Utilization per 1,000 user months	87.0	94.2
Utilization per 1,000 eligible months	0.0	0.0
Emergency department use (non-admit)		
% with use	4.8	2.9
Utilization per 1,000 user months	164.0	128.8
Utilization per 1,000 eligible months	56.8	33.7

(continued)

Table 5 (continued)
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Emergency department use (psychiatric)		
% with use	0.2	0.1
Utilization per 1,000 user months	109.8	88.1
Utilization per 1,000 eligible months	2.2	1.0
Observation stays		
% with use	0.9	0.5
Utilization per 1,000 user months	106.3	88.4
Utilization per 1,000 eligible months	9.4	5.6
Skilled nursing facility		
% with use	1.6	1.4
Utilization per 1,000 user months	151.2	144.8
Utilization per 1,000 eligible months	17.8	15.5
Hospice		
% with use	2.5	2.6
Utilization per 1,000 user months	400.0	352.3
Utilization per 1,000 eligible months	25.4	25.7
Non-institutional setting		
Primary care E&M visits		
% with use	46.3	48.5
Utilization per 1,000 user months	878.1	1,012.5
Utilization per 1,000 eligible months	794.4	1,008.5
Behavioral health visits		
% with use	3.0	3.2
Utilization per 1,000 user months	605.0	695.7
Utilization per 1,000 eligible months	56.2	71.8
Outpatient therapy (PT, OT, ST)		
% with use	6.1	1.2
Utilization per 1,000 user months	3,855.4	770.4
Utilization per 1,000 eligible months	1,045.2	80.4
Independent therapy (PT, OT, ST)		
% with use	1.0	1.2
Utilization per 1,000 user months	1,724.8	1,304.4
Utilization per 1,000 eligible months	89.5	87.5

(continued)

Table 5 (continued)
Proportion and utilization of institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Home health episodes		
% with use	1.3	1.8
Utilization per 1,000 user months	138.4	513.6
Utilization per 1,000 eligible months	13.2	36.3
Durable medical equipment		
% with use	18.5	24.4
Utilization per 1,000 user months	—	—
Utilization per 1,000 eligible months	—	—
Other hospital outpatient services		
% with use	36.2	23.2
Utilization per 1,000 user months	—	—
Utilization per 1,000 eligible months	—	—

— Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

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

[2] The percent with use is under 0.05 percent and therefore rounds to 0.0 percent. Admissions for those few beneficiaries with any use are reported in the admissions per 1,000 user months measure.

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

Medicare Advantage encounter data were not fully reported by some plans until January 2012, therefore, utilization for the period September to December 2011, the first 4 months of Baseline Year 1, is underreported; thus Baseline Year 1 results are slightly lower than anticipated.

Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee for service and encounter data.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

6.5 Beneficiaries with LTSS Needs

Highlights

- Among LTSS users, the demonstration-eligible population was younger, less likely to be white, and tended to have better health (based on lower HCC scores) than the comparison group. LTSS users in the demonstration group were also less likely to have SPMI.
- As was true for the overall demonstration-eligible population, the prevalence of Medicare service utilization remained relatively stable for LTSS users among the demonstration group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group. There were, however, some declines over time in the level of service use for both groups, including declines in inpatient admissions and hospice use.
- Within the demonstration group's LTSS users, MSHO enrollees tended to use the same or lower levels of institutional care and the same levels of non-institutional care as nonenrollees.

Integrating or coordinating care for people with LTSS needs is a major objective of the State Demonstrations to Integrate Care for Dual Eligible Individuals and demonstrations under the Financial Alignment Initiative. This chapter contains information on the Minnesota LTSS system, which provides the foundation for the demonstration. Findings from the evaluation are also reported, including the characteristics of the demonstration-eligible and comparison group beneficiaries who used any LTSS and the service utilization of those who used LTSS.

Complete Medicaid FFS data on LTSS users were not available for this report, so RTI identified those with any LTSS use from CMS administrative data derived from monthly State Medicare Modernization Act data submissions that identify Medicaid beneficiaries with any institutional LTSS, any home and community-based services (HCBS), and no LTSS use.

6.5.1 Background

A substantial portion of the dually eligible population nationally has disabilities, including limitations in the activities of daily living (ADLs), such as eating, bathing, and dressing; instrumental activities of daily living, such as meal preparation and money management; or cognitive functioning, such as dementia from Alzheimer's disease. In 2010, 55 percent of Medicare-Medicaid enrollees had limitations in ADLs; one-third had three to six limitations in ADLs, and nearly one-quarter (24 percent) lived in institutions, primarily nursing facilities (Medicare Payment Advisory Commission [MedPAC] & Medicaid and Children's Health Insurance Program Payment and Access Commission [MACPAC], 2015). Nearly one-quarter had Alzheimer's disease or related dementias.

As a result of the high proportion of Medicare-Medicaid beneficiaries with disabilities, these beneficiaries have a very high use of expensive LTSS, such as nursing facilities, personal

care services, residential care facilities, and adult day care. In 2010, 21 percent of full-benefit FFS Medicare-Medicaid beneficiaries used institutional services, which accounted for half of Medicaid spending for Medicare-Medicaid enrollees; 13 percent of full-benefit FFS Medicare-Medicaid beneficiaries used Medicaid HCBS waivers, which accounted for 23 percent of Medicaid spending on Medicare-Medicaid enrollees (MedPAC and MACPAC, 2015). Thus, institutional services and Medicaid HCBS waivers accounted for nearly three-quarters of Medicaid spending on Medicare-Medicaid beneficiaries.

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

In the last 2 decades, Minnesota and a few other States have established integrated Medicare-Medicaid programs; however, in most other States, people with disabilities currently receive care in a fragmented and uncoordinated financing and service delivery system, both within and between the health and long-term care systems (Wiener, 1996). Financing for acute care is largely the responsibility of Medicare and the Federal government, whereas long-term care is principally the responsibility of Medicaid and State governments. As with the general dually eligible population, the principal problem for older and younger people with disabilities is that in States without Medicare-Medicaid integrated care, there is no organization that has financial responsibility and accountability for both acute care and LTSS; that is, no organization is responsible for managing all aspects of care for a person. Indeed, under the current system, the financial incentives are to shift costs between Medicare and Medicaid, especially for users of LTSS, where Medicaid's financial role is so large and Medicare's financial role is so small (Grabowski, Aschbrenner, Feng, & Mor, 2009).

A fragmented financing and delivery system has negative consequences for Medicare-Medicaid beneficiaries with disabilities. For example, several studies have found that users of LTSS services—such as nursing facility residents and dually eligible beneficiaries receiving Medicaid HCBS waiver services—have high levels of hospitalization and potentially avoidable hospitalizations (Walsh et al., 2012; Konetzka, Karon & Potter, 2012; Polniaszek, Walsh & Wiener, 2011).

Nationally, Medicaid funding for LTSS is tilted toward institutional services, although steady progress has been made toward a more balanced delivery system (Eiken et al., 2015). In fiscal year 2013, 40.2 percent of Medicaid LTSS expenditures for older people and younger people with physical disabilities were for HCBS, compared to 34.9 percent in fiscal year 2008. Within this special population, however, much more progress in rebalancing has occurred for younger people with physical disabilities than for older people (Brock et al., 2014). In part, this may be because of difficulties assembling a comprehensive package of services that would allow a beneficiary to remain in the community.

In Minnesota, 63 percent of Medicaid and State funded LTSS spending for older people and adults with disabilities is for HCBS, ranking it second in the country (Reinhard, Kassner, Houser, Ujvari, Mollica, & Hendrickson, 2014).

The capitated model demonstrations under the Financial Alignment Initiative are not the only efforts to apply managed care principles to LTSS. As Minnesota has done, States are increasingly turning to capitated MCOs to integrate LTSS, sometimes with Medicaid acute care services (Musumeci, 2014). In some of the Financial Alignment Initiative demonstration States, beneficiaries who choose to disenroll from the demonstration must still receive their care through a managed LTSS plan. In addition, enrollment in Medicare Advantage Dual Eligible Special Needs Plans is increasing rapidly, and has more than quintupled between 2006 and 2014 (Verdier et al., 2015).

It is hypothesized that serving Medicare-Medicaid beneficiaries with LTSS needs within a capitated environment in which one organization is accountable for both Medicare and Medicaid/acute care and LTSS will have several positive effects on service utilization, expenditures, and quality of care. In these settings, MCOs will be incentivized to serve beneficiaries in a way that produces the lowest total cost for the highest quality care. Thus, health plans will be encouraged to provide services to people receiving LTSS that address their medical as well as social and functional needs, so that inpatients admissions, readmissions, and potentially avoidable admissions will be reduced. If savings occur for acute medical services, MCOs will have the resources to expand services for LTSS. In addition, MCOs are hypothesized to work to reduce nursing facility admissions and serve people in the community, either at home or in residential care facilities (where those settings are covered in the demonstration). Thus, utilization of and expenditures for HCBS should increase and use of nursing facilities should decrease when people can be served more cost-effectively in the community. Moreover, people admitted to nursing facilities increasingly should be those with more severe functional and cognitive disabilities whom it would be difficult to serve in the community, and fewer nursing facility residents should have low-care needs. Within HCBS, MCOs should offer a broader range of (lower-cost) services than was permissible under the FFS system because MCOs are not limited to certain benefits. States in the demonstration that are not using capitation are relying on enhanced coordination to improve outcomes, but without the financial incentives to do so.

6.5.2 Organization and Delivery of LTSS

Under the Minnesota alternative model demonstration, the State and CMS are implementing administrative changes under MSHO, the State's long-running integrated Medicare-Medicaid program. These changes are intended to support the delivery of all benefits and services, including LTSS.

Minnesota's LTSS system ranks first in the nation based on measures of affordability and access, choice of setting and provider, quality of care and quality of life, support for family caregivers, and effective transitions across care settings (Reinhard, Kassner, Houser, Ujvari, Mollica, & Hendrickson, 2014). The State's LTSS system emphasizes HCBS and housing alternatives designed to keep people out of nursing facilities, through programs such as Moving Home Minnesota and the Elderly Waiver program.

Under the demonstration, MSHO enrollees rely heavily on LTSS, with about a quarter (24.2 percent) using institutional services, and almost half (45.1 percent) using HCBS under the Elderly Waiver. An additional 2.5 percent of the community population aged into MSHO and continue to use other HCBS waivers that are not part of the MSHO capitation. The remaining MSHO enrollees live in the community and do not receive HCBS waiver services, but many do rely on the State's Medicaid State Plan Personal Care Attendant services (DHS, 2015).

6.5.3 LTSS Population Characteristics

Table 6 presents selected demographic and health characteristics of the beneficiaries with any LTSS use in the demonstration-eligible and comparison groups. Among LTSS users, the demonstration-eligible group is younger than the comparison group (26 vs. 20 percent aged 65 to 74) and less likely to be white (87 vs. 89 percent). The LTSS users in the demonstration-eligible group have somewhat lower HCC scores than the comparison group (30 vs. 25 percent with scores below 1) and are less likely to have SPMI (70 vs. 78 percent).

Table 6
Descriptive statistics for Minnesota demonstration eligible, enrolled, and comparison groups, long-term services and supports users

	Demonstration period 10/1/2013–12/31/2014		
Characteristic	**Eligibles**	**Enrolled**	**Comparison**
Total beneficiaries	42,170	32,457	100,515
Age			
65 to 74	26.0	24.5	20.3
75 to 84	32.0	32.8	28.6
85 and older	42.0	42.8	51.2
Gender			
Male	28.3	26.8	28.5
Female	71.7	73.2	71.5
Race[1]			
White	86.5	85.2	88.5
African American	6.9	7.0	9.4
Hispanic	0.7	0.8	0.9
Asian/Pacific Islander	5.9	7.0	1.2

(continued)

Table 6 (continued)
Descriptive statistics for Minnesota demonstration eligible, enrolled, and comparison groups, long-term services and supports users

	Demonstration period 10/1/2013–12/31/2014		
Characteristic	**Eligibles**	**Enrolled**	**Comparison**
Hierarchical condition category			
<1	29.7	28.8	25.2
1 < 2	44.1	44.3	45.8
2 < 4	22.4	23.1	24.6
4+	3.8	3.8	4.4
Disability as reason for original Medicare eligibility			
No	89.9	89.2	89.7
Yes	10.1	10.8	10.3
Severe and persistent mental illness			
No	70.9	70.7	77.6
Yes	29.1	29.3	22.4

[1] Less than 7 and 5 percent of beneficiaries did not fall in these designated race categories for the nonenrolled and enrolled groups, respectively.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

6.5.4 Medicare Utilization for LTSS Users

Table 7 presents Medicare utilization for LTSS users in the demonstration-eligible and comparison groups over the baseline and demonstration periods. Key findings include the following:

- As was true for the overall demonstration-eligible population, the prevalence of Medicare service utilization remained relatively stable for LTSS users among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group. There were, however, some declines in the level of service use for both groups, including for inpatient admissions and hospice use.

- For example, the shares of LTSS users in the demonstration-eligible and comparison groups with inpatient admissions remained relatively stable over the baseline and demonstration periods, at roughly 3 percent for the demonstration-eligible group and 4 percent for the comparison group. Among those with any use, the number of inpatient admissions per 1,000 user months decreased for both groups.

- The share of LTSS users with any ED use was also stable over the baseline and demonstration periods for the demonstration-eligible group (3 to 4 percent) and the comparison group (4 to 5 percent). There was no clear time trend in the number of

visits among those with any ED visits for LTSS users in either the demonstration-eligible group or the comparison group.

- Although the percentage of LTSS users with any hospice use remained stable over time for both the demonstration-eligible group (at about 3 percent) and the comparison group (at roughly 5 percent), utilization per 1,000 user months among those with any hospice use declined over time for both groups.

- The percentage of demonstration-eligible group and comparison group beneficiaries using LTSS who had a primary care visit increased over the baseline periods, but remained stable from baseline period 2 to the demonstration period in the demonstration-eligible group (approximately 53 to 54 percent), as did the utilization among those with any visits (approximately 1,000 to 1,100 visits per 1,000 user months). The comparison group also exhibited little change.

Table 7
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, long-term services and supports users

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Number of beneficiaries	44,797	96,444	44,438	95,497	42,171	100,515
Institutional setting						
Inpatient admissions[1]						
% with use	2.7	4.0	3.6	4.3	3.3	4.3
Utilization per 1,000 user months	152.9	167.3	158.7	170.1	145.5	148.9
Utilization per 1,000 eligible months	29.9	43.8	39.8	47.5	37.1	47.6
Inpatient psychiatric						
% with use	0.1	0.1	0.1	0.1	0.1	0.1
Utilization per 1,000 user months	111.9	125.7	120.0	126.3	117.4	105.2
Utilization per 1,000 eligible months	0.7	0.7	1.0	0.7	1.0	0.8
Inpatient non-psychiatric						
% with use	2.6	3.9	3.6	4.2	3.2	4.2
Utilization per 1,000 user months	152.3	165.9	157.5	168.9	143.6	147.6
Utilization per 1,000 eligible months	29.2	43.1	38.8	46.7	36.1	46.7
Inpatient dementia[2]						
% with use	0.0	0.0	0.0	0.0	0.0	0.0
Utilization per 1,000 user months	102.6	110.8	105.5	103.7	101.0	96.2
Utilization per 1,000 eligible months	0.0	0.0	0.0	0.1	0.0	0.1
Emergency department use (non-admit)						
% with use	3.4	4.0	4.3	4.6	3.6	4.9
Utilization per 1,000 user months	151.1	166.2	165.0	173.6	142.0	156.6
Utilization per 1,000 eligible months	39.0	47.2	50.6	53.7	42.1	57.6

(continued)

Table 7 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, long-term services and supports users

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Emergency department use (psychiatric)						
% with use	0.1	0.1	0.2	0.1	0.1	0.2
Utilization per 1,000 user months	107.9	106.2	109.7	110.1	96.3	94.1
Utilization per 1,000 eligible months	1.3	1.4	1.7	1.5	1.4	1.7
Observation stays						
% with use	0.5	0.6	0.7	0.8	0.7	0.9
Utilization per 1,000 user months	111.3	115.0	120.4	119.6	95.0	101.7
Utilization per 1,000 eligible months	5.5	6.2	7.5	8.3	7.5	9.8
Skilled nursing facility						
% with use	2.3	2.5	2.6	2.7	1.9	2.5
Utilization per 1,000 user months	168.2	158.8	177.6	163.3	148.9	139.2
Utilization per 1,000 eligible months	24.7	26.9	28.2	28.8	21.2	26.8
Hospice						
% with use	3.1	4.9	3.3	4.9	3.3	4.8
Utilization per 1,000 user months	414.8	500.2	430.4	485.1	370.3	426.5
Utilization per 1,000 eligible months	31.7	51.2	34.1	50.9	32.9	49.1
Non-institutional setting						
Primary care E&M visits						
% with use	40.8	58.2	54.1	63.0	53.1	64.4
Utilization per 1,000 user months	713.2	1,082.4	1,019.3	1,202.4	1,109.5	1,234.5
Utilization per 1,000 eligible months	668.9	1,021.4	982.2	1,149.8	1,073.3	1,202.4

(continued)

Table 7 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, long-term services and supports users

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Behavioral health visits						
% with use	3.1	3.8	3.7	3.7	3.7	3.7
Utilization per 1,000 user months	430.8	337.4	568.5	431.2	660.0	598.1
Utilization per 1,000 eligible months	53.6	51.6	76.6	65.8	77.6	74.3
Outpatient therapy (PT, OT, ST)						
% with use	4.1	11.4	4.7	11.6	3.0	12.1
Utilization per 1,000 user months	2,775.7	5,649.2	2,311.4	5,394.2	2,411.0	5,860.7
Utilization per 1,000 eligible months	568.8	2,323.1	545.4	2,291.5	437.3	2,756.2
Independent therapy (PT, OT, ST)						
% with use	0.7	0.7	1.0	0.9	1.1	0.9
Utilization per 1,000 user months	1,279.9	2,111.9	1,499.2	2,170.2	1,466.2	2,281.0
Utilization per 1,000 eligible months	48.8	67.7	72.0	80.3	91.4	95.3
Home health episodes						
% with use	2.7	1.5	4.1	1.6	2.1	1.7
Utilization per 1,000 user months	509.4	204.4	754.6	217.2	405.8	220.4
Utilization per 1,000 eligible months	48.5	16.2	78.8	19.1	38.4	23.7
Durable medical equipment						
% with use	16.5	14.6	27.0	15.3	26.4	14.9
Utilization per 1,000 user months	—	—	—	—	—	—
Utilization per 1,000 eligible months	—	—	—	—	—	—

(continued)

Table 7 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, long-term services and supports users

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Other hospital outpatient services						
% with use	26.5	32.8	35.2	35.5	28.8	37.4
Utilization per 1,000 user months	—	—	—	—	—	—
Utilization per 1,000 eligible months	—	—	—	—	—	—

— Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

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

[2] The percent with use is under 0.05 percent and therefore rounds to 0.0 percent. Admissions for those few beneficiaries with any use are reported in the admissions per 1,000 user months measure.

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

Medicare Advantage encounter data were not fully reported by some plans until January 2012, therefore, utilization for the period September to December 2011, the first 4 months of Baseline Year 1, is underreported; thus Baseline Year 1 results are slightly lower than anticipated.

Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee for service and encounter data.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

Table 8 presents Medicare utilization for the MSHO enrollees and nonenrollees who used LTSS during the demonstration period. Key findings include the following:

- Within the demonstration-eligible population of LTSS users, MSHO enrollees tended to use the same or lower levels of institutional care and the same levels of non-institutional care as nonenrollees.
- For example, MSHO enrollees using LTSS were less likely to have an inpatient admission (2.8 vs. 4.9 percent) and, among those with an admission, fewer total admissions (135.4 vs. 167.5 admissions per 1,000 user months), than nonenrollees using LTSS.
- Similarly, MSHO enrollees using LTSS were less likely to have any ED use than nonenrollees using LTSS (3.1 vs. 5.3 percent) and, among those using the ED, a lower level of utilization (131.1 vs. 164.6 visits per 1,000 user months).
- The percentage of beneficiaries using LTSS with primary care E&M visits was similar between MSHO enrollees and nonenrollees, at roughly 53 to 54 percent. Among those with any ED visits, the number of visits per 1,000 user months was also similar for the LTSS users, at approximately 1,000 to 1,100 visits for both enrollees and nonenrollees.

Table 8
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status among long-term services and supports users

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Number of beneficiaries	9,714	32,457
Institutional setting		
Inpatient admissions[1]		
% with use	4.9	2.8
Utilization per 1,000 user months	167.5	135.4
Utilization per 1,000 eligible months	55.0	31.9
Inpatient psychiatric		
% with use	0.1	0.1
Utilization per 1,000 user months	114.1	116.6
Utilization per 1,000 eligible months	1.1	1.0
Inpatient non-psychiatric		
% with use	4.8	2.7
Utilization per 1,000 user months	166.0	133.6
Utilization per 1,000 eligible months	53.8	30.9

(continued)

Table 8 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status among long-term services and supports users

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Inpatient dementia[2]		
% with use	0.0	0.0
Utilization per 1,000 user months	87.0	94.2
Utilization per 1,000 eligible months	0.0	0.0
Emergency department use (non-admit)		
% with use	5.3	3.1
Utilization per 1,000 user months	164.6	131.1
Utilization per 1,000 eligible months	62.3	36.1
Emergency department use (psychiatric)		
% with use	0.2	0.1
Utilization per 1,000 user months	106.1	88.8
Utilization per 1,000 eligible months	2.4	1.1
Observation stays		
% with use	1.1	0.6
Utilization per 1,000 user months	105.8	89.4
Utilization per 1,000 eligible months	11.1	6.2
Skilled nursing facility		
% with use	2.3	1.8
Utilization per 1,000 user months	149.8	147.4
Utilization per 1,000 eligible months	25.0	19.5
Hospice		
% with use	3.7	3.2
Utilization per 1,000 user months	398.8	354.9
Utilization per 1,000 eligible months	37.2	32.4
Non-institutional setting		
Primary care E&M visits		
% with use	54.3	52.7
Utilization per 1,000 user months	996.0	1,090.4
Utilization per 1,000 eligible months	950.7	1,101.6
Behavioral health visits		
% with use	3.7	3.6
Utilization per 1,000 user months	606.3	677.2
Utilization per 1,000 eligible months	69.7	79.5

(continued)

Table 8 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status among long-term services and supports users

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Outpatient therapy (PT, OT, ST)		
% with use	8.5	1.4
Utilization per 1,000 user months	4,189.3	790.2
Utilization per 1,000 eligible months	1,514.6	96.6
Independent therapy (PT, OT, ST)		
% with use	1.0	1.1
Utilization per 1,000 user months	1,794.1	1,356.3
Utilization per 1,000 eligible months	95.6	89.1
Home health episodes		
% with use	1.7	2.2
Utilization per 1,000 user months	139.7	519.7
Utilization per 1,000 eligible months	17.4	44.3
Durable medical equipment		
% with use	22.3	27.8
Utilization per 1,000 user months	—	—
Utilization per 1,000 eligible months	—	—
Other hospital outpatient services		
% with use	41.5	25.3
Utilization per 1,000 user months	—	—
Utilization per 1,000 eligible months	—	—

— Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

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

[2] The percent with use is under 0.05 percent and therefore rounds to 0.0 percent. Admissions for those few beneficiaries with any use are reported in the admissions per 1,000 user months measure.

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

Medicare Advantage encounter data were not fully reported by some plans until January 2012, therefore, utilization for the period September to December 2011, the first 4 months of Baseline Year 1, is underreported; thus Baseline Year 1 results are slightly lower than anticipated.

Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee for service and encounter data.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

6.5.5 Measures on the Long-Stay Nursing Facility Population from Minimum Data Set Data Analysis

Whereas the previous results were derived from Medicare claims and encounter data, the results presented in this subsection on LTSS use are derived from the CMS Minimum Data Set, which provides information on only the nursing facility population. These analyses provide information on annual nursing facility utilization, including new long-stay nursing facility admissions and all long-stay nursing facility users. RTI defines long-stay users as those who have stayed in a nursing facility for at least 101 days.

These analyses provide indirect measures of access to care in the community based on two hypotheses. First, fewer people will need nursing facility care if they are receiving adequate medical care and HCBS. Second, those who *do* require nursing facility care should have higher levels of impairment and care needs if access to medical care and HCBS are adequate, because those with lower impairment and care needs are more likely to have those needs met through HCBS. Selected measures of nursing facility quality are used to identify whether there are any changes in nursing facility quality over the course of the demonstration.

Table 9 presents the nursing facility admission rates and characteristics of new long-stay residents at admission for the demonstration-eligible and comparison groups over the baseline and demonstration periods. Key findings include the following:

- The new long-stay nursing facility admission rate rose over time for both the demonstration-eligible and comparison groups, from 35–36 admissions per 1,000 eligibles in the baseline periods to 39 admissions in the demonstration period for the demonstration-eligible group and from 38–39 admissions per 1,000 eligibles in the baseline periods to 43 admissions in the demonstration period for the comparison group.

- The characteristics of new long-stay nursing facility residents at admission were relatively stable for both the demonstration-eligible and comparison groups over time, although the share with severe cognitive impairment decreased in the demonstration-eligible group, from 37 to 34 percent.

Table 9
Annual new long-stay nursing facility utilization and characteristics of new long-stay residents at admission, Minnesota demonstration-eligible and comparison groups

Measures of new long-stay residents at admission	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 1 10/1/2013–12/31/2014	
	Demonstration	Comparison	Demonstration	Comparison	Demonstration	Comparison
Annual nursing facility utilization						
Weighted number of beneficiaries	38,432	110,153	38,520	108,489	36,190	110,801
New long-stay nursing facility admissions per 1,000 eligibles[1]	35.6	38.6	34.7	37.8	38.7	43.2
Characteristics of new long-stay nursing facility residents at admission						
Weighted number of admitted beneficiaries	1,367	4,250	1,338	4,103	1,400	4,792
Functional status (RUG-IV ADL scale)	8.3	8.5	8.3	8.7	8.5	8.6
Percent with severe cognitive impairment[2]	36.8	41.2	37.1	42.0	34.1	41.1
Percent with SPMI[3]	5.1	5.2	4.9	5.3	5.6	5.8
Percent with low level of care need[4]	3.1	2.2	2.4	2.8	2.8	2.1

ADL = activity of daily living; RUG = Resource Utilization Group; SPMI = severe and persistent mental illness.

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

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

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

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

NOTE: Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee-for-service and encounter data. MDS analyses align with this timeline.

Table 10 presents the nursing facility admission rates and characteristics of new long-stay residents at admission for the demonstration-eligible group and MSHO enrollees during the demonstration period. Key findings include the following:

- Relative to the overall demonstration-eligible group, MSHO enrollees had a slightly lower nursing facility admission rate (31.2 vs. 38.7 admissions per 1,000 eligibles).
- There were no notable differences in the characteristics of new long-stay nursing facility residents at admission between the MSHO enrollees and the overall demonstration-eligible group.

Table 10
Annual new long-stay nursing facility utilization and characteristics of new long-term residents at admission for the Minnesota demonstration-eligible group and Minnesota Senior Health Options enrollees

	Demonstration period 1 10/1/2013–12/31/2014	
Measures of new long-stay residents at admission	**Eligible**	**Enrolled**
Annual nursing facility utilization		
Weighted number of beneficiaries	36,190	26,731
New long-stay nursing facility admissions per 1,000 eligibles[1]	38.7	31.2
Characteristics of new long-stay nursing facility residents at admission		
Weighted number of admitted beneficiaries	1,400	834
Functional status (RUG-IV ADL scale)	8.5	8.7
Percent with severe cognitive impairment[2]	34.1	33.8
Percent with SPMI[3]	5.6	6.2
Percent with low level of care need[4]	2.8	2.4

ADL = activity of daily living; RUG = Resource Utilization Group; SPMI = severe and persistent mental illness.

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

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

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

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

NOTE: Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee-for-service and encounter data. MDS analyses align with this timeline.

Table 11 presents nursing facility use and characteristics for all long-stay nursing facility users for the demonstration-eligible and comparison groups over the baseline and demonstration periods. Key findings include the following:

- The share of beneficiaries who were long-stay nursing facility users declined over time among both the demonstration-eligible and comparison groups, dropping from 28 to 25 percent for the demonstration-eligible group and from 33 to 31 percent for the comparison group.

- The characteristics of long-stay nursing facility residents were relatively stable for both the demonstration-eligible and comparison groups over time, although the share with severe cognitive impairment decreased in the demonstration-eligible group from 50 to 47 percent and in the comparison group from 57 to 55 percent.

- The quality measures for long-stay nursing facility residents were also relatively stable over time, except for the share receiving an antipsychotic medication, which dropped from 22 to 19 percent for the demonstration-eligible group and from 26 to 22 percent for the comparison group.

Table 11
Annual long-stay nursing facility utilization and characteristics and quality measures of all long-stay nursing facility residents, Minnesota demonstration-eligible and comparison groups

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 1 10/1/2013–12/31/2014	
Measures of all long-stay residents	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Annual nursing facility utilization						
Weighted number of beneficiaries	51,434	158,001	50,521	153,531	46,117	152,771
Long-stay nursing facility users as % of eligibles[1]	28.0	33.1	26.4	32.0	24.7	30.9
Characteristics of long-stay nursing facility residents						
Weighted number of long-stay beneficiaries	14,411	52,231	13,337	49,202	11,390	47,130
Functional status (RUG-IV ADL scale)	8.4	9.0	8.3	9.0	8.4	9.0
Percent with severe cognitive impairment[2]	50.3	56.9	48.5	56.1	47.2	54.9
Percent with SPMI[3]	8.2	6.2	8.7	6.5	8.6	7.0
Percent with low level of care need[4]	7.6	5.4	8.1	5.5	8.2	5.3
Quality measures for long-stay nursing facility residents						
Weighted quality measure denominator	14,409	52,223	13,337	49,200	11,388	47,129
Percent of long-stay residents who were physically restrained	1.6	1.9	1.0	1.5	0.9	1.4
Weighted quality measure denominator	13,631	50,326	12,578	47,323	10,735	45,271
Percent of long-stay residents who received an antipsychotic medication	22.4	25.5	20.7	23.4	19.1	21.9
Weighted quality measure denominator	11,445	42,051	10,549	40,097	9,204	38,969
Percent of long-stay high-risk residents with pressure ulcers	8.5	10.1	7.8	9.2	8.5	9.5

(continued)

Table 11 (continued)
Annual long-stay nursing facility utilization and characteristics and quality measures of all long-stay nursing facility residents, Minnesota demonstration-eligible and comparison groups

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 1 10/1/2013–12/31/2014	
Measures of all long-stay residents	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Percent of long-stay residents who self-report moderate to severe pain	—	—	—	—	—	—
Percent of long-stay residents experiencing one or more falls with major injury	—	—	—	—	—	—

— Not included in this year's annual report, but planned for future analyses.

ADL = activity of daily living; RUG = Resource Utilization Group; SPMI = severe and persistent mental illness.

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

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

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

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

NOTE: Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee-for-service and encounter data. MDS analyses align with this timeline.

Table 12 presents nursing facility use and characteristics of all long-stay residents for the demonstration-eligible group and MSHO enrollees during the demonstration period. Key findings include the following:

- There were no differences between overall demonstration eligibles and MSHO enrollees for the measures of all long-stay residents.
- For example, the percentage of long-stay users was nearly identical; 24.5 percent among beneficiaries who were enrolled, and 24.7 among those who were eligible.

Table 12
Annual nursing facility utilization and characteristics and quality measures of long-stay nursing facility residents for the Minnesota demonstration-eligible and Minnesota Senior Health Options enrolled groups

	Demonstration period 1 10/1/2013–12/31/2014	
Measures of all long-stay residents	**Eligible**	**Enrolled**
Annual nursing facility utilization		
Weighted number of beneficiaries	46,117	34,675
Long-stay nursing facility users as % of eligibles[1]	24.7	24.5
Characteristics of long-stay nursing facility residents		
Weighted number of long-stay beneficiaries	11,390	8,501
Functional status (RUG-IV ADL scale)	8.4	8.6
Percent with severe cognitive impairment[2]	47.2	48.7
Percent with SPMI[3]	8.6	8.9
Percent with low level of care need[4]	8.2	8.1
Quality measures for long-stay nursing facility residents		
Weighted quality measure denominator	11,388	8,500
Percent of long-stay residents who were physically restrained	0.9	1.0
Weighted quality measure denominator	10,735	7,988
Percent of long-stay residents who received an antipsychotic medication	19.1	19.1
Weighted quality measure denominator	9,204	6,952
Percent of long-stay high-risk residents with pressure ulcers	8.5	8.2
Percent of long-stay residents who self-report moderate to severe pain	—	—
Percent of long-stay residents experiencing one or more falls with major injury	—	—

— Not included in this year's annual report, but planned for future analyses.

ADL = activity of daily living; RUG = Resource Utilization Group; SPMI = severe and persistent mental illness.

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

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

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

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

NOTE: Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee-for-service and encounter data. MDS analyses align with this timeline.

6.6 Beneficiaries with Behavioral Health Care Needs

Highlights

- About 26 percent (10,735) of all MSHO enrollees had SPMI.
- Beneficiaries with SPMI in the demonstration-eligible and comparison groups were generally similar in terms of demographic characteristics and health.
- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with SPMI within the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group. One exception, however, was the share of SPMI beneficiaries with a behavioral health visit, which declined over time for both the demonstration-eligible and comparison groups.
- Also, as was true for the overall demonstration-eligible group, there were some declines over time in the *level* of service use for beneficiaries with SPMI in both the demonstration-eligible and comparison groups, including declines for inpatient admissions and ED use. By contrast, however, the level of service use increased for behavioral health visits among SPMI beneficiaries for both the demonstration-eligible and comparison groups.
- Within the demonstration-eligible group of beneficiaries with SPMI, MSHO enrollees were less likely to use most types of care than nonenrollees, including inpatient admissions and ED visits.

Integrating or coordinating care for people with behavioral health disorders is a major objective of the demonstrations under the Financial Alignment Initiative. This chapter includes information about the prevalence of behavioral health disorders among Medicare-Medicaid beneficiaries nationwide and in Minnesota. Findings from the evaluation are also reported, including information about the coordination of care across the medical and behavioral health systems in Minnesota, the characteristics of the demonstration eligible population with SPMI, and the medical and behavioral health service utilization and quality for the subset of demonstration-eligible population with SPMI in Minnesota. In the quantitative analyses reported in tables below, the subpopulation with SPMI are those with any behavioral health service use for an SPMI as identified in Medicare claims data in the last 2 years.

6.6.1 Background

Behavioral health disorders (e.g., serious mental illnesses and/or substance use disorders) are highly prevalent among Medicare-Medicaid enrollees. An estimated 9 million of these beneficiaries live in United States today, a group composed of low-income seniors and under-65 adults with disabilities, many of whom have complex physical and mental health disorders (Congressional Budget Office [CBO], 2013). It has been widely documented that Medicare-Medicaid enrollees generate greater health care costs than those with Medicare only, and research has documented that Medicare-Medicaid enrollees with behavioral health disorders

have greater health care expenditures than Medicare-Medicaid enrollees without such disorders (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014; Kasper et al., 2010). Despite the obvious need to provide behavioral health care to Medicare-Medicaid enrollees, the demand for these services remains unmet in various parts of the country, especially in States with large portions of populations in rural areas (SAMHSA, 2012).

In 2014, behavioral health treatment expenditures totaled $220 billion. In terms of all national health care spending, mental health treatment expenditures accounted for 6.4 percent and substance use disorder treatment expenditures accounted for 1.2 percent. From 2009–2014, nationwide spending growth for mental health (5.1 percent) and substance use disorder treatment (6.2 percent) outpaced all health spending growth (4.3 percent) (Mark et al., 2015).

Medicare-Medicaid enrollees often have co-occurring physical and behavioral health illnesses, and their needs are often greater than Medicare-Medicaid enrollees with only physical conditions. In 2003, almost 40 percent of Medicare-Medicaid enrollees had both a physical and mental illness, compared to only 17 percent of all other Medicare beneficiaries (Kasper et al, 2010). Medicare-Medicaid enrollees with co-occurring physical and behavioral conditions were found to utilize a greater amount of inpatient hospital, nursing facility, and community-based long term care services than those with only a physical condition (Kasper et al., 2010). A greater prevalence of co-occurring physical and behavioral conditions has also been documented in older Medicare-Medicaid enrollees (aged 65 and older) than those aged 18–64 (CBO, 2013; Kasper et al., 2010). Given their greater use of services, Medicare-Medicaid enrollees with co-occurring conditions have been found to generate greater health care costs than Medicare-Medicaid enrollees without co-occurring conditions (CBO, 2013; Kasper et al., 2010; SAMHSA, 2014).

Among Medicare-Medicaid enrollees aged 65 and older, 20 percent are estimated to have dementia (Washington State Department of Social and Health Services [DSHS], 2011), which has been documented as a significant driver for health care costs (Schaller et al., 2015). Additionally, 20 percent of Medicare-Medicaid enrollees aged 18–64 were identified as having substance use disorders (DSHS, 2011).

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

Although not specifically targeted at people with behavioral health needs, the administrative changes being introduced under the demonstration are intended to support the delivery of benefits and services under MSHO to all beneficiaries. As reported in Table 1, one-quarter of the demonstration target population in Minnesota and 26 percent of the MSHO enrollees have a SPMI diagnosis.

6.6.3 SPMI Population Characteristics

Table 13 presents selected demographic and health characteristics for beneficiaries with an SPMI diagnosis in the demonstration-eligible and comparison groups. Among those with SPMI, the demonstration-eligible and comparison groups were generally similar, with only small differences across the measures. For example, 73 percent of the demonstration-eligible group was female, as compared to 70 percent of the comparison group. The demonstration-eligible

group was also more likely to be white (88 vs. 85 percent), more likely to be Asian/Pacific Islander (5.2 vs. 1.9 percent) and less likely to be African American (6.1 vs. 11.0 percent).

Within the demonstration-eligible group, MSHO enrollees were more likely to be older (28 vs. 26 percent aged 85 or older) and female (74 vs. 73 percent). The enrollees were also more likely to have originally qualified for Medicare due to a disability (13 vs. 12 percent) and to have somewhat higher HCC scores than the eligible group as a whole.

Table 13
Descriptive statistics for Minnesota demonstration eligible, enrolled, and comparison groups, beneficiaries with severe and persistent mental illness

	Demonstration period 10/1/2013–12/31/2014		
Characteristic	**Eligibles**	**Enrolled**	**Comparison**
Total beneficiaries	14,241	10,735	36,480
Age			
65 to 74	42.9	39.7	43.5
75 to 84	30.7	32.4	28.7
85 and older	26.4	27.9	27.8
Gender			
Male	27.5	26.0	29.8
Female	72.5	74.0	70.2
Race[1]			
White	87.9	87.2	85.2
African American	6.1	5.9	11.0
Hispanic	0.9	0.8	2.0
Asian/Pacific Islander	5.2	6.1	1.9
Hierarchical condition category			
<1	19.6	18.4	18.3
1 < 2	48.3	47.9	48.6
2 < 4	26.9	28.6	27.5
4+	5.2	5.0	5.6
Disability as reason for original Medicare eligibility			
No	87.7	86.6	87.8
Yes	12.3	13.4	12.2

[1] Less than 4 percent of beneficiaries did not fall in these designated race categories for the nonenrolled and enrolled groups, respectively.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

6.6.4 Medicare Utilization of SPMI Beneficiaries

Table 14 presents Medicare utilization for beneficiaries diagnosed with an SPMI within the demonstration-eligible and comparison groups for the baseline and demonstration periods. Key findings include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with SPMI among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group. One exception, however, was the share of SPMI beneficiaries with a behavioral health visit, which declined over time for both the demonstration-eligible and comparison groups.

- As was also true for the overall demonstration-eligible group, there were some declines over time in the level of service use for beneficiaries with SPMI in both the demonstration-eligible and comparison groups, including declines for inpatient admissions and ED use. By contrast, however, the level of service use increased for behavioral health visits among SPMI beneficiaries for both the demonstration-eligible and comparison groups.

- The share of SPMI beneficiaries with an inpatient admission remained relatively stable for the demonstration-eligible and comparison groups over the baseline and demonstration periods. However, among those with any inpatient use, there was a reduction in inpatient visits per 1,000 user months in both groups—from about 165 to 152 for the demonstration-eligible group and from about 180 to 152 for the comparison group.

- Inpatient psychiatric admissions remained low (0.3 percent) for SPMI beneficiaries in both the demonstration-eligible and comparison group over the baseline and demonstration periods.

- The share of SPMI beneficiaries with an emergency department visit remained at roughly 4 to 5 percent for the demonstration-eligible group and 5 to 6 percent for the comparison group over the baseline and demonstration periods. However, among beneficiaries with any emergency department use, there was a reduction in visits per 1,000 user months for both the demonstration-eligible and comparison groups—from roughly 170 to 180 in the baseline period to 157 for the demonstration-eligible group, and from about 190 to 176 for the comparison group.

- The patterns of emergency department use for psychiatric care was similar for SPMI beneficiaries, with the share reporting any use stable over the baseline and demonstration periods while the level of use among those with any use dropped over time for both the demonstration-eligible and comparison groups.

- Primary care E&M visits increased between baseline 1 and baseline 2 for SPMI beneficiaries in both the demonstration-eligible and comparison groups, and remained higher in the demonstration period. Utilization per 1,000 user months also increased

over the period—from 845 to about 1300 for the demonstration-eligible group and from about 1,200 to 1,360 for the comparison group.

- By contrast, the share of SPMI beneficiaries with a behavioral health visit has been declining over time, from 11 to 9 percent for the demonstration-eligible group and from 13 to 10 percent for the comparison group. However, at the same time utilization per 1,000 user months has been increasing, rising from 475 to 708 for the demonstration-eligible group and 462 to 693 for the comparison group.

Table 14
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, beneficiaries with severe and persistent mental illness

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Number of beneficiaries	10,739	26,689	13,356	30,334	14,242	36,480
Institutional setting						
Inpatient admissions[1]						
% with use	3.8	4.9	4.5	4.9	3.8	4.5
Utilization per 1,000 user months	165.4	178.7	164.2	177.1	151.8	152.2
Utilization per 1,000 eligible months	42.5	56.2	49.4	55.4	43.9	50.5
Inpatient psychiatric						
% with use	0.3	0.4	0.3	0.4	0.3	0.3
Utilization per 1,000 user months	119.4	127.3	124.5	129.7	120.3	110.7
Utilization per 1,000 eligible months	2.9	4.2	3.4	3.8	3.3	3.7
Inpatient non-psychiatric						
% with use	3.5	4.6	4.2	4.6	3.6	4.2
Utilization per 1,000 user months	163.7	173.5	161.0	173.2	146.7	147.5
Utilization per 1,000 eligible months	39.5	51.9	45.8	51.6	40.6	46.7
Inpatient dementia[2]						
% with use	0.0	0.0	0.0	0.0	0.0	0.0
Utilization per 1,000 user months	102.3	101.7	114.8	98.1	113.2	96.9
Utilization per 1,000 eligible months	0.1	0.1	0.1	0.1	0.1	0.1
Emergency department use (non-admit)						
% with use	4.2	5.4	5.1	5.8	4.3	5.8
Utilization per 1,000 user months	172.0	193.7	181.5	192.4	157.2	176.9
Utilization per 1,000 eligible months	51.2	67.3	61.2	70.0	51.9	70.8

(continued)

Table 14 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, beneficiaries with severe and persistent mental illness

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Emergency department use (psychiatric)						
% with use	0.3	0.3	0.3	0.3	0.3	0.3
Utilization per 1,000 user months	117.0	120.6	119.3	121.4	102.9	108.8
Utilization per 1,000 eligible months	3.2	3.6	3.3	3.6	2.9	3.8
Observation stays						
% with use	0.7	0.8	0.8	1.0	0.8	1.1
Utilization per 1,000 user months	117.6	116.1	124.3	118.9	96.8	102.6
Utilization per 1,000 eligible months	7.3	8.6	9.0	10.6	8.7	11.4
Skilled nursing facility						
% with use	2.4	2.5	2.6	2.5	2.0	2.4
Utilization per 1,000 user months	166.9	156.6	173.4	159.8	142.6	137.9
Utilization per 1,000 eligible months	26.6	27.7	29.0	27.1	21.4	26.4
Hospice						
% with use	2.5	3.0	2.8	2.7	2.9	3.0
Utilization per 1,000 user months	390.4	465.0	416.0	433.1	363.6	386.1
Utilization per 1,000 eligible months	25.7	31.0	29.0	28.3	28.7	30.1
Non-institutional setting						
Primary care E&M visits						
% with use	46.9	60.2	59.8	65.7	59.4	65.0
Utilization per 1,000 user months	845.2	1,179.0	1,185.2	1,339.0	1,298.5	1,360.7
Utilization per 1,000 eligible months	816.7	1,139.2	1,163.5	1,304.1	1,277.5	1,307.5

(continued)

Table 14 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, beneficiaries with severe and persistent mental illness

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Behavioral health visits						
% with use	11.0	13.2	10.4	11.0	9.3	9.8
Utilization per 1,000 user months	475.1	462.1	574.3	511.6	708.0	692.7
Utilization per 1,000 eligible months	188.9	203.1	200.0	205.8	192.7	199.2
Outpatient therapy (PT, OT, ST)						
% with use	5.4	11.0	5.6	10.7	3.4	10.8
Utilization per 1,000 user months	3,083.5	5,728.5	2,502.0	5,384.2	2,370.9	5,908.1
Utilization per 1,000 eligible months	781.9	2,216.1	677.2	2,067.5	472.1	2,457.2
Independent therapy (PT, OT, ST)						
% with use	1.0	1.1	1.2	1.1	1.4	1.0
Utilization per 1,000 user months	1,448.4	2,198.6	1,413.4	2,130.0	1,470.3	2,181.4
Utilization per 1,000 eligible months	71.0	102.0	84.3	100.9	111.5	108.5
Home health episodes						
% with use	2.7	1.9	4.1	2.1	2.1	2.2
Utilization per 1,000 user months	441.6	202.8	687.4	226.0	411.0	218.7
Utilization per 1,000 eligible months	45.5	20.7	74.7	22.9	39.3	24.2
Durable medical equipment						
% with use	16.5	15.6	27.0	16.9	26.4	16.3
Utilization per 1,000 user months	—	—	—	—	—	—
Utilization per 1,000 eligible months	—	—	—	—	—	—

(continued)

Table 14 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible and comparison groups, beneficiaries with severe and persistent mental illness

	Baseline period 1 10/1/2011–9/30/2012		Baseline period 2 10/1/2012–9/30/2013		Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
Other hospital outpatient services						
% with use	26.5	32.9	35.2	36.0	28.8	37.1
Utilization per 1,000 user months	—	—	—	—	—	—
Utilization per 1,000 eligible months	—	—	—	—	—	—

— Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

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

[2] The percent with use is under 0.05 percent and therefore rounds to 0.0 percent. Admissions for those few beneficiaries with any use are reported in the admissions per 1,000 user months measure.

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

Medicare Advantage encounter data were not fully reported by some plans until January 2012, therefore, utilization for the period September to December 2011, the first 4 months of Baseline Year 1, is underreported; thus Baseline Year 1 results are slightly lower than anticipated.

Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee-for-service and encounter data.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

Table 15 presents Medicare utilization for MSHO enrollees and nonenrollees diagnosed with an SPMI for the demonstration period. Key findings include the following:

- In general, MSHO enrollees with SPMI were less likely to use the different types of care than nonenrollees with SPMI.
- For example, MSHO enrollees with SPMI were less likely than nonenrollees with SPMI to have had any inpatient utilization (3.3 vs. 5.6 percent) and those with any inpatient use had fewer admissions (141 vs. 177 stays per 1,000 user months).
- Inpatient psychiatric admissions were rare among both MSHO enrollees and nonenrollees with SPMI (0.3 to 0.4 percent); however, among those with an inpatient psychiatric admission, MSHO enrollees had fewer stays than nonenrollees (117 vs. 129 stays per 1,000 user months).
- Among the SPMI beneficiaries, MSHO enrollees were less likely to have an ED visit (3.7 vs. 6.4 percent) and, among those with an ED visit, had less ED use (143 vs. 184 visits per 1,000 user months).
- Psychiatric ED visits were rare among both MSHO enrollees and nonenrollees with SPMI (0.2 to 0.4 visits) and, among those with a psychiatric ED visit, the level of use was lower (91 vs. 119 visits per 1,000 user months).
- Among the SPMI beneficiaries, MSHO enrollees and nonenrollees were equally likely to have primary care E&M visits (approximately 59 percent); however, among those who had a visit, MSHO enrollees had somewhat higher levels of use (1,300 vs. 1,100 visits per 1,000 user months).

Table 15
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status among beneficiaries with severe and persistent mental illness

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Number of beneficiaries	3,507	10,735
Institutional setting		
Inpatient admissions[1]		
% with use	5.6	3.3
Utilization per 1,000 user months	177.1	140.5
Utilization per 1,000 eligible months	63.6	37.8
Inpatient psychiatric		
% with use	0.4	0.3
Utilization per 1,000 user months	128.5	116.9
Utilization per 1,000 eligible months	4.2	3.0

(continued)

Table 15 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status among beneficiaries with severe and persistent mental illness

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Inpatient non-psychiatric		
% with use	5.2	3.1
Utilization per 1,000 user months	172.4	135.6
Utilization per 1,000 eligible months	59.4	34.7
Inpatient dementia[2]		
% with use	0.0	0.0
Utilization per 1,000 user months	66.7	95.9
Utilization per 1,000 eligible months	0.0	0.1
Emergency department use (non-admit)		
% with use	6.4	3.7
Utilization per 1,000 user months	183.8	143.1
Utilization per 1,000 eligible months	78.0	43.6
Emergency department use (psychiatric)		
% with use	0.4	0.2
Utilization per 1,000 user months	119.3	91.1
Utilization per 1,000 eligible months	4.7	2.2
Observation stays		
% with use	1.3	0.7
Utilization per 1,000 user months	108.4	90.9
Utilization per 1,000 eligible months	13.1	7.1
Skilled nursing facility		
% with use	2.4	1.8
Utilization per 1,000 user months	151.9	139.0
Utilization per 1,000 eligible months	26.5	19.4
Hospice		
% with use	2.6	2.9
Utilization per 1,000 user months	383.1	349.8
Utilization per 1,000 eligible months	26.6	29.6
Non-institutional setting		
Primary care E&M visits		
% with use	58.7	59.5
Utilization per 1,000 user months	1,102.4	1,296.5
Utilization per 1,000 eligible months	1,070.0	1,336.9
Behavioral health visits		
% with use	9.5	9.2
Utilization per 1,000 user months	668.2	715.4
Utilization per 1,000 eligible months	181.6	195.8

(continued)

Table 15 (continued)
Proportion and utilization for institutional and non-institutional services for the Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status among beneficiaries with severe and persistent mental illness

	Demonstration period 10/1/2013–12/31/2014	
Measures by setting	**Nonenrolled**	**Enrolled**
Outpatient therapy (PT, OT, ST)		
% with use	9.0	1.6
Utilization per 1,000 user months	4,045.6	802.8
Utilization per 1,000 eligible months	1,553.3	109.2
Independent therapy (PT, OT, ST)		
% with use	1.2	1.5
Utilization per 1,000 user months	1,928.5	1,358.0
Utilization per 1,000 eligible months	109.9	110.8
Home health episodes		
% with use	1.7	2.3
Utilization per 1,000 user months	149.6	523.1
Utilization per 1,000 eligible months	17.5	45.9
Durable medical equipment		
% with use	22.4	29.0
Utilization per 1,000 user months	—	—
Utilization per 1,000 eligible months	—	—
Other hospital outpatient services		
% with use	43.4	26.6
Utilization per 1,000 user months	—	—
Utilization per 1,000 eligible months	—	—

— Durable medical equipment and other outpatient services are defined as having any of those services during the eligible month.

E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

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

[2] The percent with use is under 0.05 percent and therefore rounds to 0.0 percent. Admissions for those few beneficiaries with any use are reported in the admissions per 1,000 user months measure.

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

Medicare Advantage encounter data were not fully reported by some plans until January 2012, therefore, utilization for the period September to December 2011, the first 4 months of Baseline Year 1, is underreported; thus Baseline Year 1 results are slightly lower than anticipated.

Given that the demonstration started in mid-September 2013, September 2013 was excluded from the baseline and demonstration periods because evaluation measures could not be created simultaneously in the same month using both fee-for-service and encounter data.

SOURCE: RTI Analysis of Medicare Encounters and Claims.

6.7 Medicare Utilization for Subgroups Based on Selected Demographic Characteristics, Geography, and Health Measures

This section presents results on Medicare service utilization from subgroup analyses on age, gender, race, disability, Alzheimer's and other dementias, HCC score, and death. ***Tables A.1-1*** to ***A.1-8*** in ***Appendix 1*** provide the detailed results from which this narrative text was derived for the demonstration-eligible and comparison groups over the baseline and demonstration periods. Generally, aside from the differences described for each subgroup, there were no other notable differences across the subgroups.

6.7.1 Age Groups

Age has been categorized as 65 to 74, 75 to 84, and 85 and older. Key findings include the following:

- As was true for the overall demonstration-eligible population, the prevalence of Medicare service utilization remained relatively stable for beneficiaries across the different age groups among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- In the demonstration-eligible group, there was a negative trend between older age and percentage of any inpatient admission, also corresponding to slightly lower utilization. For example, during the demonstration period, 2.9 to 3.0 percent of beneficiaries aged 65–74 and 75–84 had any inpatient use, compared to 2.7 percent of those 85 and older. This corresponded to a utilization rate per 1,000 user months of 151.6 (age 65–74), 142.9 (age 75–84), and 133.5 (age 85 and older). A similar trend was found in the comparison group, with a smaller difference in utilization rate between those aged 65–74 and 75–84.

- A similar trend was found for ED use. For example, in the demonstration-eligible group during the demonstration period, the percentage and utilization per 1,000 user months among beneficiaries aged 65–74 was 3.9 percent and 152.3, respectively, compared with 3.3 percent and 133.8 among those aged 74–85, and 2.9 and 131.8 among those aged 85 and older. These patterns were also reflected in the comparison group.

- Unlike inpatient admission and ED use, the percent with any hospice use was positively associated with older age. During the demonstration period, this increased from 0.8 for those aged 65–74 to 2.0 for those aged 75–84, and to 5.0 for those aged 85 and older. However, the utilization rate was similar for all age groups, ranging from approximately 350 to 370 per 1,000 user months. Although the comparison group demonstrated a similar trend in percent with any hospice use, older age was associated with a higher utilization rate.

- There was a slightly positive trend for a higher percentage of primary care E&M visits with older age, but this did not vary widely among age groups.

6.7.2 Gender

Key findings by gender include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for male and female beneficiaries among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- Men had a higher percentage of inpatient admissions compared to women during the demonstration period (3.2 vs. 2.7 percent), corresponding to a slightly higher utilization per 1,000 user months among those with any use (151.0 vs. 139.4). This trend held across all time periods and was also reflected in the comparison group.

- Similarly, men had a higher percentage of any ED use during the demonstration period (3.6 vs. 3.3 percent) and utilization per 1,000 user months (150.8 vs. 136.2) compared to women. This pattern was also observed during the baseline period and in the comparison group.

- In contrast with inpatient admissions and ED use, women had a higher percentage with any hospice use in the demonstration-eligible group. During the demonstration period, 2.7 percent of women had any use, corresponding to a utilization rate per 1,000 user months of 375.9, compared to 2.0 percent of men with any use, with a utilization of 347.5. Similar trends were observed for all time periods and in the comparison group.

- The percentage of primary care E&M visits in the demonstration-eligible group during the demonstration period was slightly higher in women compared to men, but the utilization rate among those with any visits was nearly identical between both groups.

6.7.3 Race

"Race" was categorized as White, African American, Hispanic, and Asian/Pacific Islander. Key findings include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries in different race categories among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- The percentage of beneficiaries with any inpatient admissions was generally higher among White and African American beneficiaries (both 3.0 percent during the demonstration period) compared to Hispanic and Asian beneficiaries (2.3 and 2.0 percent, respectively). Whites and African Americans also had slightly higher utilization per 1,000 months among users (140–145 admissions vs. 125–130 admissions). The comparison group demonstrated a similar trend.

- For the demonstration-eligible group during the demonstration period, ED use was generally highest among African American beneficiaries (4.9 percent) and lowest among Asian beneficiaries (2.0 percent), relative to White and Hispanic beneficiaries (3.4 and 3.7 percent, respectively). Among those with any use, beneficiaries had similar utilization (approximately 140 visits per 1,000 user months) except for Asian beneficiaries, which were lower (approximately 105 visits). These patterns held for the baseline period and comparison group.

- The percentage of beneficiaries with any SNF use in the demonstration period was consistently higher among White beneficiaries (1.8 percent) compared to African American, Hispanic, and Asian beneficiaries (0.2 to 0.6 percent). Whites with any use also had slightly higher utilization. The percent with any use was reflected in the baseline and comparison groups; utilization patterns were less consistent in the comparison group.

- White beneficiaries also had the highest percentage of any hospice use, although race was not associated with any trends in utilization among users. The comparison group demonstrated similar associations.

- In the demonstration-eligible group during the demonstration period, White beneficiaries had the highest percentage with primary care E&M visits (50.1 percent), followed by African American (47.6 percent), Hispanic (41.7 percent), and Asian beneficiaries (35.6 percent). This trend held for utilization per 1,000 months in the Hispanic and Asian groups, but there were few differences between Whites and African Americans.

6.7.4 Urban/Rural Status

Using Rural-Urban Continuum Codes, counties with a population totaling 20,000 or more people were defined as urban, and counties with less than 20,000 people were defined as rural. Key findings include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries in urban and rural areas among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- There were no clear differences by urban/rural status for percent of beneficiaries with any inpatient admissions, which was generally around 3 percent for all time periods. Utilization per 1,000 user months declined slightly from baseline to the demonstration period (from approximately 160 to approximately 140 admissions), and did not differ by urban/rural status or for the comparison group.

- ED use was slightly higher among rural beneficiaries (range of 3.7 to 4.8 percent for all time periods) compared to urban beneficiaries (3.0 to 3.8 percent) in the demonstration-eligible group, with a similar pattern in the comparison group. Rural users also had slightly higher utilization in the demonstration-eligible group only.

- The percentage of beneficiaries with any SNF use remained stable across all time periods, but was slightly higher among rural beneficiaries (2.1 to 2.6 percent) compared to urban beneficiaries (1.3 to 1.8 percent) in the demonstration period. This pattern was less consistent in the comparison group, and did not hold for utilization among those with any use.

- The percentage of beneficiaries with any hospice was also stable across all time periods, but was instead higher among urban beneficiaries (2.6 to 2.8 percent) compared to rural beneficiaries (2.0 to 2.3 percent). Among those with any hospice use, utilization per 1,000 user months declined from approximately 435–450 to 380 for urban beneficiaries, and from 380 to 330 for rural beneficiaries.

- Urban beneficiaries had a slightly higher percentage of primary care E&M visits compared to rural beneficiaries (49 vs. 45 percent), with a higher utilization among those with any use (approximately 1,080 to 830 visits per 1,000 months).

6.7.5 Disability Status

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

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with a disability among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- Among those in the demonstration-eligible group, the percentage of beneficiaries with a disability who had any inpatient admission was approximately 3 to 4 percent for all time periods, with utilization ranging from 150 to 165 admissions per 1,000 user months. The comparison group had a similar trend.

- There were no clear patterns of any ED use and utilization per 1,000 user months for the demonstration-eligible and comparison groups over time, nor any changes between baseline period 2 and the demonstration-eligible group in primary care E&M visit.

6.7.6 Alzheimer's and Other Dementias Diagnosis

Alzheimer's and other dementias were defined using diagnosis codes from inpatient and outpatient claims data. Key findings include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with Alzheimer's and other dementias among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- Among the demonstration-eligible group, adults with other dementias tend to be more likely to use inpatient and ED care and, among those using that care, to use higher levels of care per 1,000 user months than adults with Alzheimer's. That pattern is similar for the comparison group.

- By contrast, Alzheimer's patients in both the demonstration-eligible and comparison groups are more likely to use hospice care and, among those using that care, to use higher levels of care per 1,000 user months than adults with other dementias.

6.7.7 Hierarchical Condition Category

Beneficiaries were categorized into four groups: those with HCC scores less than 1, 1 < 2, 2 < 4, and 4 or greater. Key findings include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with different HCC scores among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- Among the demonstration-eligible group, adults with higher HCC scores are more likely to use care and, among those using care, to use higher levels of care per 1,000 user months. That pattern is similar for the comparison group.

6.7.8 Death

Those who died were categorized as having died during the year of observation. Key findings include the following:

- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries that died and did not die over the year among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the beneficiaries in the comparison group.

- Among the demonstration-eligible group, adults who died during the year tended to be more likely to use care (including inpatient admissions and ED visits) and, among those using care, to use higher levels of care per 1,000 user months than adults who did not die during the year. That pattern is similar for the comparison group.

6.8 Minimum Data Set Results by Demographic Characteristics and Geography

The following section provides descriptive statistics on nursing facility use stratified by gender, race, age group, and rural status. Subgroup definitions are consistent with those used for the Medicare service utilization results. To address small sample size, cells with fewer than 30 weighted subjects are not presented. Measures with fewer than two special populations of sufficient sample size are also excluded. ***Tables A.2-1*** to ***A.2-15*** in ***Appendix 2*** provide the associated detailed results.

6.8.1 Age Groups

The age groups were characterized as those aged 65–74, 75–84, and those aged 85 and older. Key findings include the following:

- For all time periods, older age was associated with a higher admission rate. In the demonstration-eligible group during the demonstration period, there were 18.5 admissions per 1,000 eligibles among those aged 65–74, 36.3 admissions for those aged 75–84, and 79.3 admissions among those aged 85 and older.

- A similar trend was found for the percentage of long-stay users, which also declined from the baseline to the demonstration period, dropping from 10.9 to 10.0 percent in those aged 65–74, from 24.5 to 21.0 percent in those aged 75–84, and from 49.3 to 45.8 percent in those aged 85 and older. These trends held true for the comparison group as well.

- In the Minnesota demonstration-eligible group, the percent of beneficiaries with severe cognitive impairment increased with age. Among all long-stay residents, this measure decreased between the baseline and demonstration periods, from 29.5 to 26.7 percent in those aged 65–74, from 44.7 to 42.2 percent in those aged 75–84, and from 57.6 to 54.8 percent in those aged 85 and older. The comparison group had a similar time trend and decrease over time.

- The percent of residents receiving antipsychotic medications was notably lower among residents aged 85 and older. For example, among all long-stay residents during the demonstration period, 16.1 percent of those aged 85 and older received antipsychotics, compared to 25.5 percent in those aged 65–74, and 22.7 percent in those aged 75–84. A similar trend held in the comparison group.

6.8.2 Gender

Key findings by gender include the following:

- In the demonstration-eligible group, women consistently had a higher admission rate compared to men for all time periods, ranging from approximately 4–6 admissions per 1,000 eligibles higher. For example, from the baseline to demonstration period, the admission rate for men increased from 32.9 admissions per 1,000 eligibles to 35.8 admissions; among women, this increased from 36.8 to 40.0 admissions. A similar pattern held for beneficiaries in the comparison group.

- In both the Minnesota demonstration-eligible and comparison groups, there was a decrease in the percentage of long-stay nursing facility users across both genders. In the demonstration-eligible group, the percentage of male long-stay users decreased from 24.9 to 21.7 percent, and the percentage of female long-stay users decreased from 29.3 to 26.0 percent. There was a similar decrease among the comparison group. Among beneficiaries who were enrolled, the percentage of long-stay users was also higher for women (25.9 percent) than for men (21.0 percent).

- In the demonstration-eligible group, among all long-stay and newly admitted residents, women consistently had worse functional status, a higher percentage of severe cognitive impairment, and a lower percentage of low level of care need compared to men across all time periods. For example, among all-stay residents during the demonstration period, compared to men, women had: worse functional status (mean of 8.5 vs. 8.1), higher cognitive impairment (48.4 vs. 44.0 percent), and a lower percent of low level of care need (7.9 vs. 9.0 percent). A similar pattern held for beneficiaries who were enrolled or in the comparison group.

- The percentage of long-stay residents who received an antipsychotic medication decreased from the baseline to demonstration period across both genders in the demonstration-eligible and comparison groups. Among Minnesota demonstration-eligible men, the percent declined from 24.3 to 20.3 percent; among women, there was a decline from 21.7 to 18.6 percent. Although there was not a consistent pattern over time, a slightly higher percentage of a high-risk male residents had pressure ulcers compared to female residents.

6.8.3 Race

Race was categorized as White, African American, Hispanic, and Asian/Pacific Islander. Key findings include the following:

- In the demonstration-eligible group, for all time periods, White beneficiaries had a higher admission rate (range of 44.7 to 50.3 admission per 1,000 eligibles) than African American, Hispanic, and Asian beneficiaries (range from 1.6 to 16.6 admissions per 1,000 eligibles). This pattern was consistently found in the comparison group as well.

- A similar pattern held for the percentage of long-stay users in the demonstration-eligible group, where White beneficiaries had a notably higher percentage of long-stay users (range of 30.6 to 33.7 percent) compared to African American, Hispanic, and Asian beneficiaries (range of 2.1 to 10.0 percent).

- Across all time periods, among all long-stay residents, White beneficiaries in the demonstration-eligible group had the lowest percentage with severe cognitive impairment compared to African Americans and Asians. There was no change over time for all three groups (range of 47.0 to 50.1 for White beneficiaries, range of 52.5 to 54.8 for African American beneficiaries, and 53.6 to 54.4 for Asian beneficiaries).

- The percent of beneficiaries with SPMI was higher among African American beneficiaries than White and Asian beneficiaries in the demonstration-eligible group. There was no change over time for all three groups.

- The percentage of long-stay residents who received antipsychotic medication decreased for all races from baseline to demonstration period, with African American beneficiaries experiencing a slightly higher relative rate of decline (from 26.2 to 19.2 percent) than White and Asian beneficiaries (from 22.2 to 18.9 percent and from 22.0 to 20.1 percent, respectively). A similar trend was found in the comparison group.

6.8.4 Urban/Rural Status

Using Rural-Urban Continuum Codes, counties with a population totaling 20,000 or more people were defined as urban, and counties with less than 20,000 people were defined as rural. Key findings include the following:

- The admission rate of rural beneficiaries was much higher than the admission rate for urban beneficiaries. In the demonstration-eligible group during the demonstration period, there were 68.8 admissions per 1,000 eligibles among rural beneficiaries, compared to 37.2 admissions per 1,000 eligibles among urban beneficiaries in Minnesota. The admission rate for both urban and rural beneficiaries in both demonstration-eligible and comparison groups increased across all time periods.

- Similar to the admission rates for the demonstration-eligible group, rural beneficiaries were also a larger proportion of the long-stay facility users in Minnesota. In the demonstration-eligible group during the demonstration period, 34.1 percent of eligible long-stay users were rural beneficiaries compared to 24.2 percent of eligible long-stay users being urban beneficiaries. The percentage of long-stay users declined over time for urban and rural beneficiaries in both demonstration-eligible and comparison groups.

- The percentage of residents with severe cognitive impairment among all long-stay residents decreased from baseline to demonstration period for both urban and rural beneficiaries in Minnesota, with a higher relative decline in percent of rural beneficiaries (from 50.0 to 43.6 percent) than urban beneficiaries (from 50.3 to 47.5 percent). The comparison group experienced a decrease as well.

- Across all time periods, among newly admitted all long-stay residents, there was a higher percentage of SPMI in urban beneficiaries than rural beneficiaries. In the demonstration-eligible group during the demonstration period, among all long-stay residents, 8.9 percent of urban beneficiaries had SPMI compared to 5.3 percent of rural beneficiaries. The comparison group showed the same trend.

- The percentage of long-stay residents who received antipsychotic medication decreased for all groups from baseline to demonstration period. The percentage of long stay residents who received an antipsychotic medication decreased from 22.7 to 19.2 percent in the urban group and decreased from 18.7 to 17.2 percent in the rural group. A similar trend was found in the comparison group.

The percentage of long-stay high-risk residents with pressure ulcers remained fairly constant in the urban group (slight increase from 8.5 to 8.7 percent). The percentage of long-stay residents with pressure ulcers in the rural group decreased from 8.6 percent to 6.4 percent from baseline to demonstration period. This trend in the rural group was also seen in the comparison group where percentage of residents with pressure ulcers decreased from 11.4 to 8.4 percent.

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7. Quality of Care

Highlights

- As would be expected given the administrative focus of the Minnesota demonstration, quality of care and care coordination remained relatively stable for the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed in the comparison group.
- However, there were some changes over time for both the demonstration-eligible and comparison groups. For example, the rate of 30-day follow up after hospitalization from mental illness increased for the demonstration-eligible group but not the comparison group, while preventable emergency department (ED) visits per 1,000 eligible months increased for the comparison group but not the demonstration group.
- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for long-term services and supports (LTSS) users among the demonstration group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group.
- As was true for the overall demonstration-eligible group, the prevalence of Medicare service utilization remained relatively stable for beneficiaries with severe and persistent mental illness (SPMI) among the demonstration group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group.

7.1 Purpose of Quality Analyses

The primary purpose of the analyses in this section is to understand quality of care in the demonstration-eligible and comparison groups so that CMS, the State, and stakeholders can understand the quality of the care provided before direct group comparisons are made in the future reports. As noted above, the administrative changes being introduced under the Minnesota demonstration are meant to better align Medicare and Medicaid processes, but are not expected to change the quality of the care provided.

The analyses in this section compare the Minnesota demonstration-eligible group and comparison group, as well as demonstration enrollees and eligible nonenrollees within the demonstration-eligible group. Because the decision to enroll in Minnesota Senior Health Options (MSHO) is voluntary, any differences between enrollees and nonenrollees may reflect differences in the observed and unobserved characteristics of the enrollees and nonenrollees (including their health care needs) and/or differences in the care that they receive.

Although we will continue to monitor these outcomes over the course of the demonstration, we will not be conducting an analysis of the impacts of Minnesota's demonstration on MSHO enrollees given the focus of the demonstration on administrative processes. We will, however, conduct an assessment of the potential for unintended

consequences of the demonstration. That assessment will need to wait for data on a longer follow-up period and the econometric analyses to be incorporated in the Final Report.

7.2 Quality Management Structures and Activities

Under the Minnesota alternative model demonstration, the State and CMS are implementing administrative changes under MSHO. The Minnesota Memorandum of Understanding notes that the State, CMS, and MSHO plans will collaborate to develop and test measures that could potentially be used to develop new Medicare-Medicaid quality metrics for MSHO plans. However, as noted earlier, this provision will not be implemented under the demonstration.

7.2.1 State and CMS Quality Management Structures and Activities

Under the Minnesota demonstration, MSHO plans continue to report quality measures and data—including Healthcare Effectiveness Data and Information Set (HEDIS), Consumer Assessment of Healthcare Providers and Systems, and Health Outcomes Survey data—as required by their Medicare and Medicaid contracts, and the plans continue to participate in the Medicare Advantage Star Ratings system.

7.3 Results for Selected Quality Measures

The quality measures presented in this section of the Annual Report are the evaluation's key quality measures. The RTI Aggregate Evaluation Plan identified a set of quality measures that will be calculated by the RTI Team using encounter and fee-for-service (FFS) data. Many of these measures are part of the HEDIS measurement set and are largely clinical in nature (e.g., preventive screens, follow-up care) or related to service use (e.g., avoidable hospitalizations, emergency department use) (Walsh et al., 2013, pp. 77–85). All measures are calculated using Medicare data, as complete Medicaid FFS data were not available for this report.

7.3.1 RTI Quality and Care Coordination Measures

RTI developed the following seven quality measures for the evaluation:

- 30-day all-cause risk-standardized hospital readmission rate;
- Preventable ED visits per 1,000 eligible months;
- Rate of 30 day follow up after hospitalization for mental illness;
- Composite measure for ambulatory care sensitive condition admissions per 1,000 eligible months (Agency for Healthcare Research and Quality [AHRQ] Prevention Quality Indicator [PQI] #90);
- Composite measure of chronic condition measure for ambulatory care sensitive condition admissions per 1,000 eligible months (AHRQ PQI #92);
- Rate of pneumococcal vaccinations per 1,000 eligible months; and

- Rate of screening for clinical depression per 1,000 eligible months.

Quality Measures for the Demonstration-Eligible Population

Table 16 presents the quality of care and care coordination measures for the demonstration-eligible and comparison groups for the baseline and demonstration periods. Key findings include the following:

- As would be expected given the administrative focus of the Minnesota demonstration, quality of care and care coordination remained relatively stable for the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed in the comparison group.

- However, there were some changes over time for both the demonstration-eligible and comparison groups. For example, the rate of 30-day follow up after hospitalization from mental illness increased for the demonstration-eligible group but not the comparison group, while preventable ED visits per 1,000 eligible months increased for the comparison group but not the demonstration-eligible group.

- The 30-day all-cause risk-standardized hospital readmission rate remained relatively stable across the baseline and demonstration periods for both the demonstration-eligible group (25.8 to 25.3 percent) and the comparison group (22.6 to 23.1 percent).

- There was no clear trend in the rate of preventable ED visits per 1,000 eligible months between the baseline and demonstration period for beneficiaries in the demonstration-eligible group. However, in the comparison group, there was an increase in preventable ED visits per 1,000 eligible months from the baseline to demonstration period (61 to 73).

- Beneficiaries in the demonstration-eligible group experienced an increase in the rate of 30 day follow up after hospitalization from mental illness from the baseline to the demonstration period (35 to 46), while the rate of follow-up was unchanged for comparison group at roughly 34.

- There was little change in hospital admissions per 1,000 eligible months for ambulatory care sensitive conditions from the baseline to the demonstration period for the demonstration-eligible group (roughly 11 to 12), while the level for the comparison group dropped from about 20 to 18.

Table 16
Quality of care and care coordination outcomes for the Minnesota demonstration-eligible and comparison groups

	Baseline period 1 09/1/2011–8/30/2012		Baseline period 2 09/1/2012–8/30/2013		Demonstration period 10/1/2013–12/31/2014	
Quality and care coordination measures	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
30-day all-cause risk-standardized readmission rate (percent)	25.8	22.6	25.2	23.2	25.3	23.1
Preventable ED visits per 1,000 eligible months	50.7	61.3	65.7	68.6	55.1	72.6
Rate of 30-day follow up after hospitalization for mental illness (percent)	34.7	34.7	37.9	33.5	46.3	33.9
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	11.1	19.8	12.4	18.9	10.5	18.4
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	5.8	10.1	6.6	9.9	5.9	9.7
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	0.3	7.0	0.9	5.8	4.9	5.3
Screening for clinical depression per 1,000 eligible months	0.0	0.2	0.0	0.2	0.2	0.6

AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; PQI = Prevention Quality Indicator.

NOTE: The adjusted probability for the 30-day all-cause risk-standardized readmission rate is estimated on the whole population, and not on those strictly in the sample.

Table 17 reports on the quality of care and care coordination measures for MSHO enrollees and nonenrollees during the demonstration period. Key findings include the following:

- In general, MSHO enrollees rate more highly on quality of care and care coordination measures than nonenrollees, particularly in terms of preventable ED visits and ambulatory care sensitive hospital admissions.
- MSHO enrollees had substantially lower rates of preventable ED visits per 1,000 eligible months than did nonenrollees (48 vs. 77 visits).
- The rate of hospital admissions per 1,000 eligible months for ambulatory care sensitive conditions, both overall and for chronic conditions only, was lower for the MSHO enrollees than the nonenrollees (7 vs. 20 for overall; 4 vs. 11 for chronic conditions).
- Preventive services, such as screening for clinical depression and pneumococcal vaccination, were slightly lower for MSHO enrollees compared to nonenrollees.

Table 17
Quality of care and care coordination outcomes for Minnesota demonstration-eligible group, by Minnesota Senior Health Options enrollment status

	Demonstration period 10/1/2013-12/31/2014	
Quality and care coordination measures	**Nonenrolled**	**Enrolled**
30-day all-cause risk-standardized readmission rate (percent)	—	—
Preventable ED visits per 1,000 eligible months	76.8	48.0
Rate of 30-day follow up after hospitalization for mental illness (percent)	42.1	47.1
Ambulatory care sensitive condition admissions per 1,000 eligible months–overall composite (AHRQ PQI # 90)	20.3	7.1
Ambulatory care sensitive condition admissions per 1,000 eligible months–chronic composite (AHRQ PQI # 92)	11.3	4.0
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	6.2	4.5
Screening for clinical depression per 1,000 eligible months	0.5	0.2

— This measure will be filled in the next version of this report pending further data analysis.

AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; PQI = Prevention Quality Indicator.

Quality and Care Coordination Measures for the Population with LTSS Needs

Table 18 reports on the quality of care and care coordination measures for LTSS users in the demonstration-eligible and comparison groups over the baseline and demonstration periods. Key findings include the following:

- As was true for the overall demonstration-eligible group, Medicare service utilization remained relatively stable for LTSS users among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the LTSS users in the comparison group.

- However, there were some changes over time for LTSS users in both the demonstration-eligible and comparison groups. For example, the rate of 30-day follow up after hospitalization from mental illness increased for the demonstration-eligible group but not the comparison group, while preventable ED visits per 1,000 eligible months increased for the comparison group but not the demonstration-eligible group.

- There was no clear trend in the rate of preventable ED visits per 1,000 eligible months over the baseline and demonstration periods for the demonstration-eligible group. By contrast, the rate increased for the comparison group, from 57 to 72 per 1,000 eligible months over the period.

- The demonstration-eligible group experienced an increase in the rate of follow-up within 30-days of a mental health-related hospitalization (35 to 47 percent) between baseline and the demonstration period. The increase for the comparison group was much smaller, from 29 to 32 percent.

- There was little change in the rate of ambulatory care sensitive condition (ACSC) admissions per 1,000 eligible months over time for either the demonstration-eligible group or the comparison group.

- There was an increase in the rate of pneumococcal vaccination for patients age 65 and older per 1,000 eligible months in the demonstration-eligible group from the baseline period to the demonstration period (0.3 to 5.0). The comparison group was higher in the baseline period than the demonstration-eligible group and dropped over time.

Table 18
Quality of care and care coordination outcomes for Minnesota demonstration-eligible and comparison groups, among long-term services and supports users

	Baseline period 1 09/1/2011–8/30/2012		Baseline period 2 09/1/2012–8/30/2013		Demonstration period 10/1/2013–12/31/2014	
Quality and care coordination measures	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
30-day all-cause risk-standardized readmission rate (percent)	—	—	—	—	—	—
Preventable ED visits per 1,000 eligible months	52.3	56.8	68.8	66.3	57.4	71.7
Rate of 30-day follow up after hospitalization for mental illness (percent)	34.6	29.5	38.4	29.2	46.6	32.0
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	11.9	23.9	13.2	23.8	11.7	24.0
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	6.0	10.8	6.6	11.4	6.4	11.6
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	0.3	5.6	0.8	5.3	5.0	4.3
Screening for clinical depression per 1,000 eligible months	0.0	0.3	0.0	0.3	0.3	0.5

— This measure will be filled in the next version of this report pending further data analysis.

AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; PQI = Prevention Quality Indicator.

Table 19 reports on the quality of care and care coordination measures for the MSHO enrollees and nonenrollees who used LTSS during the demonstration period. Key findings include the following:

- Within the demonstration-eligible group, MSHO enrollees with LTSS use tended to receive higher quality of care and care coordination than nonenrollees with LTSS use.
- Among beneficiaries with LTSS use, the count of preventable ED visits per 1,000 eligible months was lower for MSHO enrollees than nonenrollees (50.7 vs. 80.0).
- Among beneficiaries with LTSS use, the rate of 30-day follow up after hospitalization for mental illness was higher for MSHO enrollees than nonenrollees (47.7 vs. 39.2 percent).
- Among beneficiaries with LTSS use, both of the ACSC admission count measures were lower for MSHO enrollees than nonenrollees (7.6 vs. 25.4 overall, and 4.3 vs. 13.3 for chronic condition admissions).
- Similarly, among beneficiaries with LTSS use, both pneumococcal vaccination and depression screening were lower for MSHO than nonenrollees.

Table 19
Quality of care and care coordination outcomes for Minnesota demonstration-eligible and comparison groups, by Minnesota Senior Health Options enrollment status among long-term services and supports users

	Demonstration period 10/1/2013–12/31/2014	
Quality and care coordination measures	**Nonenrolled**	**Enrolled**
30-day all-cause risk-standardized readmission rate (percent)	—	—
Preventable ED visits per 1,000 eligible months	80.0	50.7
Rate of 30-day follow up after hospitalization for mental illness (percent)	39.2	47.7
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	25.4	7.6
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	13.3	4.3
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	6.7	4.6
Screening for clinical depression per 1,000 eligible months	0.6	0.2

— This measure will be filled in the next version of this report pending further data analysis.

AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; PQI = Prevention Quality Indicator.

Quality and Care Coordination Measures for the Population with SPMI

Table 20 reports quality of care and care coordination measures for beneficiaries with SPMI in the demonstration-eligible and comparison groups over the baseline and demonstration periods. Key findings include the following:

- As was true for the overall demonstration-eligible group, Medicare service utilization remained relatively stable for beneficiaries with SPMI among the demonstration-eligible group over the baseline and demonstration periods, a pattern that was echoed for the SPMI beneficiaries in the comparison group.

- However, there were some changes over time for SPMI beneficiaries in the demonstration-eligible group. Most notably, the rate of 30-day follow up after hospitalization from mental illness increased for the demonstration-eligible group but not the comparison group.

- Among beneficiaries with SPMI, the demonstration-eligible group experienced very little change in the rate of preventable ED visits per 1,000 eligible months. The rate increased from 67 visits in baseline year 1 to 83 visits in baseline year 2, and then declined to about 71 visits during the demonstration period. Over the same time period, the rate increased from 86 to 90 visits for the comparison group.

- Among beneficiaries with SPMI, the demonstration-eligible group experienced an increase in the rate of follow-up within 30-days of a mental health related hospitalization (from 34.7 to 46.3 percent), while the rate remained relatively stable for the comparison group at about 34 percent.

- Among beneficiaries with SPMI, there was a small decline in both types of ACSC admissions per 1,000 eligible months for both the demonstration-eligible group and comparison group, although the overall level was higher for the comparison group.

Table 20
Quality of care and care coordination outcomes for Minnesota demonstration-eligible and comparison groups, beneficiaries with severe and persistent mental illness

	Baseline period 1 09/1/2011–8/30/2012		Baseline period 2 09/1/2012–8/30/2013		Demonstration period 10/1/2013–12/31/2014	
Quality and care coordination measures	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**	**Demonstration**	**Comparison**
30-day all-cause risk-standardized readmission rate (percent)	—	—	—	—	—	—
Preventable ED visits per 1,000 eligible months	67.1	85.9	83.4	91.1	70.5	90.4
Rate of 30-day follow up after hospitalization for mental illness (percent)	34.7	34.7	37.9	33.5	46.3	33.9
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	15.5	28.0	14.0	24.5	12.3	23.5
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	7.6	13.3	7.3	11.7	7.1	11.1
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	0.4	7.5	1.2	5.6	5.9	5.1
Screening for clinical depression per 1,000 eligible months	0.2	0.4	0.1	0.5	0.7	1.2

— This measure will be filled in the next version of this report pending further data analysis.

AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; PQI = Prevention Quality Indicator.

Table 21 reports on quality of care and care coordination measures for the MSHO enrollees and nonenrollees with SPMI during the demonstration period. Key findings include the following:

- In general, MSHO enrollees with SPMI received higher quality of care and care coordination than nonenrollees with SPMI.
- Among beneficiaries with SPMI, MSHO enrollees had fewer preventable ED visits per 1,000 eligible months than nonenrollees (60.5 to 103.0 visits).
- Among beneficiaries with SPMI, MSHO enrollees had a higher rate of 30-day follow-up care after a mental illness related hospitalization than nonenrollees (47.1 to 42.1 percent).
- Among beneficiaries with SPMI, MSHO enrollees had fewer ambulatory care sensitive hospital admissions per 1,000 eligible months overall and for chronic conditions than nonenrollees (7.3 vs. 28.8 admissions and 4.4 vs. 15.7 admissions, respectively).

Table 21
Quality of care and care coordination outcomes for Minnesota demonstration-eligible and comparison groups, by Minnesota Senior Health Options enrollment status among beneficiaries with severe and persistent mental illness

	Demonstration period 10/1/2013–12/31/2014	
Quality and care coordination measures	**Nonenrolled**	**Enrolled**
30 day all-cause risk-standardized readmission rate (percent)	—	—
Preventable ED visits per 1,000 eligible months	103.0	60.5
Rate of 30-day follow up after hospitalization for mental illness (percent)	42.1	47.1
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	28.8	7.3
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	15.7	4.4
Pneumococcal vaccination for patients age 65 and older per 1,000 eligible months	7.6	5.3
Screening for clinical depression per 1,000 eligible months	1.7	0.5

— This measure will be filled in the next version of this report pending further data analysis.

AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; PQI = Prevention Quality Indicators.

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8. Conclusions

8.1 Implementation Accomplishments and Challenges

By formalizing certain agreements between CMS and the State that have been in practice for the Minnesota Senior Health Options (MSHO) program since before the demonstration, the demonstration has already addressed important aspects of Medicare and Medicaid alignment in areas such as integrated processes for grievances and appeals, for claims adjudication, and for program enrollment. The Demonstration Management Team has been very successful in facilitating policy collaboration between CMS and the State. In addition, the demonstration's Medicare-Medicaid alignment activities produced changes to the MSHO plan's Models of Care; improved processes used by MSHO plans, CMS, and the State in developing integrated beneficiary materials; and implemented Integrated Care Systems Partnerships.

As mentioned earlier, the demonstration includes three types of Medicare-Medicaid alignment activities: (1) joint CMS-State demonstration management activities related to the MSHO program; (2) discrete activities that CMS and the State have agreed to conduct, usually in partnership; and (3) those based on the self-implementing provisions that formalize previous CMS-State agreements related to various MSHO operational policies.

State officials expressed enthusiasm about the demonstration's accomplishments on the first activity, joint demonstration management. They noted that with the establishment of Demonstration Management Team, they have a reliable communication channel with CMS, and CMS and Regional Office members have helped resolve concrete issues: establishing procedures for addressing the withdrawal of a Dual Eligible Special Needs Plan (D-SNP) from the MSHO program, securing CMS adoption of the State's proposed language for inclusion in the MSHO D-SNP Model of Care elements, and troubleshooting on behalf of an individual MSHO plan. More generally, they appreciate the information they receive about changing D-SNP policies and the knowledge that they have a resource to help them identify and reach specific CMS staff when needed (interviews with Minnesota Department of Human Services officials, April 2014).

Progress on implementing each of the Medicare-Medicaid alignment activities is reported in ***Section 3*** of this report. As noted above, the Demonstration Management Team has been fully operational, and CMS has given the State the opportunity to propose language for inclusion in the MSHO D-SNP Model of Care and has accepted the State's language. The State is implementing the Integrated Care System Partnerships authorized by the demonstration. The State has begun using a new integrated grievances and appeals notice, developed by CMS for use by all Financial Alignment Initiative demonstrations. Work has also begun on development of a new process involving the State to assess Medicare network adequacy.

The self-implementing provisions became effective when the Memorandum of Understanding (MOU) was signed and mostly formalize, for the duration of the demonstration, informal agreements reached between CMS and the State that permitted flexibilities in the operation of the MSHO program to resolve misalignment of Medicare and Medicaid policies.

Some alignment activities outlined in the MOU have not been undertaken, such as the development and testing of new quality measures. It appears that some of these are not going to be developed through the demonstration and that instead, CMS is using other vehicles to carry out these activities. The State and CMS continue to look for opportunities to engage in quality discussions. The MOU also called for a MSHO network adequacy review to be conducted jointly by CMS and the State. Although this did not happen, pilot testing is being conducted to involve the State in CMS network adequacy reviews, as noted previously. One activity that has been significantly delayed is development of a consolidated CMS-State Consumer Assessment of Healthcare Providers and Systems survey. The State and the plans reported concerns that if the survey is not finalized soon, the window of opportunity for a joint survey could close (site visit interviews, April 2014 and July 2015).

Addressing misaligned Medicare and Medicaid policies that impede provision of seamless care to beneficiaries is difficult. As one Minnesota State official summarized, "It's all about the details." Minnesota's first-quarter submission of information about the demonstration to the RTI evaluation team summed up the nature of the Medicare-Medicaid program alignment work:

> *It is challenging to describe the Minnesota demonstration to stakeholders and state leadership because it is so related to behind the scenes technical and operational issues between Medicare and Medicaid that most people do not know or care about, even though these are necessary to maintaining and improving integration of service delivery and operations* (State Data Reporting System [SDRS] 1st Quarter, 2014).

8.2 Preliminary Findings: Service Utilization and Quality of Care

As would be expected given the administrative focus of the Minnesota demonstration, there is little evidence of any systematic changes in Medicare service utilization or quality of care and care coordination in Minnesota over the baseline and demonstration periods. This holds true for the overall demonstration-eligible population and for important population subgroups, including for long-term services and supports users, beneficiaries with severe and persistent mental illness, and a variety of subgroups based on demography, geography, and health. Further, with few exceptions, any changes over time that are observed for the demonstration-eligible population and its subgroups were echoed in the trends for the comparison group, which suggests the impacts of factors beyond those introduced under the Minnesota demonstration. However, a formal assessment of the potential for unintended consequences under the demonstration will need to wait for data on a longer follow-up period and the econometric analyses to be incorporated in future reports.

We find more differences between MSHO enrollees and nonenrollees within the demonstration-eligible population. However, because the decision to enroll in MSHO is voluntary, any differences between enrollees and nonenrollees may reflect differences in the observed and unobserved characteristics of the enrollees and nonenrollees (including their health care needs) and/or differences in the care that they receive. In future reports, econometric analyses will provide comparisons of enrollees and nonenrollees that control for differences in observable characteristics, which will come closer to isolating any differences in care under

MSHO and Minnesota Senior Care Plus (MSC+). Nonetheless, we will not be attempting to estimate the impacts of MSHO versus MSC+ under this demonstration. For recent work on this topic, see Anderson, Feng, and Long (2016). Although we will continue to monitor a range of outcomes over the course of the demonstration, we will not be conducting an analysis of the impacts of the Minnesota demonstration on MSHO enrollees given the focus of the demonstration on administrative processes. We will, however, conduct an assessment of the potential for unintended consequences of the demonstration. That assessment will need to wait for data on a longer follow-up period and the econometric analyses to be incorporated in the Final Report.

8.3 Next Steps for the Evaluation of the Minnesota Demonstration

The evaluation will continue to collect information quarterly from Minnesota through the online SDRS, covering enrollment statistics and updates on key aspects of implementation. Using the quarterly finder file submitted by the State, the evaluation team will generate quality, utilization, and cost data from Medicare and Medicaid claims and encounters, and the Nursing Home Minimum Data Set. The evaluation team will continue conducting quarterly calls with the Minnesota demonstration State staff and request the results of any evaluation activities conducted by the State or other entities. We will continue to discuss the demonstration with CMS staff. During the course of the demonstration, there will be additional site visits and focus groups with plans.

The second Annual Report on the Minnesota demonstration will include qualitative information on the status of the demonstration and descriptive analyses of quality and utilization measures for those eligible for the demonstration and for the out-of-State comparison group. The quantitative analyses will cover the period from January 2015 through December 2015. Qualitative information will include findings through the date of the last site visit (July 31, 2016). The final report will include all elements of the annual reports and the aggregate results of regression-based analyses to assess the potential of unintended consequences of the demonstration. We will not be conducting an analysis of the impacts of the Minnesota demonstration on MSHO enrollees, given the focus of the demonstration on administrative processes.

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Appendix A
Identification of the Minnesota Comparison Group

The Minnesota demonstration area consists of the entire State of Minnesota. Seven States with timely Medicaid data qualified as sources for the metropolitan statistical areas (MSAs) comprising the comparison group for the Minnesota demonstration. The comparison area is composed of 31 MSAs from seven States. All comparison MSAs are listed in ***Table A-1***.

Table A-1
Metropolitan statistical areas (MSAs) for the Minnesota comparison group, by State

Alabama MSAs	New York MSAs	Texas MSAs
Birmingham-Hoover	Albany-Schenectady-Troy	San Angelo
Daphne-Fairhope-Foley	Rochester	Wisconsin MSAs
Mobile	Pennsylvania MSAs	Appleton
California MSAs	Altoona	Eau Claire
Napa	Bloomsburg-Berwick	Fond du Lac
Vallejo-Fairfield	Erie	Green Bay
Michigan MSAs	Harrisburg-Carlisle	La Crosse-Onalaska
Ann Arbor	Johnstown	Madison
	Pittsburgh	Milwaukee-Waukesha-West Allis
	Reading	Minneapolis-St. Paul-Bloomington
	Rest of State	Oshkosh-Neenah
	State College	Racine
		Rest of State
		Sheboygan
		Wausau

The Minnesota demonstration was restricted to dual eligible beneficiaries aged 65 years or older who were eligible for a Dual Eligible Special Needs Plan and, therefore, not attributed to another Federal Medicare shared savings initiative. Comparison groups were comprised of beneficiaries aged 65 years or older who had not been attributed to another Federal Medicare shared savings initiative. Beneficiaries in the demonstration-eligible group during the demonstration period were identified from quarterly finder files of demonstration participants. Beneficiaries qualified for the demonstration-eligible group if they participated for at least one month during the demonstration period. During the two baseline periods, all beneficiaries meeting the age restriction and MSA residency requirements were selected for the demonstration-eligible and comparison groups. All beneficiaries in the evaluation had valid hierarchical condition category risk scores during a year.

Table A-2 below shows the distribution of beneficiaries by comparison State in the first baseline year. Pennsylvania contributed by far the largest share of comparison beneficiaries. State shares were very similar in the other two time periods. Because at least three States were

included and no State contributed more than half of the total comparison beneficiaries, it was not necessary to do any sampling to reduce the influence of a single State per RTI's comparison group selection methodology (see Section 1 of the Technical Appendix regarding State shares). The total number of comparison beneficiaries was comparatively stable throughout the three time periods (188,978 in baseline year 1, 184,587 in baseline year 2, and 190,403 in the first demonstration period).

Table A-2
Distribution of comparison group beneficiaries for the Minnesota demonstration, first baseline year, by comparison State (n=188,978)

Comparison State	Percent of comparison beneficiaries
Pennsylvania	45.3
Wisconsin	28.9
New York	13.3
Alabama	6.1
California	4.6
Michigan	0.9
Texas	0.8
Total percent	100.0

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

Table A-3
Minnesota elderly dual eligible beneficiary covariate means by group before and after weighting by propensity score, demonstration period 1: 9/13/2013–9/30/2014

Demonstration period 1	Demonstration-eligible group	Unweighted comparison group	PS-weighted comparison group
Characteristic	**Mean**	**Mean**	**Mean**
Age	80.146	79.035	80.204
Died	0.156	0.155	0.159
Female	0.690	0.696	0.686
White	0.781	0.797	0.781
Disability as reason for original Medicare eligibility	0.083	0.094	0.085
ESRD	0.011	0.015	0.011
Share mos. elig. during period	0.804	0.800	0.803
HCC score	1.490	1.576	1.499
MSA	0.664	0.763	0.662
% of pop. living in married household	75.393	71.023	75.721
% of households w/ member >= 60	33.597	37.226	32.979
% of households w/ member < 18	30.084	29.267	29.201
% of nonelderly w/ college education	19.910	15.702	21.351
% of nonelderly w/self-care limitation	7.430	8.416	7.338
% of nonelderly unemployed	4.445	6.051	4.357
Distance to nearest hospital	10.027	79.035	80.204
Distance to nearest nursing facility	7.621	0.155	0.159

ESRD = end-stage renal disease; HCC = hierarchical condition category; MSA = metropolitan statistical area.

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Appendix B
Additional Methodological Details

Minimum Data Set Analysis Methods

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

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

Several data nuances could have influenced the count of nursing facility residents. The weighted number of beneficiaries after matching to MDS data were calculated; this produced the weighted number of beneficiaries that served as the population of eligibles for the denominator for the two measures of annual nursing facility utilization. For the new admission and all long-stay resident groups, a beneficiary was often simply not matched to an MDS record indicating they had been admitted or were long-stay. In addition, for the long-stay nursing facility admission rate, beneficiaries who were already long-stay were excluded. A reduction in the number of weighted beneficiaries could also be due to not having been eligible for the entire period.

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

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Appendix C
Detailed Measure Definitions

Population, Special Population, and Utilization Measure Definitions

Population Definitions

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

Additional special populations were identified for the analyses as follows:

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

- *Age*. Age was defined as a categorical variable where beneficiaries were identified as *21 to 44*, and *45 years and older* during the observation year (e.g., baseline period 1, baseline period 2, and demonstration period.)

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

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

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

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

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

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

- *Nonenrollees.* Nonenrollees are Minnesota Senior Health Options (MSHO)-eligible individuals who remain in Minnesota Senior Care Plus, the Medicaid-only managed

care program that is mandatory for MSHO-eligible enrollees who do not enroll in MSHO.

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

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

Utilization Measure Definitions

For any health care service type, the methodology for estimating average monthly utilization and the percentage of users during the year takes into account differences in the number of eligibility months across beneficiaries. Because full-benefit dual eligibility status for the demonstration can vary by month over time for any individual, the methodology used determines dual eligibility status for the demonstration for each person on a monthly basis during a baseline or demonstration period. That is, an individual is capable of meeting the demonstration's eligibility criteria for 1, 2, 3, or up to 12 months during the observation year. The methodology adds the total months of full-benefit dual eligibility for the demonstration across the population of interest and uses it in the denominator in the measures in ***Section 1.3***, creating average monthly utilization information for each service type. The methodology effectively produces average monthly use statistics for each year that account for variation in the number of Medicare-Medicaid enrollees in each month of the observation year.

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

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

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

Where

Y_g = average count of the number services used [for a given service] per eligible or user month within group g.

Z_{ig} = the total units of utilization [for a given service] for individual i in group g.

n_{ig} = the total number of eligible/user months for individual *i* in group *g*.

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

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

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

Where

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

Quality of Care and Care Coordination Measures

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

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

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

Where

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

Average Adjusted Probability of Readmission by Demonstration-eligible group Type

Demonstration-eligible group	Average adjusted probability of readmission
Baseline period 1	
Demonstration	0.231713283
Comparison	0.220171257
Baseline period 2	
Demonstration	0.231703099
Comparison	0.220802089
Demonstration period	
Demonstration	0.220549052
Comparison	0.21633023

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

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

Where

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

Average Ambulatory Care Sensitive Condition (ACSC) admissions per 1,000 eligibles, overall and chronic composite (Agency for Healthcare Research and Quality Prevention Quality Indicator [PQI] #90 and PQI #92) was calculated as follows:

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

Where

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

Preventable emergency room (ER) visits per 1,000 eligible month was calculated as follows:

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

Where

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

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

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

Where

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

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

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

Where

D_g = the average number of beneficiaries per 1,000 eligible months who received depression screening in group g.
X_{ig} = the total number eligible beneficiaries age 65+ who ever received depression screening in group g.
n_{ig} = the total number of eligible months among beneficiaries in group g.

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

$$PD_g = \frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} n_{ig}}$$

Where

PD_g = the average number of beneficiaries per positive depression screening who received a follow-up plan among beneficiaries in group g.
X_{ig} = the total number beneficiaries who received a positive depression screen and a follow up plan in group g.
n_{ig} = the total number of beneficiaries who received a positive depression screen in group g.

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

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

Where

F_g = the average number of beneficiaries per 1,000 eligible months who received a fall screening assessment among beneficiaries in group g.
X_{ig} = the total number eligible beneficiaries age 65+ who received a fall screening assessment among individuals in group g.
n_{ig} = the total number of eligible months among beneficiaries aged 65 and older in group g.

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

$$PF_g = \frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} n_{ig}}$$

Where

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

Minimum Data Set Analysis Measure Definitions

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

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

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

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

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

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

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

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

impairment using the Brief Interview for Mental Status, or poor short-term memory or severely impaired decision-making skills.

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