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Financial Alignment Initiative Illinois Medicare-Medicaid Alignment Initiative: First Evaluation Report

Prepared for

Daniel Lehman
Centers for Medicare & Medicaid Services
Center for Medicare & Medicaid Innovation
Mail Stop WB-06-05
7500 Security Boulevard
Baltimore, MD 21244-1850

Submitted by

Edith G. Walsh
RTI International
307 Waverly Oaks Road
Waltham, MA 02452-8413

RTI Project Number 0214448.001.007.000.000.006

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FINANCIAL ALIGNMENT INITIATIVE
ILLINOIS MEDICARE-MEDICAID ALIGNMENT INITIATIVE: FIRST EVALUATION REPORT

By

National Academy of State Health Policy
Scott Holladay, MPA
Ellen J. Bayer, MA
Diane Justice, MA

RTI International
Matt Toth, PhD
Nicole Coomer, PhD
Joyce Wang, MPH
Brieanne Lyda-McDonald, MS
Quantesa Roberts, MA
Nga (Trini) Thach, BS
Emily Vreeland, MS
Wayne Anderson, PhD
Angela M. Greene, MS, MBA

Project Director: Edith G. Walsh, PhD

Federal Project Officers: Daniel Lehman

RTI International

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Executive Summary

The Medicare-Medicaid Coordination Office and the Innovation Center at the Centers for Medicare & Medicaid Services (CMS) have created the Medicare-Medicaid Financial Alignment Initiative to test, in partnerships with States, integrated care models for Medicare-Medicaid enrollees. CMS contracted with RTI International to monitor the implementation of the demonstrations and to evaluate their impact on beneficiary experience, quality, utilization, and cost. The evaluation will include a final aggregate evaluation and State-specific evaluations.

Illinois and CMS launched the Medicare-Medicaid Alignment Initiative (MMAI) demonstration in March 2014 to integrate care for Medicare-Medicaid beneficiaries in two regions. Eight health plans were competitively selected by the State and CMS to operate Medicare-Medicaid Plans (MMPs) under the demonstration: six in the Greater Chicago region and two in Central Illinois. MMPs receive capitated payments from CMS and the State to finance all Medicare and Medicaid services. MMPs also provide care coordination and flexible benefits that vary from plan to plan.

This first Evaluation Report for the Illinois demonstration describes implementation of the MMAI demonstration and early analysis of the demonstration's impacts. The report includes findings from qualitative data for March 1, 2014 through February 28, 2017, and quantitative results for demonstration year 1 (March 1, 2014 through December 31, 2015). Data sources include key informant interviews, beneficiary focus groups, the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey results, Medicare claims data, the Minimum Data Set nursing facility assessments, MMP encounter data, and other demonstration data. Future analyses also will include Medicaid claims and encounters as those data become available.

Highlights

- In December 2016, more than 153,000 Medicare-Medicaid beneficiaries were eligible for MMAI, and approximately 46,000 were enrolled, or 30 percent of eligible beneficiaries. State officials and stakeholders cited various factors to explain the higher than expected rate of opt-outs and disenrollments, including difficulty communicating the advantages of MMAI, limited outreach by the State, limitations on marketing by MMPs, provider influence, fear of managed care, and the lack of mandatory Medicaid managed care for Medicare-Medicaid beneficiaries.

- The results of preliminary Medicare cost savings analyses using a difference-in-differences regression approach indicate savings due to the Illinois demonstration over the period March 2014-December 2015. The cost savings analyses do not include Medicaid data due to current data availability, but these data will be incorporated into future calculations as they become available.

- Measured against the comparison group, the Illinois demonstration group had fewer monthly inpatient admissions, emergency room (ER) visits, and skilled nursing facility (SNF) admissions, and a higher probability of any long-stay nursing facility

(NF) use. There was no statistically significant difference in monthly physician visits between the demonstration and comparison groups (see ***Table ES-1***).

- For the RTI quality of care and care coordination measures, the probability of overall and chronic ambulatory care sensitive condition (ACSC) admissions and the number of preventable ER visits was lower for the demonstration group than the comparison group. However, the rate of follow-up for mental health discharges also declined among the demonstration group, relative to the comparison group. There was no impact on 30-day readmission.

- MMAI was one of three managed care programs implemented by Illinois over a 4-year period. State officials said they had been in implementation mode for several years and did not have the "bandwidth" to launch mandatory Medicaid managed long-term supports and services (MLTSS) concurrent with MMAI.

- In July 2016, the State implemented MLTSS for demonstration eligible beneficiaries who use long-term services and supports (LTSS) and are not enrolled in MMAI. Approximately 1,000 beneficiaries chose to enroll in MMAI during the MLTSS rollout. State officials and stakeholders said they hope mandatory MLTSS will continue to encourage beneficiaries to opt into MMAI.

- The demonstration has faced challenges in the Central Illinois region. One of the two MMPs withdrew from MMAI at the end of 2015 due to projected financial losses. In April 2017, the State disenrolled beneficiaries in six counties from the other MMP due to network adequacy issues.

- Providers said they had difficulty adapting to managed care, citing issues with contracting, billing and prior authorization procedures, and provider enrollment. The large number of MMPs and Medicaid MCOs made the lack of standardization especially challenging for providers in the Chicago region.

- During the first 2 years of the demonstration, the CMS-State Contract Management Team (CMT) worked with MMPs to improve timely completion of assessments and care plans. In 2016, the CMT turned its attention to the quality of care plans, including increasing engagement of enrollees in setting care goals.

- Enrollee ratings of their health plans improved from 2015 to 2016 for nearly all MMPs. In 2016, the proportion of enrollees rating their plans as a 9 or 10 on the CAHPS survey ranged from 49 to 66 percent.

- Most beneficiary focus group participants said their quality of life and/or health was better since enrolling in MMAI. Many participants said their benefits were better and their out-of-pocket costs were lower.

- Many focus group participants said their MMP care coordinators were helping them access services. Some participants said their care coordinators were hard to contact or

had not provided assistance, and a few were not aware that they had a care coordinator.

- The volume of grievances and appeals has remained low. The Illinois Department of Healthcare and Family Services and beneficiary advocates said that beneficiaries who are dissatisfied often disenroll.

- All three MMPs interviewed in 2017 expressed concerns about MMAI financing, but there was no consensus on perceived challenges. Concerns included changes in Medicare and Medicaid risk adjustment methodologies, the demonstration savings percentage, and the ratio of costs to revenue.

Table ES-1
Summary of Illinois demonstration impact estimates for demonstration period (March 1, 2014, to December 31, 2015)
($p < 0.10$ significance level)

Measure	All demonstration eligible beneficiaries	Demonstration eligible beneficiaries with LTSS use	Demonstration eligible beneficiaries with SPMI
Inpatient admissions	Lower	NS	Lower
Probability of ambulatory care sensitive condition (ACSC) admissions, overall	Lower	NS	NS
Probability of ACSC admissions, chronic	Lower	NS	NS
All-cause 30-day readmissions	NS	Higher	NS
Emergency room (ER) visits	Lower	NS	Lower
Preventable ER visits	Lower	NS	Lower
Probability of monthly follow-up after mental health discharges	Lower	NS	Lower
Skilled nursing facility (SNF) admissions	Lower	Higher	Lower
Probability of any long-stay nursing facility (NF) use	Higher	NA	NA
Physician evaluation and management (E&M) visits	NS	Higher	NS

LTSS = long-term services and supports; NA = not applicable; NS = not statistically significant; SPMI = severe and persistent mental illness.

SOURCE: RTI analysis of Medicare and Minimum Data Set data.

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1. Overview

1.1 Evaluation Overview

1.1.1 Purpose

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

This report on the Illinois capitated model demonstration under the Medicare-Medicaid Financial Alignment Initiative, called the Medicare-Medicaid Alignment Initiative (MMAI), is one of several reports that will be prepared over the next several years to evaluate the demonstration. CMS contracted with RTI International to monitor the implementation of the demonstrations under the Financial Alignment Initiative and to evaluate their impact on beneficiary experience, quality, utilization, and cost. The evaluation includes a final 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 collects qualitative and quantitative data from Illinois each quarter; analyzes Medicare and Medicaid enrollment, claims, and encounter data; conducts site visits, beneficiary focus groups, and key informant interviews; and incorporates relevant findings from any beneficiary surveys conducted by other entities. In addition to this report, monitoring and evaluation activities will also be reported in subsequent evaluation reports, and in a final aggregate evaluation report for the demonstrations under the Financial Alignment Initiative.

1.1.2 What it Covers

This report analyzes implementation of the MMAI demonstration from its initiation on March 1, 2014 through April 2017. For this reporting period, qualitative data and quantitative data based on Medicare claims and the nursing facility Minimum Data Set 3.0 are included. To capture relevant information generated at the conclusion of the demonstration period or immediately afterward, this report also includes updated qualitative information through April 30, 2017, i.e., it includes information from the February 2017 site visit and information obtained from State officials in April 2017. It describes the Illinois MMAI demonstration key design features; examines the extent to which the demonstration was implemented as planned; identifies any modifications to the design; and discusses the challenges, successes, and unintended consequences encountered during the period covered by this report. It also includes data on the

beneficiaries eligible and enrolled, geographic areas covered, and status of the participating Medicare-Medicaid Plans (hereafter referred to as MMAI plans or MMPs). Finally, the report includes data on care coordination, the beneficiary experience, stakeholder engagement activities, and, to the extent that data are available, analyses of utilization, quality, and cost data and a section on special populations served.

1.1.3 Data Sources

A wide variety of information informed this first Evaluation Report of the MMAI demonstration. Data sources used to prepare this report include the following:

Key informant interviews. The RTI evaluation team conducted site visits in Illinois in September 2014, November 2015, and February 2017. The team interviewed the following types of individuals either during the site visits or during subsequent telephone interviews: State policy makers and agency staff, CMS and State CMT members, Ombudsman Program officials, MMP officials, MMP care coordinators, hospital and nursing facility providers, advocates and other stakeholders.

Focus groups. The RTI evaluation team conducted eight focus groups in Chicago, Illinois: two focus groups on March 29, 2016; three focus groups on March 30, 2016; and three focus groups on March 31, 2016. A total of 41 enrollees and five proxies participated in the RTI focus groups. Participants were assigned to groups based on their LTSS and behavioral health services use, race, ethnicity, and primary language. Focus groups were not conducted with beneficiaries who opted out of the demonstration or who disenrolled.

Surveys. Medicare requires all Medicare Advantage plans, including MMAI plans, to conduct an annual assessment of the experiences of beneficiaries using the Medicare Advantage Prescription Drug Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey instrument. The 2015 and 2016 surveys for MMAI were conducted in the first half of 2015 and 2016, respectively, and included the core Medicare CAHPS questions, and 10 supplemental questions added by the RTI evaluation team. Survey results for a subset of 2015 and 2016 survey questions are incorporated into this report. Findings are available at the MMP level only. The frequency count for some survey questions may be suppressed because too few enrollees responded to the question. Comparisons with findings from all Medicare Advantage plans are available for core CAHPS survey questions but not for the RTI supplemental questions.

Demonstration data. The RTI evaluation team reviewed data provided quarterly by Illinois through the State Data Reporting System (SDRS). These data included eligibility, enrollment, and information reported by Illinois on its stakeholder engagement process, accomplishments on the integration of services and systems, any changes made in policies and procedures, and a summary of successes and challenges. This report also uses data for quality measures reported by MMAI plans and submitted to CMS' implementation contractor, NORC at

the University of Chicago (hereafter referred to as NORC).[1,2] Data reported to NORC include core quality measures that all Medicare-Medicaid Plans are required to report, as well as State-specific measures that MMAI plans are required to report. Due to some reporting inconsistencies across plans in 2014 and 2015, plans occasionally resubmit data for prior demonstration years; therefore, these data are considered preliminary.

Demonstration policies, contracts, and other materials. This report uses several data sources, including the Memorandum of Understanding (MOU) between the State and Centers for Medicare & Medicaid Services (CMS) (Centers for Medicare and Medicaid Services and State of Illinois, 2013a; hereafter, MOU, 2013); the three-way contract (Centers for Medicare & Medicaid Services and State of Illinois, 2013b; hereafter, Illinois three-way contract, 2013); the amended three-way contract (Centers for Medicare & Medicaid Services and State of Illinois, 2016; hereafter, amended three-way contract, 2016); and State-specific documents, e.g., solicitation documents for MMAI plans, provider notices, advisory committee meeting minutes, and other materials available on the Illinois Department of Healthcare and Family Services website; documents available on the Medicare-Medicaid Alignment Initiative webpage (https://www.illinois.gov/hfs/MedicalProviders/cc/mmai/Pages/default.aspx); data reported through the State Data Reporting System (RTI, SDRS), and documents on the CMS Medicare-Medicaid Coordination website (Centers for Medicare & Medicaid Services, 2016a).

Conversations with CMS and Illinois Department of Healthcare and Family Services officials. To monitor demonstration progress, the RTI evaluation team engages in periodic phone conversations with the Illinois Department of Healthcare and Family Services (HFS) and CMS. These might include discussions about new policy clarifications designed to improve plan performance, quality improvement work group activities, and CMT actions.

Complaints and appeals data. Complaint (also referred to as grievance) data are from three separate sources: (1) complaints from beneficiaries reported by MMAI plans to the Illinois Department of Healthcare and Family Services (HFS), and separately to CMS' implementation contractor, NORC; (2) complaints received by the HFS or 1-800-Medicare and entered into the CMS electronic complaint tracking module (CTM);[3] and (3) complaints received by the MMAI Ombudsman Program and reported to the HFS and the Administration for Community Living (ACL),[4] the Federal agency that provides technical assistance to Ombudsman programs under the Financial Alignment Initiative. Appeals data are based on data reported by MMPs to the HFS and NORC, under Core Measure 4.2, and the Medicare Independent Review Entity (IRE). Data on critical incidents and abuse reported to the Illinois Department of Aging and CMS' implementation contractor by MMAI plans are also included in this report.

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[1] Data are reported for March 2014-December 2016. These data were available at the time this report was written.

[2] The technical specifications for reporting requirements are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements.html.

[3] Data are presented for the period for the period March 2014 through December 2016. These data were available at the time this report was written.

[4] Information obtained by RTI during site visits.

Although a discussion of the eight Illinois Medicare-Medicaid Plans is included, this report presents information primarily at the MMAI demonstration level. It is not intended to assess individual plan performance, but individual plan information is provided where plan-level data are the only data available, or where plan-level data provide additional context.

Service utilization data. Evaluation Report analyses used data from many sources. First, the State provided quarterly finder files containing identifying information on all demonstration eligible beneficiaries in the demonstration period. Second, RTI obtained administrative data on beneficiary demographic, enrollment, and service use characteristics from CMS data systems for both demonstration and comparison group members. Third, these administrative data were merged with Medicare claims and encounter data, as well as the Minimum Data Set.

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

1.2 Model Description and Demonstration Goals

The MMAI demonstration began on March 1, 2014, and was originally scheduled to continue until December 31, 2017 (Illinois three-way contract, 2013). In August 2016, the State, CMS, and the MMAI plans signed an amended three-way contract that extends the demonstration for 2 additional years, through December 31, 2019 (amended three-way contract, 2016). Under MMAI, eligible beneficiaries enroll in a capitated Medicare-Medicaid Plan (MMP) that covers all services available under Medicare and Medicaid, as well as care coordination and flexible benefits, which vary from plan to plan.

The goals of the Illinois demonstration are to improve the quality and lower the cost of care provided to Medicare-Medicaid enrollees while rebalancing the LTSS system—that is, shifting services delivered from institutional to community-based settings. By relying on health plans to deliver coordinated care under capitated payments and creating an incentive to increase community-based care, the demonstration goals, design, and core features mark a sharp contrast to Illinois's historic approach to care delivery for Medicare-Medicaid enrollees.

Integration of Medicare and Medicaid functions. The demonstration integrates some Medicare and Medicaid functions, such as managed care enrollment and contract management. Enrollment of beneficiaries into MMAI is administered by the Illinois Client Enrollment Broker, a contractor which coordinates with Medicare and Medicaid enrollment systems. A joint CMS-State CMT administers the three-way contract and provides MMP oversight.

Financial model. All covered Medicare and Medicaid services are financed through risk-adjusted capitation payments to the MMPs (see ***Section 7.1, Rate Methodology***).

Eligible population. Individuals are eligible for demonstration participation if they are adults over age 21 entitled to Part A Medicare benefits and enrolled in Parts B and D, receiving comprehensive Medicaid benefits, and enrolled in the Aged, Blind, and Disabled category.

Individuals not eligible for enrollment include Medicaid enrollees using developmental disability institutional services or who participate in the Home and Community-Based Services (HCBS) waiver for adults with developmental disabilities; individuals eligible for Medicaid through the spend-down program; Illinois Medicaid Breast and Cervical Cancer Program participants; and Medicare-Medicaid enrollees who have comprehensive third-party insurance (MOU, 2013, p. 8).

Medicare-Medicaid Plans. Illinois and CMS initially contracted with eight MMPs to deliver integrated primary, acute, LTSS, and behavioral health services: six plans in the Greater Chicago area and two plans in Central Illinois. One of the Central Illinois plans withdrew at the end of 2015, and one of the Chicago area plans withdrew at the end of 2017. MMPs' operations are governed by a three-way contract with CMS and the State.

Geographic coverage. The demonstration's two service areas are Greater Chicago, which includes Cook County and five surrounding counties, and Central Illinois, which is made up of 15 counties.

Care coordination. Care management is a core MMP function. Organization of care management processes and implementation experience are discussed in ***Section 4***.

Benefits. MMAI enrollees receive Medicare Parts A, B, and D benefits, and Medicaid State Plan and HCBS waiver services through MMP plans. If there is overlap between Medicare and Medicaid services for a condition, diagnosis, or type of illness, MMPs are required to provide the more expansive set of services. Benefits available to MMAI enrollees are summarized in ***Table 1***.

Flexible benefits. MMPs are also offering flexible benefits, which vary by plan and include over-the-counter products, zero co-pays for prescription drugs, additional dental and vision benefits, fitness club memberships, rides to the pharmacy after a doctor visit, and frozen meals after hospitalizations.

New service delivery models. Plans must provide care management for enrollees in nursing facilities by employing clinicians who specialize in care management for nursing facility residents, known as SNFists (see ***Section 4, Care Coordination***).

Stakeholder engagement. State officials have engaged stakeholders through the Medicaid Advisory Committee and its subcommittees, particularly the Public Education Subcommittee, as well as through presentations to and meetings with various stakeholder organizations (see ***Section 6, Stakeholder Engagement***).

1.3 Changes in Demonstration Design

The State and CMS have not changed the design of the demonstration. However, in July 2016, the State implemented mandatory Medicaid managed LTSS in the Chicago region for demonstration eligible beneficiaries who use LTSS, and this change potentially affected enrollment (see ***Section 1.4.2, Medicaid Managed LTSS [MLTSS])***.

Table 1
Summary of benefits covered by MMAI plans

Benefits covered by MMAI plans	
Medicare and Medicaid health benefits	
Behavioral health services	Hospital services
Physician services	Lab tests and x-rays
Eye care services	Medical supplies
Hearing services	Prescriptions
Home health care	Therapy
Hospice care	Transportation to medical appointments
Medicaid LTSS	
Nursing facility services	HCBS services through five waivers*
Other required services	
Care coordination	24/7 nurse line

NOTE: The five HCBS waivers included in the demonstration are (1) Persons who are Elderly, (2) Persons with Disabilities, (3) Persons with HIV/AIDS, (4) Persons with Brain Injury, and (5) Persons residing in Supportive Living Facilities.

SOURCE: Illinois HFS, untitled MMAI enrollment materials, 2016.

1.4 Overview of State Context

This section provides an overview of Illinois's experience with Medicaid and Medicare managed care, its efforts to rebalance LTSS, plans to restructure Medicaid behavioral health services, as well as information about administrative supports for the demonstration. For a summary of predemonstration and demonstration design features for Medicare and Medicaid enrollees in Illinois, see ***Appendix E***.

1.4.1 Experience with Managed Care

Although Illinois has had Medicaid managed care for more than 40 years, take-up rates in both Medicaid and Medicare Advantage historically have been low. Illinois launched a voluntary, capitated Medicaid managed care program in 1976 to serve families and children, but enrollment was low compared with Medicaid fee-for-service (FFS). In 2011, the Illinois legislature enacted State Medicaid reform legislation requiring that at least 50 percent of Medicaid beneficiaries participate in care coordination programs by February 1, 2015 (State of Illinois, 2011, p. 1).

In 2011, the State implemented a mandatory capitated managed care program, the Integrated Care Program (ICP), to serve approximately 40,000 Medicaid-only seniors and individuals with disabilities in the Greater Chicago area, including Cook County and the five surrounding counties. This program provided a foundation of managed care experience that State officials said they have applied to MMAI (State of Illinois, 2012, p. 2).

The State launched the MMAI demonstration in March 2014, the same year in which it launched the Family Health Plan/ACA Adults program, a mandatory Medicaid managed care program for families and children, as well as adults covered under the ACA Medicaid expansion. Illinois also expanded the ICP program to additional regions in 2014 (Illinois HFS, 2014).

Prior to the demonstration Medicare-Medicaid beneficiaries were not eligible for Medicaid managed care, and Illinois was in the bottom third of States for Medicare Advantage penetration in 2014, with a 16 percent penetration rate (Gold, Jacobson, Damico, et al., 2014, p. 1). Four Dual Eligible Special Needs Plans (D-SNPs) operated in Illinois in 2013, but their enrollment totaled less than 7,000 (CMS, 2013). All D-SNPs ended in the State as of December 31, 2017. Illinois Medicaid does not have a Program of All-Inclusive Care for the Elderly (PACE).

1.4.2 Medicaid Managed LTSS (MLTSS)

Illinois added long-term services and supports (LTSS) to the ICP in 2013, so State officials and some MMPs had a year of experience with LTSS prior to the launch of MMAI.

The State planned to roll out a mandatory Medicaid managed LTSS (MLTSS) program concurrent with MMAI, but implementation was delayed several times. State officials said mandatory MLTSS was needed to ensure that demonstration eligible beneficiaries who opted out of MMAI received the benefits of managed LTSS and that nursing facility providers could not avoid managed care. However, State officials said later that they "didn't have the bandwidth" to implement MLTSS at the same time they were implementing MMAI and FHP/ACA and expanding ICP (see ***Section 1.4.4 State Agency Capacity***).

MLTSS was implemented in July 2016 for Medicare-Medicaid beneficiaries in the Greater Chicago region who use nursing facility or HCBS waiver services and opt out of MMAI. The Central Illinois region was not included in MLTSS because there was only one MMP, so beneficiaries could not be offered a choice of plans. Four Chicago MMPs signed contracts to participate in MLTSS. The Medicaid services provided under MLTSS are nursing facility and HCBS waiver services, non-emergency medical transportation, and behavioral health services. MLTSS plans also provide care coordination and flexible benefits. MLTSS enrollees receive medical and other health care services through Original Medicare and a Part D plan, or a Medicare Advantage plan, and other Medicaid services through FFS Medicaid.

MLTSS will expand in 2018 under the State's new Medicaid managed care program, known as HealthChoice Illinois. As in the Greater Chicago region, Medicare-Medicaid beneficiaries in Central Illinois who use LTSS will be required to enroll in MLTSS if they are not enrolled in MMAI. Beneficiaries required to enroll in MLTSS will have more plan choices in 2018, because all of the HealthChoice plans will cover the MLTSS benefits for enrollees in that program.

1.4.3 Budget Situation

At the time of the 2017 site visit, Illinois was in its second year without a State budget, due to an impasse between the Governor and the legislature. State officials said that the State was making payments for health care and State employee salaries under a Court order. However,

at the time of the 2017 site visit, the State had fallen 3 to 4 months behind in health plan payments, and contractors (including the enrollment broker) were not being paid at all. State officials and beneficiary advocates reported that some social service providers had closed or reduced operations due to cuts in State-funded programs. One MMP said these closures had made it challenging to maintain an adequate behavioral health provider network. State officials said health plans had expedited payments to some small behavioral health providers to help them continue operating. The State passed a budget in July 2017.

1.4.4 State Agency Capacity

State officials said that staffing levels in the HFS Bureau of Managed Care had affected the demonstration, most notably by delaying the start of MLTSS. Agency staffing had remained at roughly the same level over the past 10 years, while job responsibilities had increased considerably. Prior to 2006, the bureau administered a primary care case management (PCCM) program and the voluntary managed care program. By 2016 the bureau was administering four capitated managed care programs and the PCCM program, which continued to operate in rural counties.

1.4.5 LTSS Rebalancing Initiatives

Illinois participated in two Federal initiatives that support LTSS rebalancing, and implemented two Olmstead-related consent decrees to help individuals transition from institutional settings to community living. The Money Follows the Person program, known in Illinois as Pathways to Community Living, helps residents of institutions transition to community living and supports community services (Illinois HFS, 2013). A Balancing Incentive Program award from CMS provided an enhanced Federal matching rate for Medicaid HCBS expenditures for eight quarters to support LTSS rebalancing and structural changes to help individuals access community services (CMS, Balancing Incentive Program website, n.d.).

The Williams and Colbert Consent Decrees resulted from lawsuits by institutional residents seeking to live in more integrated, community settings. Both agreements require the State to provide services and supports to institutional residents to enable individuals with LTSS needs to live in the most integrated settings appropriate to their needs. The Williams Consent Decree affects 4,500 individuals with serious mental illness (SMI) in nursing facilities across the State (Illinois DHS, Division of Mental Health, 2011, p. 3). The Colbert Consent Decree applies to residents of nursing facilities in Cook County, including many individuals with SMI (Proposal, 2012, pp. 20–1). MMPs are not required to coordinate transitions for enrollees covered by the consent decrees, but they must implement service plans for enrollees after they transition to the community (Illinois three-way contract, 2013, pp. 58–9).

1.4.6 Behavioral Health Redesign and Integrated Health Homes

In October 2016, HFS applied for an 1115(a) Medicaid waiver to transform behavioral health care delivery. The pending waiver would address substance use, mental health services, crisis stabilization, workforce development, employment supports, and housing supports. At the time of the 2017 site visit, HFS was also preparing a State Plan Amendment for integrated health homes for the Medicaid population. State officials said their integrated health homes concept

includes both Section 2703 health homes for beneficiaries with qualifying chronic conditions and medical homes for other individuals.

Federal Financial Support

Implementation funds. Illinois was not among the 15 States that were awarded a demonstration design contract from CMS under the State Demonstrations to Integrate Care for Dual Eligible Individuals. As a result, Illinois did not receive Federal funds to support the planning of the demonstration and was ineligible to receive CMS funding for implementation support beyond the Ombudsman and SHIP/ADRC funding noted below.

Ombudsman funding. The Illinois Long Term Care Ombudsman Program (LTCOP), based in the Illinois Department of Aging, received Federal awards totaling $1,398,678 to operate the MMAI Ombudsman program over 3 years (MMCO website). More information about LTCOP's Ombudsman program and experience is provided in ***Section 5.2.9***.

SHIP/ADRC funding. In August 2013, Illinois received $394,932 in Federal funding for a 3-year period to provide options counseling to demonstration eligible beneficiaries (CMS, 2014b).

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2. Integration of Medicare and Medicaid

Highlights

- Illinois and CMS initially contracted with six MMPs in the Greater Chicago region and two MMPs in the Central Illinois region. One of the Central Illinois plans terminated its participation in MMAI at the end of 2015, and one of the Greater Chicago plans terminated at the end of 2017.
- The State announced in April 2017 that enrollees in six of the Central Illinois region's 15 counties would be disenrolled from the region's only MMP due to network adequacy issues. Another health plan applied to operate an MMP in Central Illinois beginning in January 2018, but the state decided to delay any expansions of MMP service areas until 2019.
- Providers reported experiencing challenges adapting to managed care. They cited issues with contracting, lack of standardization in billing and prior authorization procedures, and delays and inaccuracies in provider enrollment data. The large number of MMPs and Medicaid MCOs has made the lack of standardization especially challenging for providers in the Chicago region.

This section provides an overview of the management structure of the demonstration and describes the integrated delivery system including the role and structure of MMPs, their provider arrangements, and major areas of integration. Later sections provide more in-depth discussion of the implementation successes and challenges associated with the integration of these functions.

2.1 Joint Management of Demonstration

The operations of the Medicare-Medicaid Plans (MMPs) are governed by a three-way contract with the State and CMS, executed in September 2013 (Illinois three-way contract, 2013). The three-way contract was amended in August 2016 to extend the demonstration by two years and align with Medicare Advantage and Illinois Medicaid managed care contracts (amended three-way contract, 2016). State officials said the three-way contract would need to be amended again prior to January 1, 2018 to incorporate requirements of the newly adopted Medicaid managed care rule.

A joint CMS-State Contract Management Team (CMT) oversees the MMPs and coordinates Medicare and Medicaid policies and processes. The CMT monitors plans' compliance with the three-way contract; meets regularly with the MMPs; reviews grievance and appeal data; receives and responds to complaints; coordinates MMP audits and surveys; provides technical assistance to the plans; and reviews marketing materials (amended three-way contract, 2016). Most CMT activities have been performed jointly, with exceptions when issues are solely within either State or Federal purview.

The CMT includes representatives of CMS's Medicare-Medicaid Coordination Office and Chicago Regional Office, as well as staff of the Illinois Bureau of Managed Care (BMC). CMT members meet weekly to discuss topics such as questions from the MMPs, coordination between the State and CMS, and agendas for MMP calls. The CMT also meets monthly with the Ombudsman and the enrollment broker.

The CMT holds regular meetings with each MMP. During the first months of passive enrollment, the CMT met weekly with MMPs to address enrollment issues but has since scaled back to monthly meetings. Early in the demonstration, CMT members said their meetings addressed topics such as care coordinator hiring and caseloads, Health Risk Assessments (HRA) completion, and enrollment system discrepancies. In 2017, the CMT addressed issues such as network adequacy in Central Illinois, marketing guidance, and person-centered care planning.

2.2 Overview of Integrated Delivery System

2.2.1 MMAI Plans

Illinois officials said the design of the MMAI demonstration was based on the State's Integrated Care Program (ICP), a mandatory Medicaid managed care program that integrates Medicaid medical, behavioral health, and LTSS services for older adults and adults with disabilities. State staff noted that the ICP put in place structures that MMAI could build on, such as a common set of contracted health plans, care coordination policies that required only minor modifications, and partnerships with other State agencies that could be adapted for MMAI. State officials said their experience with Medicare prior to the demonstration was limited.[5]

Shortly after submitting its proposal to participate in the Financial Alignment Initiative, CMS and the State began the plan solicitation process, including a joint CMS-State MMP readiness review, which resulted in the selection of eight MMPs. In May 2012, Illinois issued two requests for proposals (RFPs) to solicit bids from health plans to participate in the MMAI demonstration, with a separate RFP for each of the two regions (HFS, 2012b and 2012c). The eight successful bidders were announced in November 2012 (HFS, 2012a). Plans had to complete a readiness review and be approved prior to demonstration start.

All health plans selected to participate in MMAI had some experience with Medicare Advantage prior to the demonstration, and most had experience with Illinois Medicaid managed care, although their Medicaid experience may have been brief.

The six MMPs selected to operate in the six-county Greater Chicago region were Aetna Better Health, Cigna-HealthSpring of Illinois, IlliniCare Health Plan, Meridian Health Plan of Illinois, Humana Health Plan, and BlueCross BlueShield of Illinois. Three of the MMPs did not participate in one or more counties due to network adequacy issues. Despite variations in MMP

[5] Illinois had contracts with Medicare Advantage Dual Eligible Special Needs Plans (D-SNPs) under the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA), but the agreements were limited to coordination of benefits and did not include capitation of Medicaid services. Fewer than 11,000 Medicare-Medicaid beneficiaries were enrolled in D-SNPs in April 2017, and State officials decided not to extend contracts beyond the end of 2017 (CMS, 2017). Illinois does not have a Program of All-Inclusive Care for the Elderly (PACE).

coverage, enrollees in all six Greater Chicago counties had a choice of four or more MMPs (Illinois HFS, n.d.-a) during the first four years of the demonstration.

Initially, two MMPs, Health Alliance Medical Plans and Molina Health Care of Illinois, served the 15 counties in Central Illinois, but Health Alliance withdrew in December 2015 due to projected financial losses (see ***Section 7, Financing and Payment***). Health Alliance left the Illinois Medicaid market as well. The State transitioned the plan's 5,900 members to new coverage and transferred enrollees' HCBS service plans either to the remaining MMP or to an HCBS waiver coordination agency. State officials said some Health Alliance members opted into the Molina MMP, but most returned to Medicaid FFS and either Original Medicare or Medicare Advantage plans.

In April 2017, the State disenrolled MMAI beneficiaries in six Central Illinois counties from the one remaining MMP after three hospitals terminated their contracts with the plan. Passive enrollment into that MMP was suspended in the other nine counties in the region, although opt-in enrollments were still allowed (HFS, 2017). Disenrolled MMAI members were enrolled in Medicaid FFS and either Original Medicare and a Part D plan, or a Medicare Advantage plan.

In 2017, State officials said that another health plan had applied to operate an MMP in the Central Illinois region, but later that year the State decided to not to expand any MMP service areas until 2019.

In addition to the changes affecting Central Illinois, Cigna, one of the Greater Chicago region MMPs, ended its participation in the demonstration and in the Illinois Medicaid market at the end of 2017 and its members were passively enrolled into other MMPs, with the option to change plans, opt out, or disenroll.

MMP enrollment as of December 2016 and each MMP's percentage of total demonstration enrollment are shown in ***Table 2***.

Table 2
Enrollment in MMAI, by Medicare-Medicaid Plan, December 2016

Medicare-Medicaid Plan	Greater Chicago	Central Illinois	Percentage of total enrollment
Aetna Better Health	6,146	—	13.2
BlueCross BlueShield of Illinois	13,926	—	29.8
Cigna-HealthSpring of Illinois	5,437	—	11.7
Humana Health Plan	6,176	—	13.2
IlliniCare Health Plan (Centene)	5,321	—	11.4
Meridian Health Plan	6,308	—	12.4
Molina Healthcare of Illinois	—	3,899	8.4
Total	43,314	3,899	100.0

— = Not Applicable
SOURCE: Illinois HFS: Enrollment for Medicare-Medicaid Alignment Initiative (MMAI). https://www.illinois.gov/hfs/MedicalProviders/cc/Pages/MMAIEnrollment.aspx. 2017. As obtained on January 27, 2017.

2.2.2 Provider Arrangements and Services

Provider stakeholders reported challenges throughout the first 3 years adapting to managed care. Some Medicaid providers were challenged by the transition from Medicaid FFS to multiple payers, and even large provider organizations in the Chicago region faced difficulties due to the large number of health plans and lack of standardization in billing and prior authorization procedures.

Contracting

MMPs said their initial goal was to establish broad networks to enable them to enroll beneficiaries, and provider stakeholders said many providers had a similar goal in signing contracts with multiple plans to avoid losing patients. State officials and stakeholders said that small providers, including behavioral health, community LTSS, and Federally Qualified Health Center (FQHC) providers, were at a disadvantage because they were inexperienced in managed care contracting. Some stakeholders said in 2014 that the State should have done more to educate providers about contracting and allowed more time for negotiating agreements.

In 2017, State officials, MMPs, and some providers and advocates said some providers had become more selective about contracting with health plans. An advocacy group said that the Central Illinois MMP's network issues discussed earlier resulted from certain hospitals taking a more selective approach to contracting. An MMP executive said that some hospitals in the Chicago region were also becoming more selective about contracting. According to the executive, hospitals pursuing that approach want to contract with large health plans with commercial products that pay higher rates, although they will also accept those plans' Medicare and Medicaid products. A provider stakeholder said another objective in selective contracting is to reduce the administrative burden of contracting with a large number of plans.

Health plans interviewed in 2017 also said they were becoming more selective, within the limitations of the State's Any Willing Provider (AWP) law, which requires insurers to contract with providers who are willing to accept standard rates and who meet a plan's quality standards. For example, one MMP said it would like to contract selectively with nursing facilities because low-quality facilities tend to have higher costs, but it was difficult to terminate contracts due to the challenge of moving residents to other facilities. Instead, the plan encourages enrollees and their families to select higher quality nursing facilities at the time of admission.

Provider payments

MMPs typically pay providers the same rates as Medicare and Medicaid FFS, according to plans and State officials. MMPs said they sometimes have to pay higher rates to providers in certain counties, or to certain types of providers, to maintain network adequacy. On the other hand, State officials said MMPs pay several hospitals less than Medicare FFS rates under national contracts. A provider stakeholder said several durable medical equipment (DME) providers that enrolled after the first year of MMAI are paid less than Medicaid rates.

Several MMPs described limited use of alternative payment methods, which seemed to be most commonly used for primary care providers. For example, one plan uses a combination of pay-for-performance based on Healthcare Effectiveness Data and Information Set (HEDIS) measures, per member per month (PMPM) care coordination fees, and shared savings

arrangements. Another MMP said it is challenging to implement alternative payment methods for a product like MMAI that represents a small percentage of a provider's panel.

Provider challenges with managed care processes

During each site visit, providers discussed the challenges of adapting to managed care. For some provider types the major problem was their lack of familiarity with managed care prior to the demonstration, but even providers with prior managed care experience have experienced problems due to the large number of health plans with whom they need to contract and lack of standardization in requirements and processes. Provider stakeholders said HFS had helped by convening meetings between health plans and provider groups to address some of these issues, but that HFS tended to defer to the plans to resolve issues (***Section 6.2.1, State Role and Approach***).

In 2014, State officials said the transition to managed care was especially difficult for behavioral health providers, which did not transition to Medicaid FFS payment methods until July 2011, having previously operated under grant funding and an advance-and-reconcile version of FFS. Some providers were still transitioning their billing systems to FFS in 2014 when they began transitioning to a new managed care contract-based system with multiple MMP payers.

One provider said billing for addiction treatment services was particularly confusing because health plans instructed providers to use different claims forms than they were accustomed to using under Medicaid FFS, and each plan used different modifiers. The State finally required uniform billing codes for addiction treatment services in 2016.

Provider groups said that prior authorization was another significant challenge due to variation among plans in the services that require authorization, the forms used, and how requests are submitted. One provider reported that plans had not integrated prior authorization processes for services covered by both Medicare and Medicaid, such as home medical equipment.

Provider groups said that the lack of standardization among plans was especially problematic in the Greater Chicago region. Several providers said that after the Medicaid managed care roll-out was completed, there were 12 health plans participating in all of the State's Medicaid managed care programs, including MMAI.[6] Providers said that national health plans, such as those participating in MMAI, were less flexible about changing their procedures than the local plans.

Provider enrollment has been a continuing challenge, according to providers. One provider explained that after providers apply and are accepted into a network, there are sometimes delays and errors in listing them in the plan's directory, which can cause providers to lose patients and experience billing problems. Several provider associations said that delays and inaccuracies in enrolling physicians also impact provider organizations where physicians

[6] At the time of the 2017 site visit, there were a total of 12 Medicaid health plans in the Greater Chicago region, including commercial plans and provider-led entities with risk contracts. Each plan participated in one or more Medicaid managed care programs, for a total of 33 Medicaid managed care different products. In March 2017, the State released an RFP to procure Medicaid health plans with the intention of reducing the number of plans and consolidating three Medicaid care programs.

practice, such as hospitals and FQHCs, by causing billing problems and confusion about whether their physicians are in MMPs' networks.

Medical homes

Under the three-way contract, MMPs are required to offer enrollees a choice of primary care providers (PCPs) to act as their medical homes. MMPs are required to include FQHCs, Community Mental Health Centers, multi-specialty groups, and PCPs in private practice in their networks (Illinois three-way contract, 2016, p. 65). PCPs are not expected to provide care coordination, which is provided by MMP care coordinators and integrated care teams, although several MMPs said that a small number of primary care practices provide some level of care coordination and receive PMPM payments from plans.

MMPs are also required to use strategies to support advancement toward patient-centered medical home certification by entities such as the National Committee for Quality Assurance (NCQA) (Illinois three-way contract, 2016, p.65). MMPs are meeting the medical home requirement by contracting with PCPs and offering practice transformation support.

Nursing Facilities

According to State officials and stakeholders, some Illinois nursing facilities were very resistant to the demonstration and lobbied for legislation to impose limits on managed care plans. During the 2014 legislative session, a law backed by one of the nursing facility associations was enacted which requires MMPs to contract with any willing nursing facility that accepts the standard terms, conditions, and rates.[7] Nursing facility associations also advocated for strict timeframes for prior authorization and full payment of Medicare rates for skilled nursing facility (SNF) benefits.

In addition to lobbying legislators and HFS officials, State officials said some nursing facilities had encouraged residents to opt out of the demonstration and submitted batches of opt-out forms, in some cases for all of their MMAI-eligible residents. Early in the demonstration some facilities also encouraged residents to buy Medicare supplement insurance policies to ensure payment of co-insurance for the SNF benefit, until CMS sent a notice reminding providers that Federal law prohibits sale of such policies to Medicare-Medicaid beneficiaries.

2.3 Major Areas of Integration

2.3.1 Integrated Benefits and Enrollment

MMAI enrollees receive Medicare and Medicaid medical, behavioral health, and LTSS services through their MMPs, as well as care coordination and flexible benefits such as zero copayments for prescription drugs, additional dental care, and over-the-counter drug benefits, as described in ***Section 1.2, Model Description and Demonstration Goals***. The demonstration

[7] Illinois Public Act 098-0651 was enacted in 2014. Article V-F of the act was titled the Medicare-Medicaid Alignment Initiative (MMAI) Nursing Home Residents' Managed Care Rights Law. State officials said the original bill backed by nursing facility providers was amended during the legislative process, resulting in more balanced legislation.

integrates Medicare and Medicaid managed care enrollment through the Illinois Client Enrollment Broker, as described in ***Section 3, Eligibility and Enrollment.***

2.3.2 Integrated Care Coordination and Care Planning

Care coordination by the MMPs integrates medical care, behavioral health, and long-term services and supports. Integrated care teams led by care coordinators are responsible for developing and implementing care plans to address each enrollee's needs. Plans are also responsible for providing care management for enrollees in nursing facilities by employing clinicians who specialize in care management for nursing facility residents, known as SNFists (see ***Section 4, Care Coordination***).

2.3.3 Integrated Quality Management

The MMAI quality management framework includes four primary components: joint oversight by the State and CMS; quality measurement and reporting; quality and performance improvement activities by the plans; and external quality reviews by the Medicare Quality Improvement Organization and Illinois Medicaid's External Quality Review Organization (see ***Section 9, Quality of Care***).

2.3.4 Integrated Financing

All Medicare and Medicaid services are financed through risk-adjusted capitated payments to the MMPs from Medicare and Medicaid. The demonstration savings percentage and quality withholds are applied to the payments for Medicare Parts A and B and Medicaid, but not to Part D capitation payments. Illinois implemented a blended LTSS rate to provide an incentive for MMPs to rebalance LTSS services and serve more enrollees in the community. The blended rates were effective January 1, 2016 (***Section 7, Financing and Payment***).

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3. Eligibility and Enrollment

Highlights

- More than 153,000 Medicare-Medicaid beneficiaries were eligible for the Illinois capitated model demonstration in December 2016 and more than 46,000 of them were enrolled, or 30.2 percent. Enrollment peaked in the final month of phased enrollment, February 2015, and then began to decline during the remainder of the period covered in this report.
- State officials and stakeholders cited several factors to explain the low enrollment rate, including difficulty communicating the advantages of MMAI, limited outreach by the State, confusion, provider influence, and apprehension about managed care. The suspension of passive enrollment from March through October 2015 also contributed to the decline in MMAI enrollment.
- In July 2016, the State implemented mandatory Medicaid managed LTSS (MLTSS) in the Greater Chicago region for demonstration-eligible beneficiaries who used LTSS and were not enrolled in MMAI. Beneficiary advocates said that MMAI offered much more integration than MLTSS, but it was difficult to communicate MMAI's advantages to beneficiaries, and many beneficiaries may prefer MLTSS because they can remain in Original Medicare and have more choice of providers.

3.1 Introduction

This section provides an overview of the enrollment process for MMAI. Eligibility for the demonstration, enrollment phases, and the passive enrollment process are included in this section. Enrollment and opt-out data are presented, and factors influencing enrollment decisions and recently implemented enrollment strategies are also discussed.

3.2 Enrollment Process

3.2.1 Eligibility

Full-benefit Medicare-Medicaid beneficiaries aged 21 and older, including beneficiaries participating in five home and community-based services (HCBS) waiver programs, are eligible for the demonstration. Beneficiaries not eligible for enrollment include individuals who receive developmental disability institutional services or participate in the HCBS waiver for adults with developmental disabilities; individuals eligible for Medicaid through the spend-down program; Illinois Medicaid Breast and Cervical Cancer Program participants; and Medicare-Medicaid enrollees who have comprehensive third-party insurance (MOU, 2013).

3.2.2 Phases of Enrollment

Phased enrollment into MMAI began in March 2014 with a 3-month period of opt-in only enrollment, followed by two phases of opt-out or passive enrollment (with the ongoing opportunity to opt in). Passive enrollment began in May 2014 for community-based beneficiaries who did not receive LTSS, followed by another phase of passive enrollment from December 2014 through February 2015 for beneficiaries using LTSS and/or HCBS waiver services.

In Phases 2 and 3, the State mailed enrollment notices to a maximum of 3,000 beneficiaries per month in Central Illinois and 5,000 per month in the Chicago area to create gradual increases in MMP enrollment and a manageable workload for the enrollment call center (See ***Table 3).***

Table 3
MMAI phased enrollment plan

	Phase 1	Phase 2	Phase 3
First effective date	March 1, 2014	June 1, 2014	December 1, 2014
Target population	All eligible beneficiaries	All community beneficiaries eligible for passive enrollment	Nursing facility residents and participating waiver enrollees eligible for passive enrollment
Geographic area	Greater Chicago area and Central Illinois	Greater Chicago area and Central Illinois	Greater Chicago area and Central Illinois
Enrollment method	Opt-in enrollment	Passive enrollment	Passive enrollment
Gradual roll-out		In the Greater Chicago service area, passive enrollment occurred over a period of 6 months, and a maximum of 5,000 beneficiaries were enrolled per plan per month. In the Central Illinois service area, passive enrollment occurred over a 6-month period and a maximum of 3,000 beneficiaries were enrolled per plan per month.	Enrollment was conducted in monthly waves. All eligible individuals were passively enrolled in the demonstration by February 2015.

MMAI = Medicare-Medicaid Alignment Initiative.

3.2.3 Passive Enrollment Experience

Nearly three-quarters of MMAI enrollees were passively enrolled. State officials said their biggest enrollment challenge during early implementation was beneficiary confusion about the multiple enrollment and disenrollment notices they received, which included initial letters about the demonstration, 90-day and 60-day enrollment notices, enrollment packets from MMPs, and disenrollment notices from Part D plans. State officials, beneficiary advocates, and plans reported that many beneficiaries had difficulty understanding the notices—particularly those

from CMS—due to their length and wording. State officials said many beneficiaries were alarmed when they received notices that their Part D coverage was ending before they had enrolled in a MMP. CMS tested revised language and made changes to the Part D plan notice templates for 2017 to indicate Part D coverage was ending due to the beneficiaries being enrolled in a MMP.

MMAI enrollment peaked at 62,218 in February 2015, the final month of phased enrollment. Illinois suspended passive enrollment from March through October 2015 because the State was unable to reprogram its legacy eligibility system to comply with CMS guidance limiting each beneficiary to one passive enrollment per calendar year (CY) (see ***Section 3.2.5, Integration of Medicare and Medicaid Enrollment Systems***). During the eight months when passive enrollment was suspended, total MMAI enrollment declined by 21 percent. The State resumed passive enrollment using a manual process in the fall of 2015, with 4,600 beneficiaries passively enrolled effective November 1, 2015. Monthly passive enrollment has continued since that time.

The State implemented mandatory enrollment in the MLTSS program in July 2016. This, in combination with the effects of monthly passive enrollment, helped to stabilize enrollment in MMAI over the course of 2016. MLTSS is limited to demonstration eligible beneficiaries in the Greater Chicago region who use LTSS and opt out of or disenroll from MMAI. State officials said that about 1,000 beneficiaries opted into MMAI rather than accepting enrollment into MLTSS. Advocates said they thought beneficiaries who valued integration may have opted into MMAI, while beneficiaries who wanted to remain in original Medicare may have accepted enrollment into MLTSS plans.

State officials and various stakeholders said in 2015 that the lack of a mandatory Medicaid managed care requirement for the demonstration eligible population was an important factor in the high rate of opt-outs and voluntary disenrollments. During the 2017 site visit, State officials and stakeholders expressed hope that, over time, MLTSS enrollees would recognize the advantages of MMAI and opt into the demonstration.

3.2.4 Factors Influencing Enrollment Decisions

Positive features of MMAI

Beneficiary advocates and MMPs cited several basic features of MMAI as reasons beneficiaries might choose to enroll rather than remain in FFS: a single card and single point of contact; care coordination; and flexible benefits, which vary among plans. Many of the beneficiary focus group participants said they liked MMAI's flexible benefits, especially zero co-pays for prescription drugs, a benefit offered by three of the six MMPs in the Chicago region and by Molina in Central Illinois.

Beneficiary advocacy groups said that because MMAI integrates LTSS, behavioral health, and medical care, they recommend it to LTSS users rather than MLTSS. However, because MLTSS also has care coordination and flexible benefits, beneficiaries may have difficulty understanding MMAI's advantages. They said the single card is a selling point for MMAI, because MLTSS enrollees typically have cards for four payers: an MLTSS plan,

Medicaid FFS, original Medicare, and a Part D plan. Advocates and State officials said the lack of integration also makes the MLTSS program confusing for providers.

Enrollee decisions to opt out and disenroll

State officials said instructions for opt-out and disenrollment were prominently displayed in the enrollment notices, which may have encouraged enrollees with doubts about the demonstration to opt out or disenroll. State officials and stakeholders cited a range of additional factors contributing to the high rate of opt-out and disenrollment, including lack of familiarity with managed care, lack of information about the advantages of MMAI, and unwillingness to adapt to managed care requirements such as obtaining referrals for specialists and using network providers.

An advocacy group said that "[w]ith the senior population, it takes quite a while for people to get used to a change like MMAI; they've always been used to the red, white, and blue [original Medicare] card and their Medicaid card." Another advocacy group said they had heard that some beneficiaries opted out in response to passive enrollment notices simply because they did not like being told what to do. Advocates also said that Illinois still has a strong culture of FFS and some consumers and providers have been slow to accept managed care.

Provider influence on enrollment decisions

State officials and stakeholders said some providers had encouraged beneficiaries to opt out or disenroll, especially early in the demonstration when providers were unfamiliar with MMAI. During the 2015 site visit, State officials said that some nursing facilities were submitting batches of opt-out requests for their demonstration eligible residents; the State officials expected that practice to end when mandatory MLTSS was implemented. Also in 2015, a beneficiary advocate said that "the biggest obstacle in the process is the medical community. They didn't like to be in managed care…. It was supposed to be an easy process, but because of discouragement from the doctors, people started opting out at high rates."

Marketing by Medicare Advantage plans

During the 2017 site visit, beneficiary advocates said that marketing presentations by Medicare Advantage plans in senior apartment buildings are confusing for beneficiaries because they may not understand the difference between Medicare Advantage plans and MMPs. An MMP representative said that unless brokers and agents are well informed about MMAI's integrated benefits, they may present Medicare Advantage plans as the best option for Medicare-Medicaid beneficiaries. Another MMP said it loses members to Medicare Advantage plans during open enrollment but gains members when beneficiaries understand that the MMAI plan is integrated and has zero co-pays.

3.2.5 Integration of Medicare and Medicaid Enrollment Systems

Enrollment Broker

Maximus functions as the enrollment broker for all State health programs, including MMAI. Maximus mails enrollment materials to eligible beneficiaries; provides enrollment

assistance and responds to inquiries to the enrollment call center; receives opt-in, opt-out, disenrollment, and plan change requests; and conducts passive enrollment.

Maximus also sends all enrollment data files to CMS's Medicare Advantage Prescription Drug (MARx) enrollment system, and receives daily transaction reply reports from CMS. Maximus then sends enrollment forms to the MMPs and HFS. The Illinois three-way contract outlines Maximus's additional responsibilities, including developing materials to help individuals choose whether to enroll in the demonstration, presenting MMP information in an unbiased way, informing beneficiaries about their rights; and auto-assigning enrollees to MMPs (MOU, 2013, pp. 170–172).

Enrollment Discrepancies

During the 2014 and 2015 site visits, State officials, MMPs, providers, and beneficiary advocates cited enrollment discrepancies as a significant challenge. Discrepancies occur when data in the Medicare, Medicaid, and enrollment broker systems are not in sync, thus creating confusion about enrollees' eligibility and plan enrollment. These discrepancies created difficulties for enrollees trying to fill prescriptions and access care, and for providers trying to verify coverage and bill for services. Resolving discrepancies created a significant amount of extra work for the MMPs, CMS, HFS, and the enrollment broker. Over time the State, the enrollment broker, and CMS developed processes to correct enrollment discrepancies in a timely manner, and during the 2017 site visit, discrepancies were barely mentioned. One MMP said the volume of discrepancies had declined from 400 per month to a handful.

Enrollment System Changes

As mentioned in ***Section 3.2.3***, Illinois suspended passive enrollment from March through October 2015. CMS enrollment guidance limits each Medicare beneficiary to one passive enrollment per CY, and State officials said they were unable to reprogram their legacy eligibility system to identify beneficiaries who had already been auto-enrolled by CMS into a Medicare Part D prescription plan. The State resumed passive enrollment in November 2015 using a manual process, which was still being used in early 2017. State officials said in 2017 that when they are able to automate, the system will be more efficient and will identify more newly eligible beneficiaries.

State officials also said during the 2017 site visit that they want to implement rapid re-enrollment into the demonstration for beneficiaries who lose Medicaid eligibility but regain it within two months. HFS systems are automated to provide rapid re-enrollment in Medicaid managed care, but HFS disabled that feature for MMAI to ensure compliance with CMS guidance limiting beneficiaries to one passive enrollment during a CY. CMS later revised their guidance, and State officials said in 2017 that they plan to implement rapid re-enrollment, but the change will be delayed until 2018 due to other priorities.

Medicaid Eligibility Redeterminations

According to State officials, MMPs, and beneficiary advocates, Medicaid eligibility redeterminations have adversely affected enrollment and continuity of care. Illinois is a 209(b) State, which means the State Medicaid agency requires Supplemental Security Income (SSI) beneficiaries to apply for Medicaid and meet separate eligibility criteria, instead of deferring to

the Social Security Administration (SSA) and auto-enrolling SSI beneficiaries. To retain their eligibility, SSI-eligible Medicare-Medicaid beneficiaries must return a form each year that verifies their continued eligibility. Beneficiary advocates said that beneficiaries may not receive the notices, may not be able to read or understand them, or may simply fail to respond in a timely manner. While loss of Medicaid eligibility related to re-determination is a common occurrence in Medicaid, it causes particular problems for MMAI, because there has not been a process to re-enroll beneficiaries into their MMPs. During the 2017 site visit, State officials expressed interest in implementing a rapid re-enrollment process for beneficiaries who regain their Medicaid eligibility within 2 months. The process would require systems changes that State officials said they hoped could be completed in 2018.

To reduce the number of enrollees who lose Medicaid eligibility, the State provides lists of enrollees due for re-determination to the MMPs each month, and the CMT compiled a list of re-determination best practices, which was shared among MMPs. State officials said Illinois implemented a new Integrated Eligibility System in 2014, and an online portal is planned that will allow beneficiaries to renew their eligibility online. Launch of the online portal was delayed several times during 2016, and it had not been implemented at the time of the 2017 site visit.

Enrollment Materials

State officials said during the 2017 site visit that they were working with CMS to revise MMAI enrollment notices to more clearly explain MMAI and add other information; those revisions were implemented later in 2017. The revised notices state that MMAI enrollees receive their Medicare, Medicaid, and Part D benefits from one plan, that care coordinators will help them manage their health care and LTSS, and that they will need to use their plans' provider networks. State officials said the revised language was inspired by messaging developed for the Massachusetts Financial Alignment Initiative (FAI) demonstration. The revised notices also clarify that MMAI enrollees' current Part D coverage will continue until the new coverage begins, and provide information about the MMAI Ombudsman program and the Senior Health Insurance Program (SHIP), an options counseling service.

Marketing

Marketing guidance for MMAI combines Medicare Advantage and Illinois Medicaid requirements, and State, CMS, and MMP officials agreed that Medicaid marketing guidance is more restrictive than Medicare guidance, resulting in uncertainty among plans about what activities are permissible. To address MMPs' uncertainty, the Contract Management Team solicited questions from the plans and prepared a question-and-answer document in 2016. CMT members said that while MMPs are restricted in terms of marketing to beneficiaries prior to enrollment, the document clarified that plans have flexibility to provide information about MMAI to their own Medicare Advantage and MLTSS plan members.

Outreach and Education

MMAI stakeholders interviewed during evaluation site visits—including MMPs, provider associations, and beneficiary advocates—said there was insufficient outreach when the demonstration was launched. Illinois relied on enrollment mailings, the enrollment broker's call center, and the MMPs to provide information to beneficiaries. Meetings of the Medicaid Advisory Committee (MAC) and its subcommittees, as well as meetings with provider

associations, were the primary means of communication with stakeholder groups (see ***Section 6.2.1, State Role and Approach***). Stakeholder groups said these forms of outreach were not adequate to educate beneficiaries about MMAI, and some providers were unaware of MMAI and unable to respond to beneficiaries' questions. Stakeholders said the limited outreach contributed to confusion among beneficiaries and providers during early implementation, leading to high opt-out and disenrollment rates.

State officials and stakeholders said they had hoped the launch of the mandatory MLTSS program in 2016 in the Greater Chicago region would have been an opportunity to re-educate beneficiaries and providers about MMAI. State officials said they engaged advocates and MMPs through phone calls to plan the rollout of MLTSS. Advocates and HFS collaborated on a webinar to explain MLTSS to interested providers and community groups, the State used enrollment mailings to inform beneficiaries, and provider notices were sent to Medicaid LTSS providers, though not to medical providers.

When MLTSS launched, advocates said there was an initial period of confusion when new MLTSS enrollees presented their MLTSS plan cards to medical providers, who were unfamiliar with MLTSS and declined to serve them. To address the issue, HFS issued a general provider notice explaining that MLTSS enrollees should use their Original Medicare or Medicare Advantage coverage for medical services. State officials said the CMS Regional Office and MMPs shared the notice with Medicare providers, and the client broker's call center responded to questions from MLTSS enrollees. State officials said it was a "noisy problem" but that the confusion died down quickly after the notices were issued.

3.3 Summary Data

As of December 2016, approximately 46,294 beneficiaries were enrolled in the MMAI, or about 30.2 percent of the eligible population. The number of enrollees and the enrollment rate have declined since December 2014 (see ***Table 4***). As of December 2016, 74 percent MMAI enrollees had been passively enrolled, and 26 percent had opted in.

Table 4
Demonstration enrollment at the end of each year

Enrollment indicator	Number of beneficiaries		
	December 2014	December 2015	December 2016
Eligibility			
Beneficiaries eligible to participate in the demonstration as of the end of the month	150,104	149,989	153,454
Enrollment			
Beneficiaries currently enrolled in the demonstration at the end of the month	55,776	52,527	46,294
Percentage enrolled			
Percentage of eligible beneficiaries enrolled in the demonstration at the end of the month	37.2%	35.0%	30.2%

NOTE: The numbers in this table are the exact numbers reported by the State to RTI in the SDRS.
SOURCE: RTI International: State Data Reporting System (SDRS), 2015, 2016, and 2017.

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4. Care Coordination

Highlights

- MMP care coordinators are responsible for coordinating enrollees' medical care, LTSS, and behavioral health services. In addition to coordinating care across delivery systems, MMPs are required to provide care management for nursing facility residents by SNFists, clinicians who specialize in long-term care.
- During the first 2 years of the demonstration, efforts by the Contract Management Team (CMT) and MMPs to improve care coordination focused on timely completion of assessments and care plans by the MMPs. In 2016, the CMT turned its attention to the quality of care plans, including engagement of enrollees in setting care goals.
- As part of its compliance review for care coordination, the External Quality Review Organization reviewed plans' care management IT systems and whether they support effective and efficient care planning and coordination. State officials said they had seen examples of effective systems, but that some plans were using systems that did not support efficient care coordination and person-centered planning, and they had pointed out their limitations.

4.1 Care Coordination Model

MMPs are required to provide care management to ensure effective coordination and communication among enrollees' providers, transitions between care settings, and management of all medical care and behavioral health services, and long-term services and supports (LTSS). (Illinois three-way contract, 2013, pp. 42–51; Illinois MOU, 2013, pp. 62–66). Plans are also responsible for providing care management for enrollees in nursing facilities by employing clinicians who specialize in care management for nursing facility residents, known as SNFists (Illinois three-way contract, 2013, p. 50; Illinois MOU, 2012, pp. 66–67). Prior to the demonstration, beneficiaries did not receive comprehensive care coordination, although they may have received case management of HCBS and behavioral health services.

This section provides an overview of the demonstration requirements related to the care coordination function, including assessment processes; use of Integrated Care Teams (ICT) and the development of ICPs; delivery of care coordination services; and the role of care coordinators. The experience of Medicare-Medicaid Plans (MMPs) are included in this section as is the care coordination of LTSS and behavioral health services and data exchange.

4.1.1 Assessment

MMPs are required to make their best effort to administer Health Risk Screenings (HRSs) to beneficiaries within 60 days of enrollment to collect information about enrollees' medical, behavioral health, and LTSS needs and history. MMPs typically conduct HRSs by

telephone, using nonclinical staff. Plans use the results of the health risk screening, claims-based predictive modeling, and surveillance data, such as referrals, service authorizations, and LTSS assessments, to stratify enrollees into low, moderate, and high-risk categories (Illinois three-way contract, 2016, p.45).

MMPs are also required to complete more comprehensive HRAs for moderate- and high-risk enrollees within 90 days of enrollment. MMPs may complete HRAs by telephone for some enrollees, but the contract requires face-to-face HRAs for enrollees receiving HCBS waiver services or residing in nursing facilities. Timeframes for completion of face-to-face HRAs range from 15 days for enrollees newly eligible for HCBS to 180 days for enrollees who were using LTSS at the time of enrollment. MMPs are required to incorporate HRA results into enrollees' care plans. Plans use predictive modeling reports and surveillance data to track changes in enrollees' risk levels and to reassess enrollees and update care plans as needed (amended three-way contract, 2016, p. 46).

As an overall measure for completion of assessments with different timeframes, MMPs are required to report completion of assessments within 90 days of enrollment, including HRAs for moderate- and high-risk enrollees and HRSs for other enrollees. Early in the demonstration, the Contract Management Team (CMT) learned that MMPs were having difficulty completing assessments. During the third and fourth quarters of 2014, only 40 percent of all enrollees had their assessments completed within 90 days of enrollment.

MMPs said that large, monthly waves of passive enrollment made completing assessments a challenge. Plans also cited several other challenges, including the numerous incorrect addresses in enrollment files; the transience of the enrollee population; and enrollee reluctance to participate in phone screening due to limited cell phone minutes. MMPs and advocates also said that many enrollees in the Chicago region were wary of and reluctant to engage with strangers, including MMP staff whom they did not know. Advocates said some passively enrolled beneficiaries may have perceived initial calls from plans as telemarketing because they did not realize they had been enrolled into plans.

To boost assessment completion rates, the CMT required MMPs to submit performance improvement plans, collected and shared best practices for locating beneficiaries, and provided technical assistance as needed. The CMT also revised the State-specific reporting requirements to require MMPs to make five attempts to contact enrollees within 60 days, rather than three attempts, and allowed plans to complete an HRS or HRA up to 20 days before an enrollee's coverage is effective (CMS, 2016, pp. 7, 15).

During each site visit, MMPs described using a variety of methods they used to locate and engage enrollees. Some said they obtained updated contact information from pharmacies, PCPs, and transportation providers. Several plans said they contracted with community-based organizations or hired temporary workers to locate enrollees. One plan said it arranges for care coordinators to visit enrollees in the hospital when they are receptive to help. Several MMPs said they offer home-delivered meals following hospitalization as a flexible benefit to encourage members to contact them. One plan said its staff were trained on motivational interviewing techniques to improve their ability to engage enrollees.

State officials noted that while the plans often used outreach workers to find hard-to-locate enrollees in the community, they tended to rely more heavily on telephonic care coordination than the State would like.

Over time, the percentage of enrollees that MMPs were unable to reach has trended downward, as shown below in ***Table 5***. The percentage of enrollees that MMPs were unable to reach in three attempts was highest in the second half of 2014, when plans were unable to reach 30 percent of enrollees. During 2015 and 2016, the percentage of unreachable enrollees ranged from 13 to 24 percent.

Table 5
Percentage of enrollees that Illinois MMPs were unable to reach following three attempts, within 90 days of enrollment

Quarter	CY 2014	CY 2015	CY 2016
Q1	N/A	22.4%	23.7%
Q2	13.4%	21.9%	18.7%
Q3	31.6%	16.1%	23.3%
Q4	30.3%	13.2%	14.9%

N/A = Not available.

NOTES: Data are not available for Quarter 1 2014. Health Alliance ended their MMP operations on December 31, 2015. Data for Health Alliance are available through Quarter 4 2015. Data presented for 2016 represent totals for the remaining plans.

SOURCE: RTI analysis of MMP reported data for Core Measure 2.1, as of March 2017. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at: https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements.html.

As MMPs have located and engaged more enrollees, assessment completion rates have improved. For enrollees the plans were able to contact and engage, assessment completion rates improved in the first quarter of 2015 and have continued to improve since that time. Completion rates climbed from 58 to 63 percent in the second half of 2014, from 81 to 84 percent in 2015, and from 89 to 93 percent in 2016. After all of the MMPs reached an 80 percent completion rate the CMT stopped requiring monthly reporting of assessment data, according to State officials, although verbal reporting by the plans has continued on monthly calls.

4.1.2 Care Planning Process

The ICT

Each enrollee is assigned a care coordinator who is responsible for coordinating all covered medical care, behavioral health care, and LTSS. The care coordinator leads the enrollee's Integrated Care Team (ICT), which implements the primary care provider's treatment plan, helps coordinate care, provides medication management and health education, promotes integration of medical, behavioral health, and LTSS, and helps develop a person-centered care

plan (Illinois three-way contract, 2013, pp. 42–44). The ICT's composition may vary based on the enrollee's needs and preferences.

MMPs convene ICT rounds, which allow care coordinators to discuss their cases in a meeting with the medical director, a pharmacist, and other care coordinators. MMPs reported that enrollees and PCPs are invited to join ICT meetings and PCPs sometimes participate when medically complex cases are discussed. However, MMPs said PCPs generally do not attend the meetings due to time constraints.

The Individualized Care Plan (ICP)

Care plan development: The care coordinator and ICT are required to develop care plans within 90 days of enrollment, or within 180 days for enrollees using HCBS waiver services and nursing facility residents. Care plans document enrollees' medical, behavioral health, social, and LTSS needs; list goals based on needs and preferences; identify and evaluate risks; and incorporate input from the enrollee, PCP, other providers, and family. Care plans should include both covered and non-covered services, although MMPs are not required to pay for non-covered services. Enrollees' HCBS waiver service plans, known as Person-Centered Service Plans, are also part of their care plans (Illinois three-way contract, 2013, pp. 53–56).

State officials said that after assessment rates reached acceptable levels, HFS and CMS turned their attention to care plan completion rates. During the demonstration's first year, MMPs completed care plans for less than 40 percent of all enrollees within 90 days. Among enrollees who plans were able to locate and engage, completion rates were higher.

The percentage of care plans completed within 90 days has gradually increased over the course of the demonstration, as shown below in ***Table 6***. Among enrollees that MMPs were able to contact and engage, the percentage of enrollees with a care plan completed within 90 days ranged from 51 to 74 percent in 2015, and from 75 to 81 percent in 2016.

Table 6
Members with care plans within 90 days of enrollment

Quarter	Total number of enrollees whose 90th day of enrollment occurred within the reporting period	Care plan completed within 90 days of enrollment %	
		All enrollees	All enrollees not documented as unwilling to complete a care plan or unreachable
2014			
Q2	578	38.8	69.8
Q3	31,001	25.5	50.3
Q4	17,440	29.0	57.5

(continued)

Table 6 (continued)
Members with care plans within 90 days of enrollment

Quarter	Total number of enrollees whose 90th day of enrollment occurred within the reporting period	Care plan completed within 90 days of enrollment %	
		All enrollees	All enrollees not documented as unwilling to complete a care plan or unreachable
2015			
Q1	18,567	37.5	51.3
Q2	5,275	52.8	74.2
Q3	2,820	49.2	69.0
Q4	2,477	52.0	66.7
2016			
Q1	8,228	55.0	81.1
Q2	5,005	56.3	77.5
Q3	3,275	55.8	81.4
Q4	2,459	57.8	74.8

NOTES: Data are not available for Quarter 1 2014. Health Alliance ended their MMP operations on December 31, 2015. Data for Health Alliance are available through Quarter 4 2015. Data presented for 2016 represent totals for the remaining plans.

SOURCE: RTI analysis of MMP reported data for State-specific Measure IL 3.1, as of March 2017. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Illinois-specific Reporting Requirements document, which is available at: https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements.html.

State officials said that in addition to monitoring care plan completion, they also addressed issues with the quality of care planning after an External Quality Review Organization (EQRO) compliance review identified areas for improvement. State officials said many of the care plans reviewed by the EQRO included only medical goals, and did not incorporate enrollee goals and preferences. State officials also expressed concern that most care plans were not enrollee-friendly, due to use of medical terminology and the lack of person-centered language, making them difficult for enrollees to read and understand.

To address these issues, State officials conducted their own on-site care coordination reviews at each health plan's offices, asking care coordinators and medical directors to discuss cases selected by the State. The CMT then asked each MMP to submit four care plans in October 2016: one care plan each for a high-risk member, a nursing facility resident, a member who used HCBS, and a member who used behavioral health services. During each MMP's CMT meeting that month, plan officials were asked to discuss the cases using video conferencing, utilizing their management systems. CMT members provided feedback and shared a best practices document afterwards. State officials said they had found that plans were more responsive when CMS was engaged in monitoring the plans' performance.

MMPs are required to report on the percentage of members with at least one documented discussion of care goals in the care plan, and this metric was a quality withhold measure for demonstration year 1 (CY 2014 and CY 2015). In 2014, the percentage of members with at least one documented discussion of care plan goals ranged from 60 to 76 percent. During 2015 and 2016, the plans averaged 67 percent to 90 percent each quarter, with only two quarters below 80 percent.

State officials said that through their care plan reviews, they learned that one plan was mailing system-generated plans to members it was unable to contact, and was counting the mailed care plans as discussions of care goals. Other plans counted system-generated plans as completed care plans. State officials informed the plans that those practices were unacceptable.

CMT Goals for Care Planning

State officials said the CMT's goals for care planning included increased enrollee engagement in developing goals and measurable outcomes. They also asked MMPs to provide documentation of progress on enrollees' goals in care plan documents. State officials were also working to make care plans more reader-friendly by reminding MMPs that enrollee materials must be provided in an appropriate format and reading level. State officials said they were also encouraging use of person-centered statements, such as "I will" and "my care coordinator will," to help personalize care plan documents for enrollees. The CMT compiled their goals and MMP best practices into a document that was shared with MMPs in late 2016. In addition to encouraging adoption of these practices, the CMT stated its intention to add contractual requirements that MMPs translate care plans into enrollees' native languages or provide in other alternative formats as needed and obtain enrollees' signatures on completed care plans (personal communication with HFS, 2017).

Care Coordination at the Plan Level

The three-way contract set standards for care coordinators ranging from 1:600 for low-risk enrollees to 1:75 for those in the high-risk category, and 1:30 for enrollees in the brain injury and HIV/AIDS waivers. For blended caseloads, the contract assigns a weight to each risk category. Care coordinators are required to make contact every 90 days with high-risk enrollees who are not enrolled in an HCBS waiver; standards for enrollees in the HCBS waivers range from a monthly in-home contact for enrollees in the brain injury waiver, to a once-a-year contact with enrollees in the Supportive Living (assisted living) Program (Illinois three-way contract, 2013, pp. 46–47).

Plans are required to report to CMS' implementation contractor (NORC) the ratio of care coordinators to enrollees and other staffing measures. The average across all plans for CY 2015 was 102 enrollees per one full-time equivalent (FTE) care coordinator. The turnover rate for care coordinators increased from 12 percent in 2014 to nearly 22 percent in 2015 (see ***Table 7***). During the 2014 site visit, State officials and MMPs said that the rapid growth of Medicaid managed care had created competition for care coordinators in the Chicago region, leading to some turnover as some staff changed jobs to take advantage of better opportunities. During the 2016 focus groups, some participants commented on care coordinator turnover (see ***Section 5.2.4, Care Coordination Services***).

Table 7
Care coordination staffing

Calendar year	Total number of care coordinators (FTE)	Percentage of care coordinators assigned to care management and conducting assessments	Member load per care coordinator assigned to care management and conducting assessments	Turnover rate
2014	537	90.7	117.36	12.1%
2015	546	95.6	102.30	21.7%

NOTES: The Illinois MMAI demonstration began March 1, 2014. At the time this report was written, data for 2016 was not available.

SOURCE: RTI analysis of MMP reported data for Core Measure 5.1, as of March 2017. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at: https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements.html

Some MMPs said they use vendors for some care coordination. Several plans contract with a community behavioral health provider to coordinate care for enrollees with serious mental illness, and one plan also contracts for LTSS coordination. MMPs also reported using vendors for more limited functions such as locating enrollees and completing assessments.

Care management in nursing facilities

During the 2015 site visit, care coordinators assigned to nursing facilities participated in two MMP interviews. They said their work ranged from assisting residents with community transitions to advocating on residents' behalf.

Nursing facility residents receive care management by SNFists in addition to care coordination services. Plans provide SNFist services through provider agreements, vendor contracts, or in-house staff. SNFist responsibilities may include completing HRAs, developing care plans, coordinating post-acute care, reconciling medications, and monitoring nursing facility residents' health. Several plans reported use of performance measures for SNFists related to emergency department (ED) utilization, hospital readmissions, reducing SNF length of stay, increasing transition referrals, and closing gaps in use of preventive care services (personal communication with HFS, 2017).

Care transitions

When enrollees transition from hospitals to nursing facilities or to their homes, or from institutional to community settings, MMPs are responsible for transition planning. This planning includes arranging community supports before the enrollee's move, assessing ongoing care needs, and monitoring continuity and quality of care. Illinois had three initiatives to transition nursing facility residents to the community: the State's Money Follows the Person (MFP) project, which ended in 2017, the Colbert Consent Decree, and the Williams consent decrees (see ***Section 1.4.5 LTSS Rebalancing Initiatives***). MMPs said they worked with the MFP, Colbert,

and Williams transition coordinators to implement service plans developed by these coordinators as required by the three-way contract (2016, pp.48–50, 58). Under the amended three-way contract, MMPs are required to make incentive payments to MFP transition coordinators for maintaining enrollees in the community after 90 days and after 365 days (amended three-way contract, 2016, pp. 42).

4.2 Information Exchange

Care Management Systems

MMPs are required to use care management systems to electronically track and store enrollee information to facilitate care management. They are required to integrate data from multiple sources to develop and track enrollee profiles that include demographics, eligibility data, claims and pharmacy data, assessment results, authorizations, care plans, and care coordinator assignments.

Under the original three-way contract, MMPs were required to provide enrollees and providers with access to the care management systems by March 2015. That requirement was dropped when the three-way contract was amended in 2016 because all of the plans had implemented enrollee and provider portals (Illinois three-way contract, 2013, pp. 47–48).

In 2016, the EQRO reviewed MMPs' care management systems and assessed their capacity to facilitate effective and efficient care coordination. State officials reported wide variations in these systems' capabilities. They said the best systems integrate data from across the organization so that providers and care coordinators can readily access enrollee information. For example, one MMP's system integrates service utilization data with care plans, so care coordinators can quickly check whether members are receiving the services on their care plans. The system also identifies gaps in preventive care and prompts staff to remind members to visit their PCPs for needed services.

In contrast, the EQRO found that care coordinators at some other MMPs had to navigate through their systems to determine the status of services, according to State officials, and managers had to calculate care coordination staffing ratios manually, because their systems did not calculate them automatically. State officials said that another MMP has an effective care management system for their in-house care coordinators, but that system is not compatible with care management systems used by the vendors that coordinate members' LTSS and behavioral health services.

Health Information Exchange

Illinois did not have a health information exchange (HIE) in operation at the time of the 2017 site visit. State officials said during the 2017 site visit that they are preparing a request for proposal to procure a vendor to operate a statewide HIE, and that admission, discharge, and transfer (ADT) notices are the first priority. MMPs said that they are notified of hospital ADT by faxes or phone calls from hospitals, and utilization management staff enter that information into their care management systems, making it available to care coordinators in a timely manner.

5. Beneficiary Experience

Highlights

- Overall, MMAI enrollees' experiences appear to have improved over time, according to beneficiary advocates. Advocates said that beneficiaries who were mistrustful of managed care or confused by network restrictions opted out or disenrolled, and those who remained in MMAI have more positive attitudes about their MMPs.
- Most focus group participants said their quality of life and/or health had improved since enrolling in MMAI. Many participants said their benefits were better and their out-of-pocket costs were lower.
- Many focus group participants said their MMP care coordinators were helping them access services. Some participants said their care coordinators were hard to contact or had not provided assistance, and a few were not aware that they had a care coordinator.
- Enrollee ratings of their health plans improved from 2015 to 2016 for nearly all MMPs. In 2016, the proportion of enrollees rating their plans as a 9 or 10 on the CAHPS survey ranged from 49 to 66 percent. The volume of grievances and appeals has remained low. HFS and enrollee representatives commented that beneficiaries who are dissatisfied often disenroll.

5.1 Introduction

Improving the experience of beneficiaries who access Medicare- and Medicaid-covered services is one of the main goals of the demonstrations under the FAI. Many aspects of MMAI are designed expressly with this goal in mind, including emphases on working closely with beneficiaries to develop person-centered care plans, delivering all Medicare and Medicaid services through a single plan, providing access to new and flexible services, and aligning Medicare and Medicaid processes.

This section highlights findings from various sources that indicate the levels of beneficiary satisfaction with MMAI overall; it also describes beneficiary experience with new or expanded MMAI benefits, medical and specialty services, care coordination services, access to and quality of care, person-centered care and patient engagement, and personal health outcomes and quality of life. For beneficiary experience, we draw on findings from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey,, RTI focus groups and stakeholder interviews. Please see ***Section 1.1.3***, ***Data Sources*** for details about each data source. This section also provides information on beneficiary protections, data related to complaints and appeals, and critical incident and abuse reports. The section includes information, where available, on the experience of special populations.

5.2 Impact of the Demonstration on Beneficiaries

This section summarizes the findings of focus groups, beneficiary surveys, and stakeholder interviews reflecting beneficiary experiences with service delivery and quality of life under MMAI. Beneficiary experiences related to the early enrollment process, including experiences of beneficiaries who chose to opt in, opt out, or who were passively enrolled, are discussed as part of ***Section 3, Eligibility and Enrollment***.

5.2.1 Overall Satisfaction with MMAI

Comments from beneficiary advocates, State officials, and focus group participants suggest that overall satisfaction with MMAI has improved over time. Early in the demonstration, inadequate outreach and education led to confusion among beneficiaries and providers, according to beneficiary advocates. They said many beneficiaries initially expressed fear and mistrust of managed care organizations, and many beneficiaries disenrolled because of dissatisfaction with network limitations. A few focus group participants complained about network limitations and prior authorization requirements. For example, one participant said: "I went to my doctor for my eyes, and I didn't realize it, but they could not take my insurance unless I had gotten preapproved."

However, most focus group participants were more positive about the demonstration. For example, one participant noted that "now there's a…health plan in which the doctor and the insurance are creating a team to take care of my health. So, for these reasons I'm very satisfied."

As evidence of positive attitudes about MMAI, State officials noted that some beneficiaries who have been involuntarily disenrolled—typically due to temporary loss of Medicaid—have called the enrollment broker and asked to be re-enrolled in MMAI when they regained Medicaid coverage.

As shown in ***Table 8***, the percent of enrollees rating their health plan as a 9 or 10 (with 10 being the best) increased among nearly all MMPs from 2015 to 2016. This proportion ranged from 49 to 66 percent in 2016, compared to the national average of 59 percent for all MMP contracts and 61 percent for all Medicare Advantage contracts. The percentage of enrollees reporting always being treated with courtesy and respect by MMAI plans was higher than the national distribution of MMP contracts in both 2015 and 2016.

We provide national benchmarks from MA plans, where available, understanding that MA enrollees and demonstration enrollees may have different health and sociographic characteristics which would affect the results. There are differences in the populations served by the MMAI demonstration and the MA population, including health and socioeconomic characteristics that must be considered in the comparison of the demonstration to the national MA contracts.

Table 8
Beneficiary overall satisfaction, 2015 and 2016

CAHPS survey item	Year	National distribution – All MA contracts	National distribution – All MMP contracts	Aetna	Blue Cross Blue Shield	Cigna-HealthSpring	Health Alliance	Humana	IlliniCare	Meridian	Molina
Percent rating health plan 9 or 10 on scale of 1 (worst) to 10 (best)	2015	62 (N=148,335)	51 (N=5,141)	45 (N=116)	49 (N=239)	46 (N=120)	60 (N=225)	51 (N=136)	53 (N=215)	42 (N=105)	52 (N=163)
	2016	61 (N=142,984)	59 (N=9,765)	49 (N=139)	64 (N=373)	56 (N=181)	N/A	51 (N=202)	66 (N=159)	53 (N=139)	62 (N=485)
Percent rating drug plan 9 or 10 on scale of 1 (worst) to 10 (best)	2015	62 (N=136,044)	56 (N=5,042)	49 (N=115)	54 (N=236)	56 (N=110)	59 (N=222)	60 (N=125)	57 (N=215)	45 (N=103)	60 (N=157)
	2016	61 (N=132,613)	61 (N=9,617)	59 (N=136)	63 (N=370)	65 (N=180)	N/A	59 (N=196)	61 (N=155)	55 (N=142)	66 (N=472)
Percent reporting being "always" treated with courtesy and respect	2015	79 (N=45,771)	70 (N=2,070)	—	—	—	—	—	78 (N=96)	—	—
	2016	79 (N=43,077)	75 (N=3,719)	—	81 (N=144)	—	N/A	—	82 (N=82)	—	85 (N=193)

N/A=Not Applicable; — = Data not available; MA = Medicare Advantage; MMP = Medicare Medicaid Plan.

SOURCE: CAHPS data for 2015 and 2016.

5.2.2 New or Expanded Benefits

As noted in ***Section 1.2, Model Description and Demonstration Goals***, MMPs offer a range of value-added or flexible benefits, such as zero copayments for prescription drugs, over-the-counter (OTC) products, and additional dental and transportation benefits. Enrollee stakeholders and MMP staff indicated that enrollee awareness of flexible benefits has increased and said zero copayments, transportation, dental, and OTC benefits were especially popular.

Some focus group participants expressed satisfaction with flexible benefits. For example, one participant said: "I would like to speak in favor of MMAI because there [are] some things I could get that I couldn't get with just Medicare alone, like the hearing aids…the glasses, [and] $500 in dental." Several other participants mentioned that OTC benefits were important to them.

5.2.3 Medical and Specialty Services

As indicated in ***Table 9***, 48 to 74 percent of MMP members said in 2016 that they had the same doctor as before enrolling in their current plan. The proportion of members who said they had the same doctor declined from 2015 to 2016 in half of the MMPs, whereas it increased in two of the plans.

Table 9
Beneficiary experience with medical services (including specialists), 2015 and 2016

CAHPS survey item	Year	Aetna	Blue Cross Blue Shield	Cigna-HealthSpring	Health Alliance	Humana	IlliniCare	Meridian	Molina
Percent reporting that they had the same doctor before enrolling in the MMP	2015	60 (N=116)	74 (N=232)	56 (N=115)	79 (N=227)	55 (N=135)	66 (N=223)	59 (N=108)	74 (N=160)
	2016	64 (N=52)	66 (N=131)	53 (N=78)	N/A	48 (N=64)	64 (N=41)	62 (N=60)	74 (N=190)

MMP=Medicare-Medicaid Plan; N/A=Not Applicable

SOURCE: RTI Supplemental CAHPS data for 2015 and 2016.

Focus group participants reported varied experiences with MMPs' provider networks. Some participants said they chose health plans with networks that included their regular providers and specialists. Several participants did not realize their provider choices were limited until they visited out-of-network providers who would not accept their coverage. About half of participants said they had new PCPs due to enrollment in the demonstration.

HFS staff said the agency had not received enrollee complaints about provider networks, because beneficiaries can easily opt out or disenroll to access nonparticipating providers. Beneficiary advocates and provider representatives said the demonstration has reduced access to specialists in some cases. For example, an advocate said that access to endocrinologists diminished in the demonstration's first year because one major health system in Chicago did not contract with MMPs. Some focus group participants described challenges in access to specialty care:

> I'm not satisfied.…because before we integrated, we could do a lot more things… My PCP would send us [to a specialist] and there would be no problem. But now that we're integrated, like he was saying, certain doctors don't take you.

5.2.4 Care Coordination Services

Comments from State officials, focus group participants, and enrollee and provider representatives suggest that enrollees' care coordination experiences have varied. An advocate reported that early in the demonstration, many enrollees did not know who their care coordinators were or how to reach them. During the 2017 site visit, a State official indicated that most enrollees know that they have care coordinators but the extent of interaction has varied. According to another official, some enrollees contact the Ombudsman office after trying unsuccessfully to reach care coordinators.

Most focus group participants said they had communicated with care coordinators, and many had received regular in-person visits. Many participants also said that their care coordinators had helped them access services. Their experiences are reflected in these comments:

> [My care coordinator is] calling me…once a month and meeting with me every three months…Very helpful, and she's not going to rest until I get what I need."

> Whatever I need, she helps me get it. And it wasn't like that before, so that's something new.

Some focus group participants reported less positive experiences with care coordination, including difficulties contacting their care coordinators and lack of assistance obtaining services. Several attributed the lack of follow-up to turnover among care coordinators. A few participants were unaware that they had a care coordinator.

> That's new information [that the plan provides care coordination] for me… It's called caseworker?…[I] never knew that they existed.

> I've had three care coordinators and now I'm on my fourth…it's a lot of turnover going on with them…so I don't like it.

A beneficiary advocacy group reported confusion about care coordination among some MMAI enrollees who also receive assistance from social service providers, housing agency staff, or hospital discharge planners. The group has tried to educate community agency staff about MMP care coordinators' roles. Some focus group participants said they relied primarily on physician office staff or social workers at their housing complex to help coordinate their care.

As indicated in ***Table 10***, the proportion of MMAI members reporting that someone from their health plan, doctor's office, or clinic helped coordinate their care ranged from 26 to 41 percent in 2016. In all but two plans, these rates were higher than those in 2015, when 15 to 36 percent of respondents said they had received care coordination services.

Table 10
Beneficiary experience with care coordination, 2015 and 2016

CAHPS survey item	Year	National distribution – All MA contracts	National distribution – All MMP contracts	Aetna	Blue Cross Blue Shield	Cigna-HealthSpring	Health Alliance	Humana	IlliniCare	Meridian	Molina
Percent who had anyone from their health plan, doctor's office, or clinic help them coordinate their care among doctors or other health providers	2015	N/A	N/A	25 (N=111)	25 (N=224)	36 (N=107)	34 (N=204)	15 (N=118)	36 (N=206)	18 (N=96)	27 (N=147)
	2016	N/A	N/A	26 (N=46)	34 (N=122)	33 (N=67)	N/A	33 (N=60)	27 (N=59)	28 (N=54)	41 (N=185)
Of those who used care coordination, the percent who were "very satisfied" with the help from the MMP or doctor's office in coordinating their care	2015	N/A	N/A	#	37 (N=54)	43 (N=37)	61 (N=69)	#	43 (N=74)	#	50 (N=40)
	2016	N/A	N/A	#	46 (N=39)	#	N/A	65 (N=20)	#	#	44 (N=73)
Percent reporting that health plan "always" gave them information they needed	2015	55 (N=45,457)	47 (N=2,058)	—	44 (N=76)	42 (N=59)	61 (N=77)	40 (N=66)	47 (N=94)	—	51 (N=57)
	2016	55 (N=42,677)	52 (N=3,669)	47 (N=52)	51 (N=146)	56 (N=77)	N/A	61 (N=89)	63 (N=78)	—	58 (N=193)

— = data not available; # = sample size 10 or less not presented; MA = Medicare Advantage; MMP = Medicare Medicaid Plan.

SOURCE: RTI Supplemental CAHPS data for 2015 and 2016 and CAHPS data for 2015 and 2016.

5.2.5 Beneficiary Access to Care and Quality of Services

Beneficiaries' experiences with access to care were mixed. Many focus group participants said that reduced cost-sharing had improved their access to services:

> Before I got [MMP coverage], I would have to choose between paying my mortgage or getting my glasses, buying groceries or paying for my medication. I now don't have to make those choices.

> Now I pay nothing. No copay or nothing. I love that.

A few participants expressed dissatisfaction with MMPs' benefit limits. One participant said: "One of the things that I didn't like about the [MMP] was that they short[ened] the time of therapy."

State officials, enrollee representatives, and MMP staff reported ongoing transportation challenges, including lack of timeliness, limited vendor capacity to communicate in languages other than English, and difficulties in finding drop-off and pick-up locations. State officials commented that transportation has also been a challenge in Medicaid FFS, which contracts with the same vendor used by some MMPs.

A few focus group participants described negative experiences with transportation in the demonstration. One participant said: "I had same-day surgery…I sat [for] 4 hours waiting… [for the transportation service] to…pick me up."

State officials said the demonstration has potential to improve beneficiaries' transportation experiences, and during the 2017 site visit, officials mentioned an upcoming meeting with MMPs and transportation vendor staff to discuss the issue. One MMP was already addressing transportation problems by escalating the problem to the transportation vendor's CEO, and creating a joint MMP-vendor committee to review and resolve complaints. Another MMP said that vendor staff attend consumer advisory committee meetings, and the vendor has made service changes based on members' feedback (see ***Section 6.2.2****, MMP's* ***Consumer Advisory Committees***).

5.2.6 Person-centered Care and Patient Engagement

Many focus group participants said their health care providers were attentive and showed concern for their well-being and preferences, while a few felt that their providers did not spend enough time explaining and discussing treatments:

> I like [my PCP] very much because he listens. He sits down and listen[s]…He gives me time and attention and everything."

> [T]he doctor does not return [my] calls…. And when she's done seeing you, that's it. She walks out. I'm not done… I still have more things I wish to ask.

State officials commented that the degree of beneficiary engagement sometimes depends on individuals' health status and service use. One official said that beneficiaries using HCBS waiver services seem to be more likely to work with care coordinators, while another said enrollees often tend to become more engaged when their health declines and they have a greater need for services. The official also noted that engagement levels may vary depending on the skills of individual care coordinators:

> …There are some care coordinators who have been trying to find and engage with a member for years. That care coordinator leaves the health plan, the [enrollees] get the rock star care coordinator and suddenly [the enrollees are] friends with their care coordinator. I think a lot of [it depends on] personal relationships.

State officials and an enrollee stakeholder group said that care planning under MMAI is not sufficiently person-centered (see ***Section 4.1.2, Care Planning Process),*** and HFS staff said that improvement in this area is among the most important goals for the remainder of the demonstration. HFS officials said the care planning process should engage members in setting goals, assessing progress, and making revisions based on changes in functional status and personal priorities.

5.2.7 Personal Health Outcomes and Quality of Life

Most focus group participants believed that their quality of life and/or health was better since enrolling in MMAI. Many participants attributed improvement to plans' benefits and reduced out-of-pocket costs. A few reported feeling healthier because providers had helped them lose weight:

> My new GI specialist [said] let's get a nutritionist to work with you to try to keep your weight…down…I…changed my entire lifestyle…and I came down from 325 pounds to…198.

In 2016, between 81 and 92 percent of CAHPS respondents reported that their personal doctors understood how health problems affected their everyday lives. For most MMPs, these findings represented an improvement over 2015 results (see ***Table 11***).

Table 11
Beneficiary experience with personal health outcomes, 2015 and 2016

CAHPS survey item	Year	Aetna	Blue Cross Blue Shield	Cigna-HealthSpring	Health Alliance	Humana	IlliniCare	Meridian	Molina
Percent reporting that their personal doctor understands how any health problems they have affect their day-to-day lives	2015	85 (N=115)	87 (N=232)	88 (N=114)	96 (N=223)	89 (N=134)	92 (N=221)	77 (N=107)	88 (N=161)
	2016	89 (N=54)	90 (N=128)	92 (N=78)	N/A	86 (N=62)	89 (N=62)	81 (N=58)	91 (N=194)

N/A=Not Applicable

SOURCE: RTI Supplemental CAHPS data for 2015 and 2016.

5.2.8 Experience of Special Populations

This section summarizes the beneficiary experience for MMAI special populations, including individuals with LTSS or behavioral health needs, and racial/ethnic or linguistic minorities. ***Table 12*** presents 2015 and 2016 CAHPS data on several survey measures describing the experiences of special populations such as MMP enrollees who use home health care or assistance.

LTSS

In the three MMPs with enough CAHPS data in 2016 to report on the experience of enrollees who use home health care or assistance, the percent of respondents indicating that it was usually or always easy to get personal care or aide assistance at home ranged from 69 to 87 percent. The percent of respondents indicating that it was usually or always easy to obtain or replace special medical equipment ranged from 75 to 81 percent for these same three MMPs in 2015.

During the 2017 site visit, two beneficiary advocacy groups and a provider association identified access to DME as an issue. According to one advocate, some beneficiaries disenrolled from MMAI due to long delays in accessing DME and difficulties finding in-network DME providers. However, the advocate reported that many of them later re-enrolled in MMAI after experiencing even greater difficulties accessing DME in original Medicare and Medicaid FFS.

The provider stakeholder said there are fewer DME providers in the market due to the Medicare bidding process as well as Medicaid rate cuts and payment delays, and some of the remaining providers are not accepting new Medicaid customers. Access problems can also result from physicians' lack of familiarity with MMPs' prior authorization policies, the State requirement to obtain a Medicare denial prior to seeking Medicaid coverage, MMP requirements for new authorizations when enrollees change plans, and lack of assistance from care coordinators, according to the provider stakeholder.

Table 12
Long-term services and supports and medical equipment, 2015 and 2016

CAHPS survey item	Year	Aetna	Blue Cross Blue Shield	Cigna-HealthSpring	Health Alliance	Humana	IlliniCare	Meridian	Molina
Percent who needed someone to come into their home to give them home health care or assistance	2015	21 (N=112)	25 (N=229)	20 (N=112)	30 (N=209)	15 (N=129)	22 (N=216)	19 (N=101)	21 (N=156)
	2016	#	22 (N=128)	20 (N=76)	N/A	24 (N=62)	18 (N=61)	22 (N=58)	27 (N=192)
Percent who reported it is "usually" or "always" easy to get personal care or aide assistance at home through their care plan	2015	59 (N=22)	80 (N=55)	75 (N=20)	83 (N=60)	63 (N=19)	71 (N=45)	#	81 (N=27)
	2016	#	81 (N=26)	87 (N=15)	N/A	#	#	#	69 (N=48)
Percent who had a health problem for which they needed special medical equipment, such as a cane, wheelchair, or oxygen equipment	2015	24 (N=116)	28 (N=227)	18 (N=112)	40 (N=224)	22 (N=135)	38 (N=217)	26 (N=102)	29 (N=163)
	2016	36 (N=50)	29 (N=129)	27 (N=77)	N/A	27 (N=63)	34 (N=62)	23 (N=60)	39 (N=194)
Of those who reported needing it, percent who reported it is "usually" or "always" easy to get or replace the medical equipment they needed through their health plan	2015	41 (N=27)	47 (N=59)	#	80 (N=87)	48 (N=27)	60 (N=77)	52 (N=25)	77 (N=39)
	2016	#	53 (N=32)	74 (N=19)	N/A	#	#	#	68 (N=72)

= Sample size 10 or less not presented; N/A = Not Applicable

SOURCE: RTI Supplemental CAHPS data for 2015 and 2016.

Behavioral Health

One provider stakeholder believed that enrollees' access to psychiatric care was limited because MMPs' networks did not include sufficient numbers of psychiatrists. Another provider representative commented that community mental health centers were understaffed due to low

MMP payment rates and State budget cuts. A few focus group participants said they had struggled to find behavioral health providers and services and felt that MMPs did not provide enough information to facilitate access to these providers and services:

> [My MMP's provider directory] …will give the name of a psychologist but it won't tell what their specialty is…I have a couple of special [behavioral health] issues, and I can't find anybody that deals with that specific issue.

In the two MMPs with sufficient data to report in 2016 on beneficiary access to treatment or counseling for personal or family problems, the proportion of respondents stating that they were usually or always able to access these services was 85 and 86 percent (see ***Table 13***).

Table 13
Beneficiary experience with access to services, 2015 and 2016

CAHPS survey item	Year	Aetna	Blue Cross Blue Shield	Cigna-HealthSpring	Health Alliance	Humana	IlliniCare	Meridian	Molina
Percent who needed any treatment or counseling for a personal or family problem	2015	13 (N=114)	12 (N=231)	13 (N=112)	14 (N=210)	#	13 (N=212)	11 (N=102)	8 (N=150)
	2016	#	12 (N=127)	#	N/A	#	21 (N=61)	#	15 (N=187)
Of those who reported needing it, percent who report it is "usually" or "always" easy to get the treatment or counseling they needed through their health plan	2015	#	70 (N=27)	#	74 (N=27)	#	88 (N=26)	#	#
	2016	#	86 (N=14)	#	N/A	#	#	#	85 (N=26)

= Sample size 10 or less not presented. N/A = Not Available

SOURCE: RTI Supplemental CAHPS data for 2015 and 2016

Linguistic and Cultural Diversity

According to MMP staff and beneficiary stakeholders, many MMAI enrollees have primary languages other than English, including Spanish, Arabic, Hindi, Mandarin, Korean, Russian, and Polish. To address the needs of diverse member populations, MMPs have provided staff training on cultural competency; hired or contracted with bilingual care coordinators and/or clinical staff with diverse cultural and ethnic backgrounds; translated written materials; provided in-person and telephonic interpreter service; included providers who speak multiple languages in their networks; and helped enrollees find providers who speak their primary language.

To increase MMP staff understanding of diverse member populations, HFS arranged for representatives of a beneficiary advocacy group to provide cultural sensitivity training to MMPs'

care coordinators. MMPs have contracted with the group for interpreter services and have sought the group's guidance on effective engagement strategies.

Some Hispanic focus group participants reported challenges because they did not have sufficient access to written information in Spanish:

> There were some announcements saying: "You have to pick a plan and an insurance." But [they]…didn't send anything in Spanish so I…ignored them…until somebody told me: "…Because you didn't pick a medical insurance, one has been picked for you."

5.2.9 Beneficiary Protections

Beneficiaries receiving services under MMAI have the right to make complaints and appeal adverse decisions about their services, and Ombudsman services are available to assist demonstration enrollees with filing complaints and appeals. State officials said that the rate of complaints by MMAI enrollees had been lower than in Illinois Medicaid managed care. They attributed the lower rate of complaints to MMAI enrollees' right to disenroll or change plans if they are dissatisfied.

Focus group participants showed limited awareness of their rights under MMAI. A few said they were aware of health plan materials explaining their protections and rights, but said they do not use them because the size of the handbook and the amount of information were daunting. One participant commented, "Look through your [health plan] guides, because all that information is there. It's just that a lot of us don't read it." Only a few focus group participants were aware of the Ombudsman program, and many were unfamiliar with the term "Ombudsman or change plans.

Ombudsman Services

The State of Illinois's Long-Term Care Ombudsman Program (LTCOP) is responsible for advocating on behalf of beneficiaries, safeguarding due process, and identifying systematic issues with the demonstration (MOU, 2013, p. 12). Within LTCOP, the Home Care Ombudsman Program serves enrollees in MMAI and other managed care programs. According to State officials, common reasons for enrollee inquiries or complaints to the Ombudsman include difficulties reaching care coordinators; requests for additional home care hours; and challenges in navigating the health care system. The Ombudsman can help enrollees at all stages of the appeals process and advocate on their behalf. Additionally, the Ombudsman program has been available to help beneficiaries whose MMPs have terminated from MMAI, for example by helping them enroll in other plans.

Complaint and Appeal Procedures

Beneficiaries receiving services under MMAI have the right to submit complaints and to appeal adverse coverage determinations. The three-way contract defines a complaint or grievance as an expression of "dissatisfaction with any aspect of the Contractor's or Provider's operations, activities or behavior, regardless of whether remedial action is requested" (Illinois three-way contract, 2013, p. 8). Most beneficiary grievances related to MMAI are tracked and resolved at the MMP level. MMAI enrollees who seek to file a grievance or complaint may also

do so externally by calling 1-800-MEDICARE, HFS, or the Ombudsman program. These complaints or grievances are entered into the CMS complaint tracking module (CTM), which can be accessed by CMS, HFS, and Ombudsman staff.

Any appeals of Medicaid, Medicare Part A, and Medicare Part B coverage decisions must first be submitted to the enrollees' MMP. If a Medicaid-related appeal is not resolved in an enrollee's favor, the enrollee can file for a State fair hearing and/or an external independent review. MMPs automatically forward any Medicare Part A or B appeals not resolved fully in the enrollee's favor to the CMS Independent Review Entity (IRE). Further levels of appeal are available to both the MMP and enrollee, including a hearing before an Administrative Law Judge, review by the Departmental Appeals Board, and judicial review. MMPs must provide continuing benefits during appeals of any Medicare Part A, Part B, or Medicaid-related services (three-way contract, 2013, p. 101–13). First-level Part D appeals likewise must be submitted to MMPs. Upon receiving an adverse MMP decision on a Part D benefit, enrollees have the option to appeal to the IRE. Appeals that the MMPs are unable to resolve in a timely manner can be forwarded to the IRE prior to the final MMP decision (three-way contract, 2013, pp. 103–4). Following is a summary of grievance (complaint) and appeals data received from (1) data reported by MMPs on complaints made directly to them[8]; (2) data reported on the CTM for complaints received by HFS and 1-800-Medicare;[9] (3) data reported by the State's Long-Term Care Ombudsman program on complaints made directly to its office;[10] (4) data reported by the Independent Review Entity (IRE), which is a second-level review of appeals;[11] and (5) qualitative information collected by the evaluation team. Reporting periods vary across these sources.

Complaint and Appeal Trends

The number of complaints per 1,000 MMAI enrollees peaked in the second and third quarters of the demonstration, steadied in the second year (2015), and began to decline in the third year (2016[12]). Over half of the 600 complaints received by 1-800-Medicare in the first demonstration year (March 2014–December 2015) were related to beneficiary enrollment. There were far fewer complaints in the second year of the demonstration (86 in total), but enrollment issues still accounted for a large proportion (39 complaints or 45 percent). In MMAI's second year, there were no recorded complaints related to marketing or cost-sharing, co-insurance, coverage gaps, or inappropriate billing (data not shown).[13] State officials reported that MMAI grievance rates were much lower than those in the State's other managed care programs. HFS

[8] MMP Reported Data provided to RTI by CMS
[9] Data obtained from the Complaints Tracking Module (CTM) within HPMS by RTI
[10] Information obtained by RTI during site visits
[11] Data provided to RTI by CMS
[12] Source: RTI analysis of MMP reported data for Core Measure 4.2, as of March 2017. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at: https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements.html.
[13] Source: RTI calculations on data from the CMS Complaint Tracking Module, covering March 2014- December 2016, Information Current as of March 28, 2017.

staff believe that enrollees who experience challenges choose to disenroll, because it was simple and enabled them to return to more familiar financing arrangements.

The total number of appeals per 1,000 MMAI enrollees trended upward over the course of the demonstration (2014–2016). The number of appeals in a quarter ranged from a low of two in the second quarter of 2014 (the first quarter for which information was available) to a high of 314 in fourth quarter of 2016. The percent of appeals decided in enrollees' favor ranged from 50 percent in the second quarter of 2014 to 86 percent in the fourth quarter of 2016.[14]

Outcomes of appeals referred to the IRE trended generally more in favor of MMPs over the course of the demonstration. In 2014 and 2015, the IRE upheld a majority (68 percent) of the 111 appeal determinations made by the MMP; the 17 decisions that were overturned mostly related to nursing facility services (4), acute inpatient hospital care (4) and clinical lab/X-Ray services (4) (data not shown[15]).

[14] Source: RTI analysis of MMP reported data for Core Measure 4.2, as of March 2017. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at: https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/InformationandGuidanceforPlans.html are preliminary and have not been reconciled.

[15] Source: RTI calculations on IRE data from 2014 and 2015 as provided by CMS.

6. Stakeholder Engagement

Highlights

- Illinois engaged stakeholders in designing its managed care programs for older adults and individuals with disabilities, the Integrated Care Program and the MMAI demonstration.
- After the design phase ended in late 2012, the State began using its existing advisory committee structure, the Medicaid Advisory Committee and its subcommittees, to inform stakeholders about MMAI implementation and obtain feedback.
- State officials, MMPs, and other stakeholders said the launch of MMAI might have gone more smoothly if there had been more outreach and education, especially to Medicare providers.
- Provider associations said State officials helped to address provider issues that arose during implementation by convening meetings between provider groups and plans.
- MMPs have used consumer advisory committee meetings to provide information and obtain member feedback on issues such as member materials and transportation.

6.1 Overview

This section describes the approach taken by Illinois for engaging stakeholders, the mechanisms for soliciting stakeholder feedback, and the impact of those efforts on the demonstration.

6.2 Organization and Support

6.2.1 State Role and Approach

Illinois actively engaged stakeholders for older adults and individuals with disabilities in the design and planning of its managed care initiatives through a series of 16 meetings between April 2010 and December 2012. The State launched the Integrated Care Program (ICP) as a pilot in 2011 and expanded it in 2013 and 2014. The design of MMAI was based on ICP, and the stakeholder process informed several aspects of the demonstration design, including the emphasis on self-directed care, Americans with Disabilities Act (ADA) compliance, continuity of care, and cultural competency (State of Illinois, 2012, pp. 21-5).

Since the design phase ended, the State has relied on its existing stakeholder engagement structure, the Medicaid Advisory Committee (MAC) and its subcommittees, to engage stakeholders. The MAC meets quarterly and has 15 voting members, including a minimum of five members representing beneficiaries (HFS, n.d.-b). MAC meetings are held in Springfield and Chicago using video conferencing. State officials and stakeholders said many stakeholders

attend meetings of the MAC and its subcommittees to observe. One provider stakeholder said there was typically standing room only in the Chicago conference room during MAC meetings.

Stakeholders said it is worthwhile to attend MAC meetings for updates on Medicaid programs, but MMAI is seldom on the agenda. One beneficiary advocate described the meetings as primarily "show and tell," but added that State officials "occasionally take input."

State officials and stakeholders said MMAI is most likely to be discussed during meetings of the MAC Public Education Subcommittee, which receives regular MMAI updates and provides feedback on beneficiary notices. However, a beneficiary advocate said MMAI received less attention than ICP from members of the subcommittee because MMAI enrollees have the right to disenroll if they are dissatisfied, while ICP enrollment is mandatory.

Outreach to Stakeholders

Following the design period, HFS conducted MMAI education sessions for several types of providers, including HCBS and mental health providers. Nevertheless, State officials and multiple stakeholders said many providers were poorly informed about MMAI when it launched and were not prepared to respond to inquiries from patients.[16] A State official said HFS "belatedly realized that there were a lot of providers who were blindsided by the roll out" of MMAI, particularly Medicare providers who, despite serving Medicare-Medicaid enrollees, do not view themselves as Medicaid providers.

A coalition of beneficiary advocacy groups called the Make Medicare Work Coalition (MMW) supplemented State outreach efforts. The coalition operates with private funding and provides beneficiary information, training, and technical assistance on Medicaid eligibility and managed care programs, as well as information on Medicare. MMW prepared materials and conducted webinars about MMAI aimed at providers and staff of agencies that serve older adults and individuals with disabilities. MMW also sponsored a webinar and prepared materials about the MLTSS program.

Provider Engagement

Providers said HFS played a valuable but limited role in resolving provider challenges with health plans during early implementation. Several provider associations reported that State officials had convened meetings between health plans and provider groups to discuss problems such as billing and prior authorization across all of the State's managed care programs, including MMAI (see ***2.2.2 Provider Arrangements and Services***). State officials reported that after bringing plans and providers together to address issues, HFS typically removed themselves from the discussions because they did not want to impose solutions. State officials said in 2017 they continue to meet with provider associations as needed to address provider concerns.

[16] Efforts to educate providers about MMAI may have been hampered by other activity in the same period, including the State's implementation of Medicaid expansion, the launch of mandatory Medicaid managed care for families and adults, and expansion of the ICP program, as well as changes associated with the Affordable Care Act.

6.2.2 MMP's Consumer Advisory Councils

Under the three-way contract, MMPs are required to establish consumer advisory committees or have enrollee representation on their MMP governance boards to provide input on topics such as demonstration management, enrollee care, outreach and education materials, and quality improvement (MOU, 2013, pp. 133-4; Proposal, 2012, p. 23). The consumer advisory committees must meet quarterly and include enrollees, family members, legal guardians, and/or community stakeholders (Proposal, 2012, p. 23). The establishment of a consumer advisory committee or inclusion of enrollees on a governance board was a quality withhold measure for demonstration year 1 (MOU, 2013, p. 47).

State officials said attendance at plans' consumer advisory committee meetings varies depending on weather and location. Meetings are held in different locations to encourage members from throughout the region to attend. Plans typically serve lunch and provide transportation to encourage members to attend, and some pay stipends to members who attend. Several MMPs said they included members of their ICP and MMAI plans on the same committees.

Plans said they used their consumer advisory committee meetings to obtain member feedback and provide information on topics such as flexible benefits, care coordination, and formulary changes. Several plans said their committees provided useful feedback on member materials, transportation, and other services. One plan said their transportation vendor always attends the meetings to get feedback from members, and had changed some timeframes as a result of feedback.

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7. Financing and Payment

Highlights

- MMPs interviewed in 2017 expressed varying concerns about MMAI financing. One plan expressed concern about Medicaid risk adjustment methodologies and another about Medicare risk adjustment; two plans said the five percent savings percentage was challenging, and the third had concerns about the ratio of costs to revenue.
- One Central Illinois MMP withdrew from the demonstration at the end of 2015, citing losses due to low MMAI rates. State officials acknowledged that MMAI Medicare rates were 10 percent lower than Medicare Advantage rates, but cited poor utilization controls and a high-cost enrollee population as the primary factors in the plan's departure.
- Illinois revised the Medicaid rate structure to implement blended LTSS rates in 2016 to provide stronger incentives for rebalancing LTSS services and simplify administration. State officials reported that MMPs have helped enrollees transition from nursing facilities to the community, but no data were available.
- MMPs said that they were trying to achieve savings by reducing use of ED services, hospital admissions, and readmissions. However, at the time of the 2017 site visit, only anecdotal information was available about MMPs' financial performance.

7.1 Rate Methodology

All Medicare and Medicaid-covered services are financed by capitated payments to the MMPs; the Medicare and Medicaid contributions represent baseline spending, or the estimated costs if the demonstration had not been implemented. Capitation payments are risk adjusted, using separate methodologies for Medicare Parts A and B, Medicare Part D, and the Medicaid components of the rate. The savings rate is applied to baseline spending.

This section describes the rate methodology of the demonstration and findings relevant to early implementation.

7.1.1 Rating Categories and Risk Adjustments

Each component of the capitation rate is adjusted to reflect risk. Medicare Parts A and B rates are risk adjusted using the Medicare Advantage CMS Hierarchical Condition Categories (HCC) model and the CMS-HCC end-stage renal disease (ESRD) model, whereas the Medicare Part D rate is risk adjusted using the Part D RxHCC model. Medicaid rate cells are stratified by age (21–64 and 65+), geographic area (Greater Chicago and Central Illinois), and setting of care, with community rates paid for enrollees living in the community who do not use HCBS waiver services, and blended LTSS rates paid for enrollees who use either nursing facility or HCBS waiver services.

Initially, the Medicaid rate structure for MMAI included five rates related to the setting of care: (1) community; (2) nursing facility; (3) HCBS waiver; (4) waiver plus; and (5) community plus (HFS and CMS, 2013). That rate structure was used for CY 2014 and CY 2015. The waiver plus and community plus rates were intended to create incentives for rebalancing LTSS services by paying an enhanced rate for 3 months after transitions from nursing facilities to the community. State officials said the original rate structure was challenging to administer because payments for members using LTSS changed frequently as enrollees transitioned between settings. One MMP mentioned checking its payment file and finding that payments for some enrollees did not match their care settings.

The revised Medicaid rate structure was implemented effective January 1, 2016. Under the revised structure, each plan is paid an MMP-specific blended LTSS rate for each of their enrollees who use LTSS, regardless of whether they reside in a nursing facility or live in the community with waiver services. The MMP-specific rates are developed based on the distribution of each plan's members between nursing facility and HCBS waiver rate cells in January of that year (Milliman, 2016, p.7).

The 2016 rates are shown below in ***Table 14***. The blended LTSS rates shown in the table are aggregate rates, rather than the MMP-specific rates that are used to pay the plans.

Table 14
Medicaid per member per month rate cells, calendar year 2016

Rate cell	Age	Greater Chicago PMPM	Central Illinois PMPM
Community	21-64	$136.98	$100.97
Community	65+	46.75	65.87
Blended LTSS	21-64	2,638.49	2,157.39
Blended LTSS	65+	2,093.26	1,860.32
Composite Rate		$765.79	$685.09

LTSS=long-term services and supports, PMPM= per member per month.

SOURCE: Milliman: Medicare-Medicaid Alignment Initiative Rates – Calendar Year 2016 Medicaid Capitation Rate Development, January 1, 2016 through December 31, 2016. May 12, 2016.

State officials said the blended rates are intended to provide an incentive to the MMPs to serve enrollees with LTSS needs in community settings. Blended LTSS rates were implemented for other Medicaid managed care programs effective January 1, 2016 as well.. However, one MMP expressed concern about the blended rates, noting that MMAI enrollment is unstable and that passive enrollment may have a greater impact on the ratio of HCBS waiver participants to nursing facility residents than the plans' rebalancing efforts.

Another MMP expressed concern about Medicare risk adjustment, noting that members with complex conditions were opting out, which was changing their case mix, thereby reducing their Medicare capitation payments.

7.1.2 Savings Percentage

The aggregate savings percentages for the demonstration were determined in advance by CMS and the State, based on the expectation that the demonstration could achieve savings for both parties while paying adequate rates to MMPs. The savings percentages are applied equally to the Medicare Parts A and B and Medicaid baseline spending amounts, 1 percent in demonstration year 1, increasing gradually to 5 percent in demonstration year 3, as shown in ***Table 15***. The savings percentage will remain at 5 percent for years 4 and 5. The savings percentages are not applied to the Part D component of the capitation rate (amended three-way contract, 2016, pp. 138-9). CMS monitors Part D costs on an ongoing basis, and material changes may be factored into future year savings percentages (amended contract, 2016, p. 139).

Table 15
Savings rates by demonstration year

Demonstration year	Period covered	Savings rate
Year 1	March 1, 2014 – December 31, 2015	1%
Year 2	January 1, 2016 – December 31, 2016	3%
Year 3	January 1, 2017 – December 31, 2017	5%
Year 4	January 1, 2018 – December 31, 2018	5%
Year 5	January 1, 2019 – December 31, 2019	5%

SOURCE: Amended three-way contract, 2016, p.138.

State officials said in 2014 that they expected MMPs to achieve cost savings by reducing hospitalizations and use of ED services, because Illinois has high utilization rates, and the Medicaid-only Integrated Care Program pilot had achieved reductions in the first year. They also expected MMPs to reduce the use of institutional LTSS, because Illinois's LTSS system was over-reliant on institutional care before the demonstration.

An MMP executive said in 2017 that the savings rates were based on the assumption that plans could achieve managed care efficiencies in a few years, but that it was taking more than a few years to change provider practice patterns in the Chicago market because Medicare Advantage penetration has been low and providers are still adapting to managed care. An executive with another MMP said the plan had negotiated lower fees with some hospitals but those cost savings were not sufficient "[w]ith the additional two percent challenge [from the higher savings rate] … it's going to continue to be an uphill battle for us."

7.1.3 Performance Incentives

In addition to the savings built into the capitation rates, CMS and the State withhold a percentage of their respective components of the capitation rate to be paid to MMPs for meeting established quality thresholds (see ***Section 9.1., Quality Measures***). The quality withhold is not applied to the Part D component of the capitation. The quality withhold is 1 percent for demonstration year 1, 2 percent for demonstration year 2, and 3 percent for years 3, 4, and 5.

Demonstration year 1 spanned 9 months of 2014, and 12 months of 2015, so it was divided into two reporting periods. MMPs were evaluated at the end of CY 2014 and at the end of CY 2015, and withheld amounts were to be paid separately for each year (amended three-way contract, 2016, pp. 143-6). All of the MMPs received quality withhold payments for CY 2014, according to State officials, with payments ranging from 25 percent to 100 percent of the withheld amount. The analysis and payment process for CY 2015 had not been completed at the end of 2017, according to State officials.

7.1.4 Medical Loss Ratios

The demonstration sets a target medical loss ratio of 85 percent for MMPs, the same ratio used for Medicare Advantage plans. If a plan's calculated medical loss ratio is less than 85 percent, the plan is required to refund the difference to HFS and CMS. In determining the calculated medical loss ratio, the numerator includes personnel costs for care coordinators as well as the cost of covered services and services provided in lieu of more costly covered services. The denominator is the total capitation revenue, including the quality withhold amount, whether or not the MMP actually receives the withhold (amended three-way contract, 2016, pp. 140-1).

State officials said in early 2017 that they had not calculated medical loss ratios yet for any year of the demonstration. A State official said that since encounter data were not yet available for MMAI they would ask the MMPs to submit reports later in 2017 on their costs by category and certify that the data are accurate and complete. The medical loss ratio calculations will be prepared jointly by HFS and CMS, according to State officials.

7.2 Financial Impact

7.2.1 Early Implementation Experience

One State official mentioned during the 2014 site visit that there had been some early pushback from MMPs about the Medicaid capitation rates, but after they were told that the rates were actuarially certified, they had no further complaints. The official said that if there were a problem with the adequacy of rates the State would have heard complaints.

Two MMPs indicated in late 2015 that lower than expected enrollment was posing financial challenges, with one MMP executive saying that actual enrollment was about 40 percent of what they initially projected, resulting in a $300 million reduction in projected revenue.

Capitation rates were a factor in the departure of a Central Illinois MMP from the demonstration at the end of 2015. The plan told State officials that it expected to lose an estimated $12 million in 2015 and that capitation rates were too low to cover costs. State officials said that the Medicare portion of the MMAI rates was in fact 10 percent lower than Medicare Advantage rates in Central Illinois, and that the plan was unhappy about receiving lower rates for MMAI than for its Medicare Advantage products. However, State officials said the primary factors in the MMP's poor performance were inadequate utilization controls and enrollment of a costlier beneficiary population. The plan is well known in Central Illinois and attracted more high-cost enrollees than its competitor, according to State officials.

During the 2017 site visit, the three plans interviewed each expressed concern about MMAI financing, but there was no consensus. Two plans were concerned about risk-adjustment and the effect of unstable enrollment; one of these plans was primarily concerned with Medicaid risk adjustment, while the other plan was focused on Medicare (see ***Section 7.1.1, Rating Categories and Risk Adjustments***). The third plan was primarily concerned with the ratio of costs to revenues (see ***Section 7.2.2, Cost Experience***). Two plans expressed concern about the 5 percent savings rate in effect for the remainder of the demonstration (see ***Section 7.1.2, Savings Percentage***). While there was no consensus, MMP executives seemed less optimistic about their plans' financial performance than during the 2015 site visit.

7.2.2 Cost Experience

Only anecdotal information about the MMPs' cost experience was available at the time of the 2017 site visit, as the State had not begun receiving encounter data, and health plans' financial reports to HFS aggregate the experience of their entire Medicaid book of business. Citing an actuarial study prepared for a trade association, one plan executive said that most of the MMPs had costs in excess of revenues. However, the two other MMPs did not mention that particular concern. State officials said they had seen the study but had not validated the findings. The evaluation team was not able to obtain a copy of the report.

All three MMPs interviewed in 2017 said that in the Chicago region enrollees with serious mental illness were a significant cost driver, due to their high use of ED services and high rates of hospital admissions and readmissions. One MMP executive said nursing facility residents also have high rates of ED use and hospital admissions and readmissions, adding that nursing facilities have "an incentive to get people to go into the hospital… [to] get the higher Medicare [skilled nursing facility] rate when they come out."

Several plans also mentioned new waves of passive enrollment as a cost driver. One plan said that after each wave of passive enrollment they saw a spike in ED and inpatient utilization, but that after enrollees engaged with the plan their ED and inpatient utilization declined. The plan noted that beneficiaries who are passively enrolled also tend to be less engaged with PCPs and self-management of care than beneficiaries who opt in, which might explain their higher rates of ED and inpatient utilization.

Plans interviewed in 2015 and 2017 said that their efforts to reduce costs were focused on reducing hospital admissions and readmissions. Several plans said they were contracting with a community behavioral health provider to coordinate care for enrollees with serious mental illness. One of them said that they expected to see a significant reduction in admission and readmission rates as these enrollees begin receiving coordinated care. Two plans said they were addressing high rates of hospital admissions from some nursing facilities by encouraging new enrollees, as well as residents who are discharged and readmitted, to choose nursing facilities with better performance on quality metrics and fewer hospitalizations.

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8. Service Utilization

The purpose of the analyses in this section is to understand the effects of the Medicare-Medicaid Alignment Initiative (MMAI) Illinois demonstration through demonstration year 1 (March 1, 2014 thru December 31, 2015) using difference-in-differences regression analyses. In addition, descriptive statistics on service utilization are provided for selected Medicare services. Utilization data were analyzed for eight Medicare-Medicaid Plans (MMPs) that signed three-way contracts to integrate Medicare and Medicaid services: six plans in the Greater Chicago area and two plans in Central Illinois.

We find evidence that the demonstration resulted in significant changes in utilization patterns, including changes in quality of care and care coordination. These changes include reductions in monthly inpatient admissions, emergency room (ER) visits, and skilled nursing facility (SNF) admissions; a reduced probability of inpatient admissions for ambulatory care sensitive conditions (ACSCs); and decreases in the number of preventable ER visits, and the rate of follow-up visits within 30 days of a mental health admission. The demonstration resulted in a higher annual probability of any long stay nursing facility (NF) use, but had no impact on physician evaluation management (E&M) visits and all-cause 30-day readmissions.

Table 16
Summary of Illinois demonstration impact estimates for demonstration period (March 1, 2014 to December 31, 2015)
($p < 0.10$ significance level)

Measure	All demonstration eligible beneficiaries	Demonstration eligible beneficiaries with LTSS use	Demonstration eligible beneficiaries with SPMI
Inpatient admissions	Lower	NS	Lower
Probability of ambulatory care sensitive condition (ACSC) admissions, overall	Lower	NS	NS
Probability of ACSC admissions, chronic	Lower	NS	NS
All-cause 30-day readmissions	NS	Higher	NS
Emergency room (ER) visits	Lower	NS	Lower
Preventable ER visits	Lower	NS	Lower
Probability of monthly follow-up after mental health discharges	Lower	NS	Lower
Skilled nursing facility (SNF) admissions	Lower	Higher	Lower
Probability of any long-stay nursing facility (NF) use	Higher	NA	NA
Physician evaluation and management (E&M) visits	NS	Higher	NS

LTSS = long-term services and supports; NA = not applicable; NS = not statistically significant; SPMI = severe and persistent mental illness. SOURCE: RTI analysis of Medicare and Minimum Data Set data.

Table 16 presents an overview of the results from impact analyses using Medicare and MDS data through demonstration year 1 (calendar year [CY] 2015). The relative direction of all statistically significant results at the $p < 0.10$ significance level (derived from 90 percent confidence intervals) is shown. In contrast to the comparison group, the Illinois demonstration group had fewer monthly inpatient admissions, ER visits, and SNF admissions, and a higher probability of any long-stay NF use. There was no statistically significant difference in monthly physician visits between the demonstration and comparison groups. For the RTI quality of care and care coordination measures, the probability of overall and chronic ACSC admissions and the number of preventable ER visits was lower for the demonstration group than the comparison group. However, the rate of follow-up for mental health discharges also declined among the demonstration group, relative to the comparison group. There was no impact on 30-day readmission.

The relative directions of the impact estimates for demonstration eligible beneficiaries with severe and persistent mental illness (SPMI) were similar to the findings for the overall demonstration eligible population. However, among demonstration eligible beneficiaries with LTSS use, the demonstration resulted in impact estimates that substantively varied from estimates among the overall demonstration population.

8.1 Overview of Benefits and Services

MMAI enrollees receive Medicare Parts A, B, and D benefits, and Medicaid State Plan and HCBS waiver services through MMPs. There are no new services under the demonstration except the care coordination provided by the MMPs, and flexible benefits (value-added services), which vary from plan to plan. As under Medicare Advantage, Medicare hospice services continue to be provided through the Medicare FFS system.

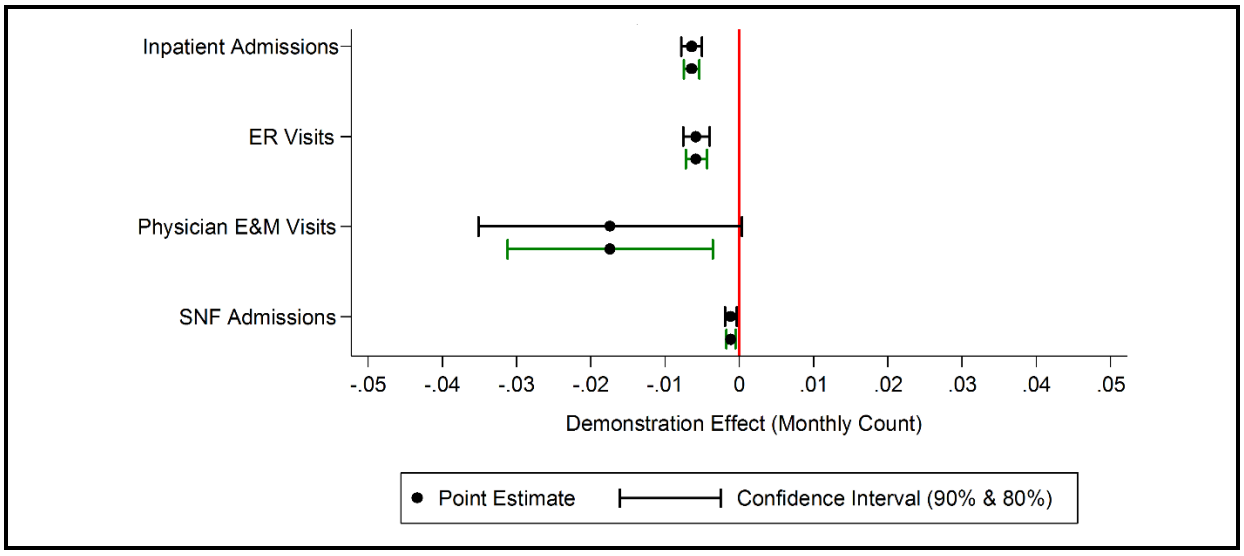
8.2 Impact Analyses on the Demonstration Eligible Population

The population analyzed in this section includes all beneficiaries who met demonstration eligibility criteria in Illinois or in the comparison areas for Illinois. For context, in Illinois, across the 22-month demonstration period, approximately 49 percent of eligible beneficiaries in demonstration year 1 whose utilization was analyzed in this section were enrolled in the MMAI. ***Appendix A*** provides a description of the comparison group for Illinois. Please see ***Section 3.2*** for details on demonstration eligibility. Subsections following this section present results for demonstration eligible beneficiaries with any use of long-term services and supports (LTSS)—defined as receipt of any institutional long-stay nursing facility services or Medicaid home and community-based services [HCBS])—and for demonstration eligible beneficiaries with SPMI.

Appendix B contains a description of the evaluation design, the comparison group identification methodology, data used, measure definitions, and regression methodology for estimating demonstration impacts using a difference-in-differences approach. The regression methodology accounts for differences between the demonstration and comparison groups over the predemonstration period (March 1, 2012–February 30, 2014) and the first demonstration year (March 1, 2014–December 31, 2015) to provide estimates of demonstration impact.

Figures 1 and ***2*** display the Illinois demonstration's effect on key service utilization measures for the demonstration group relative to the comparison group through demonstration year 1. The demonstration decreased monthly inpatient admissions by 0.0064 admissions per month (90 percent CI: −0.0078, −0.0050). After multiplying the monthly estimate by 12, the annual estimate corresponds to 0.0771 fewer inpatient admissions per eligible beneficiary during the demonstration period. The demonstration decreased ER visits by 0.0059 visits per month (90 percent CI: −0.0076, −0.0040) and SNF admissions by 0.0011 visits per month (90 percent CI: −0.0019, −0.0004). The demonstration also resulted in a 0.42 percentage-point increase (90 percent CI: 0.19, 0.65) in the probability of any long-stay NF use over the demonstration year. This measure is defined as the number of individuals who stayed in an NF for 101 days or more, and who were long-stay after the first month of demonstration eligibility; it includes new admissions from the community as well as those with a continuation of a stay in an NF. The demonstration did not have a statistically significant effect on E&M visits.

Figure 1
Demonstration effects on service utilization for eligible beneficiaries in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence intervals)

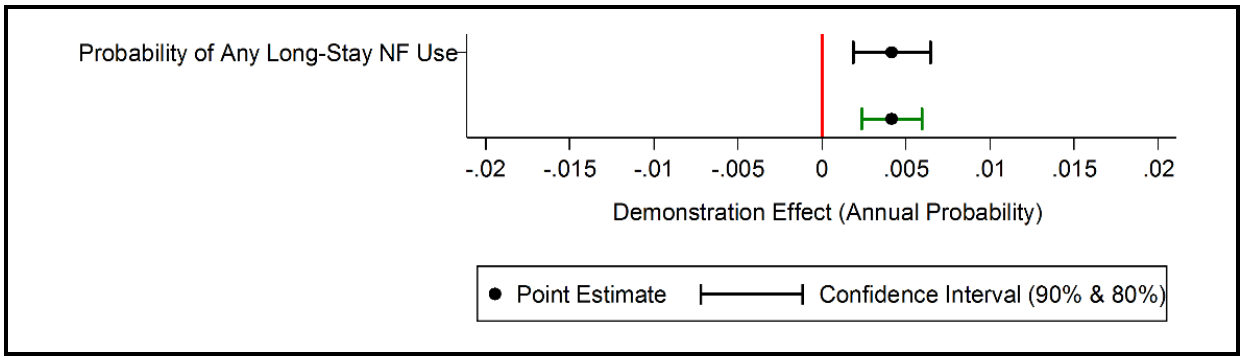


E&M = evaluation and management; ER = emergency room; SNF = skilled nursing facility.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green.

SOURCE: RTI International analysis of Medicare data.

Figure 2
Demonstration effects on long-stay nursing facility use for eligible beneficiaries in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence intervals)



NF = nursing facility.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green.

SOURCE: RTI International analysis of Minimum Data Set data.

Tables 17 and ***18*** present the demonstration's effects on service utilization for the first demonstration year. We have indicated the previously reported point estimates with their associated significance levels.

Table 17
Demonstration effects by year on service utilization for eligible beneficiaries in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Utilization measure (per month)	Demonstration year 1 (3/14–12/15)
Inpatient admissions	−0.0064**
ER visits	−0.0059**
Physician E&M visits	−0.0174
SNF admissions	−0.0011**

E&M = evaluation and management; ER = emergency room; SNF = skilled nursing facility.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only.

SOURCE: RTI International analysis of Medicare data.

Table 18
Annual demonstration effects on probability of long-stay nursing facility use for eligible beneficiaries in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Utilization measure (per demonstration year)	Demonstration year 1 (3/14–12/15)
Probability of any long-stay NF use	0.0042**

NF = nursing facility.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only.

SOURCE: RTI International analysis of Minimum Data Set data.

Table 19 provides estimated regression-adjusted mean values of the utilization measures of each service for the demonstration and comparison groups during the predemonstration and demonstration periods. This table shows the magnitude of the difference-in-differences estimate relative to the adjusted mean outcome value in each period.

The values in the third and fourth columns represent the post-regression mean predicted value of the outcomes for each group in each period, based on the composition of a reference population (the comparison group in the demonstration period). These values show the differences between the two groups in each period, and the relative direction of any potential effect in each group over time. In addition to the graphic representation in the figures above, we have reported the difference-in-differences estimate, along with the *p*-value and the relative percent change of the difference-in-differences estimate compared to the average adjusted rate for the comparison group over the entire demonstration period.

To interpret the adjusted mean values in the third and fourth columns, as an example, the adjusted mean for monthly inpatient admissions was higher in the demonstration group than in the comparison group in the predemonstration period, and was similar to the comparison group in the demonstration period. Additionally, the adjusted mean for monthly ER visits was higher for the demonstration group in both the predemonstration period and the demonstration period.

To help interpret the relative percentage difference reported in the fifth column, the difference-in-differences estimate for inpatient admissions implies a decrease of 14.8 percent as a result of the demonstration. Additionally, the difference-in-differences estimate for monthly ER visits implies a decrease of 7.4 percent as a result of the demonstration.

Table 19
Adjusted means and impact estimate for eligible beneficiaries in the demonstration and comparison groups in Illinois through December 31, 2015

Measure	Group	Adjusted mean for predemonstration period	Adjusted mean for demonstration period	Relative difference (%)	Regression-adjusted difference-in-differences (90% confidence interval)	*p*-value
Inpatient admissions	Demonstration group	0.0507	0.0434	−14.8	−0.0064 (−0.0078, −0.0050)	<0.0001
	Comparison group	0.0446	0.0432			
ER visits	Demonstration group	0.0783	0.0782	−7.4	−0.0058 (−0.0076, −0.0040)	<0.0001
	Comparison group	0.0722	0.0783			
Physician E&M visits	Demonstration group	1.2111	1.1844	NA	−0.0174 (−0.0352, 0.000)	0.1063
	Comparison group	1.1053	1.0980			
SNF admissions	Demonstration group	0.0203	0.0157	−8.6	−0.0011 (−0.0019, −0.0004)	0.0157
	Comparison group	0.0152	0.0128			
Probability of any long-stay NF use	Demonstration group	0.2134	0.1996	2.8	0.0042 (0.0019, 0.0065)	0.0028
	Comparison group	0.1652	0.1499			

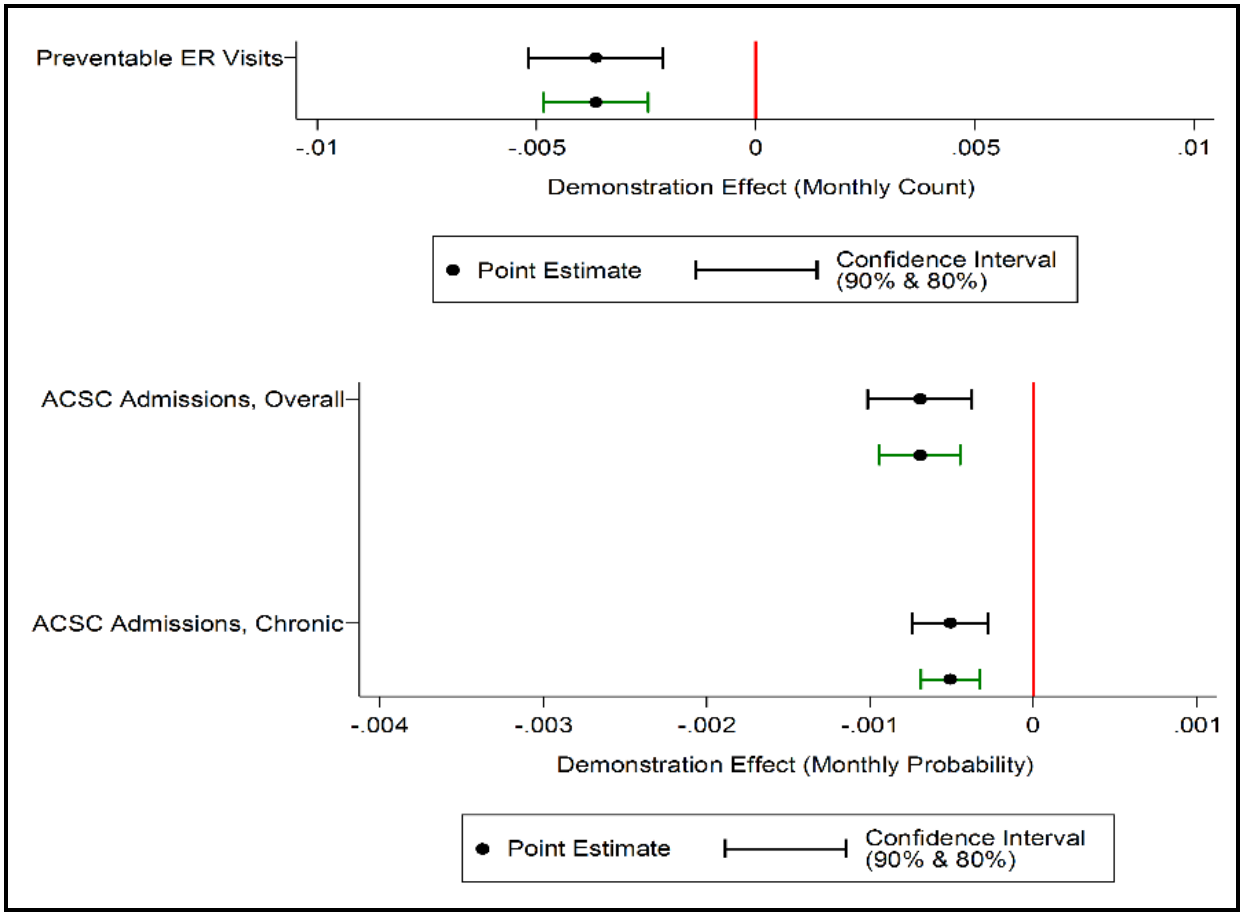
E&M = evaluation and management; ER = emergency room; NF = nursing facility; NS = not statistically significant; SNF = skilled nursing facility.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher.

SOURCE: RTI International analysis of Medicare and Minimum Data Set data.

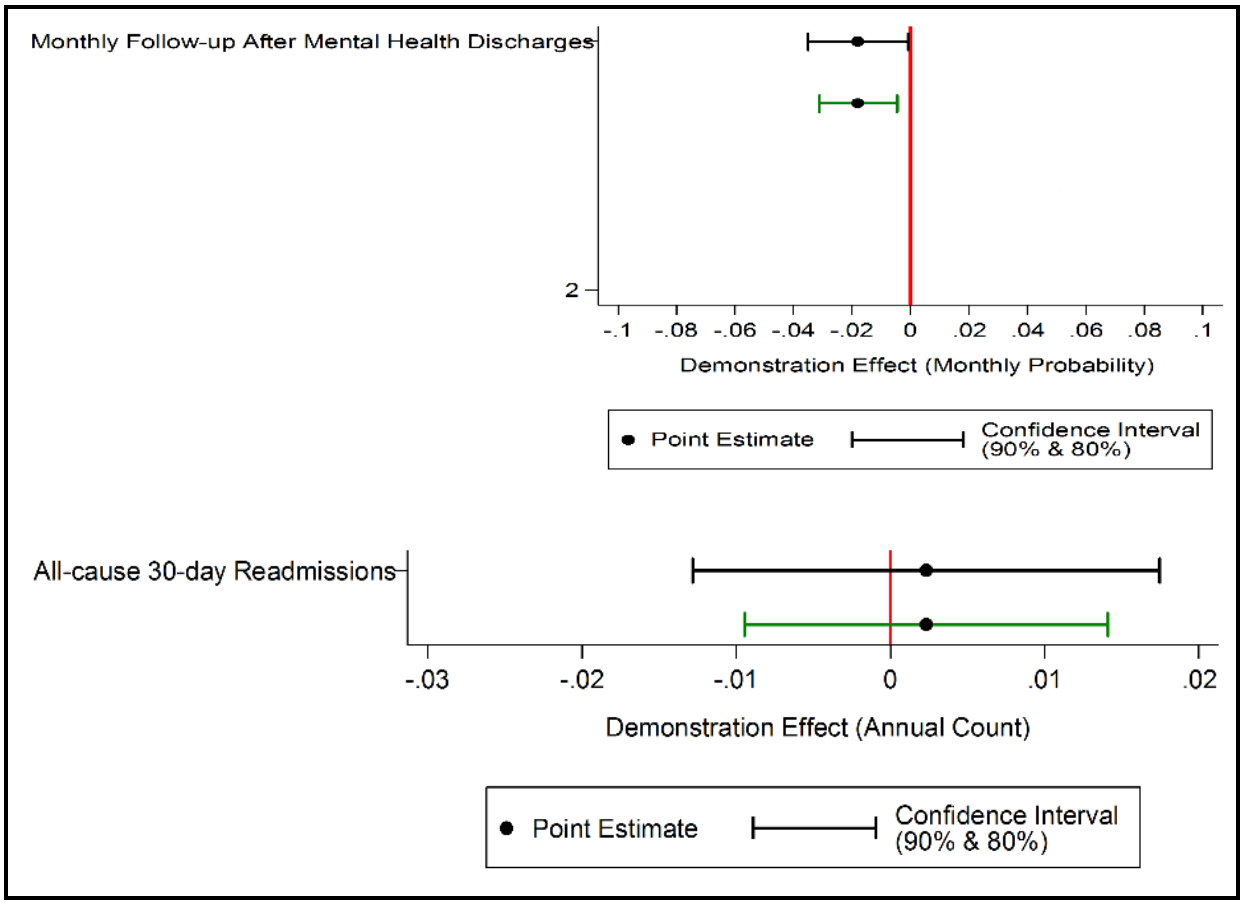
Figure 3 displays the Illinois demonstration's effects on RTI quality of care and care coordination measures for the demonstration group relative to the comparison group through demonstration year 1. The Illinois demonstration decreased the number of preventable ER visits per month (lower by 0.0036 visits per month; 90 percent CI: −0.0052, −0.0021), decreased the probability of monthly inpatient ACSC admissions for overall (lower by 0.07 percentage points per month; 90 percent CI: −0.0010, −0.0004), and chronic conditions (lower by 0.05 percentage points per month; 90 percent CI: −0.0007, −0.0003). On the other hand, there was a decrease in the probability of monthly follow-up care after a mental health discharge (lower by 0.0179 visits; 90 percent CI: −0.0349, −0.0008) over the demonstration period. There was no statistically significant demonstration effect on the count of all-cause 30-day readmissions.

Figure 3
Demonstration effects on RTI quality of care measures for eligible beneficiaries in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence intervals)



(continued)

Figure 3 (continued)
Demonstration effects on RTI quality of care measures for eligible beneficiaries in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence intervals)



ACSC = ambulatory care sensitive condition; ER = emergency room.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green.

SOURCE: RTI International analysis of Medicare data.

Table 20 presents the demonstration's effects on the RTI quality of care and care coordination measures for the first demonstration year. We have indicated the previously reported point estimates with their associated significance levels.

Table 20
Demonstration effects by year on quality of care and care coordination for eligible beneficiaries in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Quality of care and care coordination measures	Demonstration year 1 (3/14–12/15)
Preventable ER visits	−0.0036**
Probability of ACSC admissions, overall	−0.0007**
Probability of ACSC admissions, chronic	−0.0005**
Probability of monthly follow-up after mental health discharges	−0.0179**
All-cause 30-day readmissions	0.0023

ACSC = ambulatory care sensitive conditions; ER = emergency room.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only.

SOURCE: RTI International analysis of Medicare data.

Table 21 provides estimated regression-adjusted mean values for the RTI quality of care and care coordination measures for each of the demonstration and comparison groups during the predemonstration and demonstration periods. This table shows the magnitude of the difference-in-differences estimates for quality of care outcomes relative to the adjusted mean values in each period.

The values in the third and fourth columns represent the post-regression mean predicted value of the outcomes for each group in each period, based on the composition of a reference population (the comparison group in the demonstration period). These values show how different the two groups were in each period, and the relative direction of any potential effect in each group over time. In addition to the graphic representation above, we have provided the difference-in-differences estimate for reference, along with the *p*-value and the relative percent change of the difference-in-differences estimate compared to the adjusted average for the comparison group over the entire demonstration period.

Table 21
Adjusted means and impact estimate for eligible beneficiaries in the demonstration and comparison groups for Illinois through demonstration year 1

Measure	Group	Adjusted mean for predemonstration period	Adjusted mean for demonstration period	Relative difference (%)	Regression-adjusted difference-in-differences estimate (90% confidence interval)	*p*-value
Preventable ER visits	Demonstration group	0.0394	0.0401	−9.8	−0.0036 (−0.0052, −0.0021)	<0.0001
	Comparison group	0.0325	0.03680			
Probability of ACSC admission, overall	Demonstration group	0.0067	0.0055	−11.1	−0.0007 (−0.0010, −0.0004)	0.0004
	Comparison group	0.0070	0.0063			
Probability of ACSC admission, chronic	Demonstration group	0.0044	0.0037	−11.6	−0.0005 (−0.0007, −0.0003)	0.0003
	Comparison group	0.0046	0.0043			
Probability of monthly follow-up after mental health discharges	Demonstration group	0.4026	0.4078	−4.4	−0.0179 (−0.0349, −0.0008)	0.0849
	Comparison group	0.3807	0.4035			
All-cause 30-day readmissions	Demonstration group	0.3404	0.5405	N/A	0.0023 (−0.0128, 0.0175)	0.7994
	Comparison group	0.3206	0.5071			

ACSC = ambulatory care sensitive conditions; ER = emergency room.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher.

SOURCE: RTI International analysis of Medicare data.

To interpret the adjusted mean values in the third and fourth columns, as an example, the adjusted mean for monthly preventable ER visits was higher in the demonstration group than in the comparison group in the predemonstration period, but was similar to the comparison group in the demonstration period. Additionally, the adjusted means for the probability of ACSC admissions (overall) for the demonstration and comparison groups were similar during the predemonstration period, but during the demonstration period, the mean for the demonstration group was lower than the comparison group.

To help interpret the relative percentage difference reported in the fifth column, the difference-in-differences estimate for preventable ER visits implies a decrease of 9.8 percent as a result of the demonstration. Additionally, the difference-in-differences estimate for the probability of ACSC admissions (overall) implies a decrease of 11.1 percent as a result of the demonstration.

8.2.1 Descriptive Statistics on the Demonstration Eligible Population

In addition to the impact results presented for the demonstration eligible population in this section, ***Appendix C, Tables C-1*** through ***C-3*** present descriptive statistics for the demonstration eligible population for each service for the predemonstration and demonstration years, to help understand the utilization experience over time. We examined 14 Medicare service utilization measures, six RTI quality of care measures, and five nursing facility-related measures derived from the Minimum Data Set (MDS). No testing was performed between groups or years. The results reflect the underlying experience of the two groups, and changes over time are not intended to be interpreted as caused by the demonstration.

The demonstration and comparison groups were similar across many of the service utilization measures in each of the predemonstration years and the demonstration year (***Table C-1***). However, there were a few outcomes where differences were apparent. For example, inpatient use was higher for the demonstration group than the comparison group, but there was a larger decline from the predemonstration period to the demonstration period for the demonstration group. The demonstration group had fewer ER visits relative to the comparison group in both the predemonstration and demonstration periods. The demonstration group experienced a slight decline in the number of SNF admissions from the predemonstration period through the demonstration period, whereas there was no relative change in the rate of admissions among those in the comparison group.

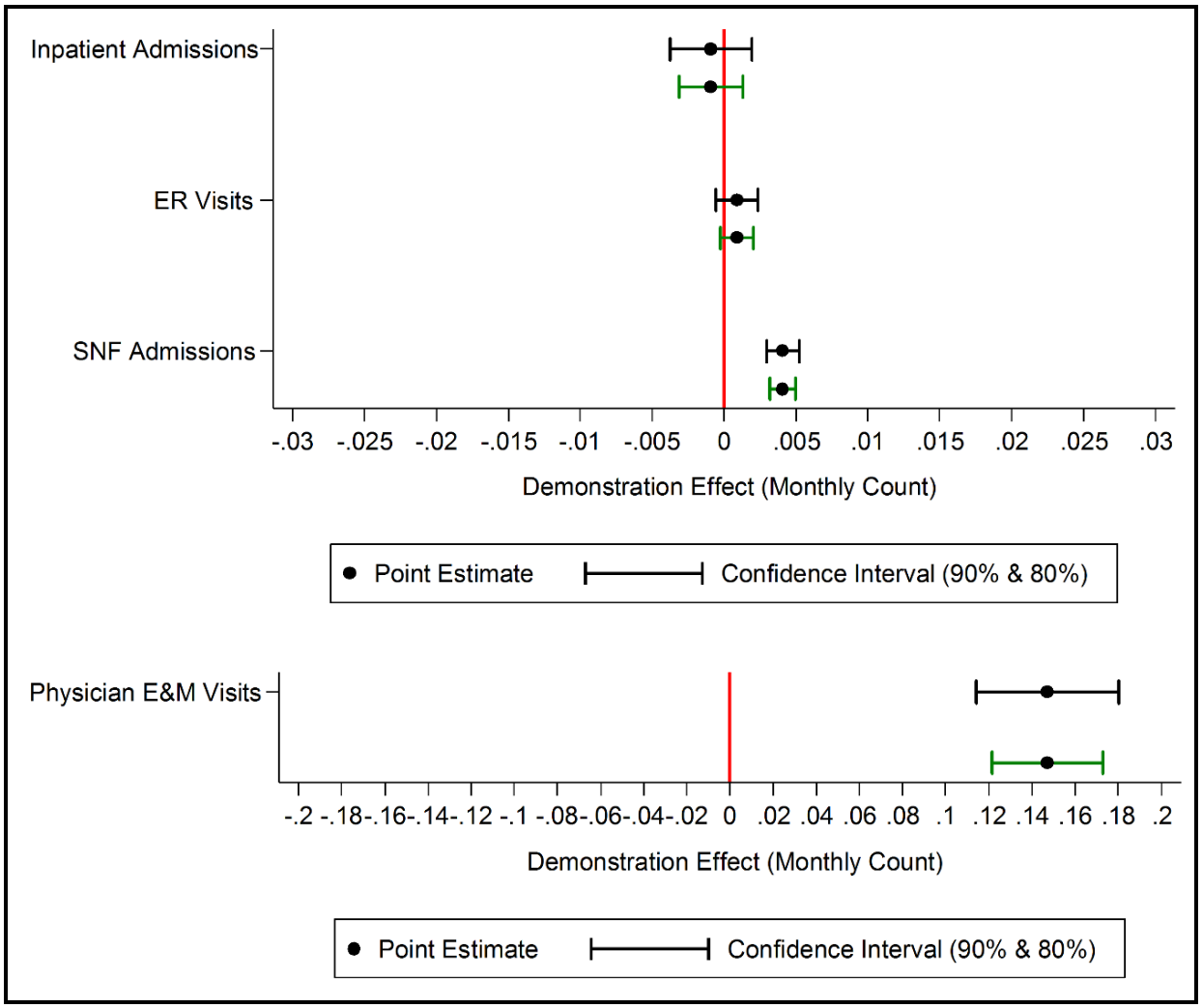
As with the service utilization measures, the Illinois demonstration eligible beneficiaries were similar to the comparison group on many, but not all, of the RTI quality of care and care coordination measures (***Table C-2***). Key differences included slightly lower rates of preventable ER visits, but higher rates of 30-day readmission and Prevention Quality Indicators (PQI) admissions. Finally, there were limited differences between the demonstration group and comparison group in the count of long-stay nursing facility utilization (***Table C-3***), although the demonstration group had a higher proportion of users than the comparison group. There were also differences in some characteristics of long-stay NF residents at admission: relative to the comparison group, the demonstration eligible beneficiaries had a lower percentage with severe cognitive impairment, better functional status, and more beneficiaries with a low level of care needed during the demonstration period.

8.2.2 Impact Analysis on Demonstration Eligible Beneficiaries with LTSS Use

Demonstration eligible beneficiaries were defined as using LTSS in a demonstration year if they received any institutional services or HCBS. Approximately 43 percent of all eligible beneficiaries in demonstration year 1 were LTSS users. In contrast to the overall population, beneficiaries with LTSS use had an increase in SNF admissions, E&M visits, and probability of an all-cause 30-day readmission. There was no demonstration effect on inpatient admissions, ER visits, ACSC admissions (chronic and overall), preventable ER visits, or monthly follow-up care after a mental health discharge.

Figure 4 displays the demonstration's effects on key service utilization measures among demonstration eligible beneficiaries who were LTSS users in the demonstration group relative to the comparison group through demonstration year 1. The demonstration increased monthly E&M visits by 0.1471 visits per month (90 percent CI: 0.1143, 0.1800). After multiplying the monthly estimate by 12, the estimate corresponds to an annual increase of 1.76 E&M visits. The demonstration also increased monthly SNF admissions by 0.0041 admissions per month (90 percent CI: 0.0096, 0.0052), or 0.05 admissions per year. There were no statistically significant demonstration effects on inpatient admission or ER visits.

Figure 4
Demonstration effects on service utilization for eligible beneficiaries with LTSS use in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence internals)



E&M = evaluation and management; ER = emergency room; SNF = skilled nursing facility.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green. Beneficiaries who first met LTSS criteria during the demonstration period were removed from the regression model to address analytic issues in estimating results. Results should be interpreted with caution as there may be important observable and unobservable factors specific to the LTSS population that are not included in the propensity score model and weights.

SOURCE: RTI International analysis of Medicare data.

Table 22 presents the demonstration effects on key service utilization for the demonstration eligible population with LTSS use for the first demonstration year. We have indicated the previously reported point estimates with their associated significance levels.

Table 22
Demonstration effects by year on service utilization for eligible beneficiaries, Illinois LTSS users
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Utilization measure (per month)	Demonstration year 1 (3/14–12/15)
Inpatient admissions	−0.0009
ER visits	−0.0009
Physician E&M visits	0.1472**
SNF admissions	0.0041**

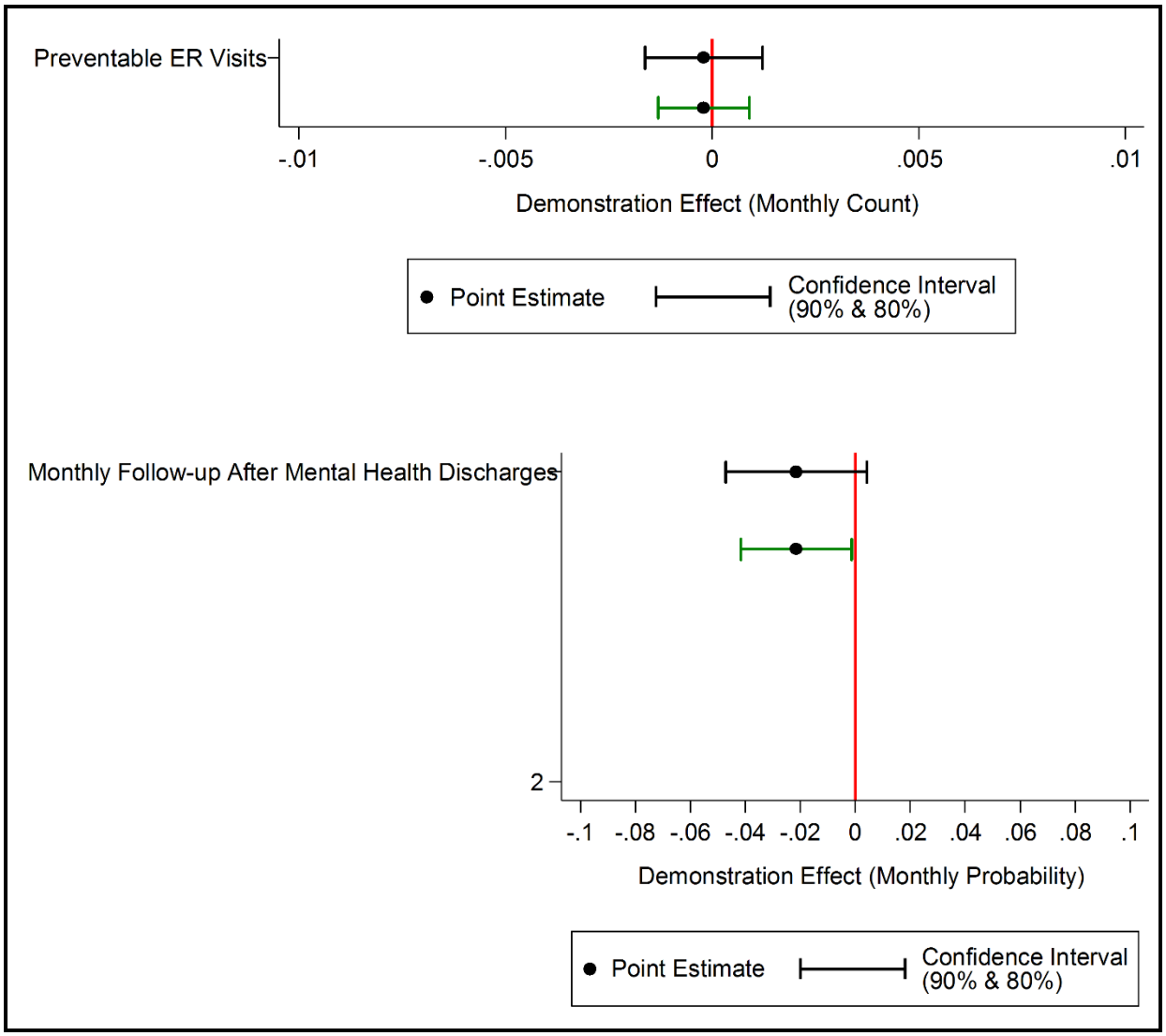
E&M = evaluation and management; ER = emergency room; SNF = skilled nursing facility.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only. Beneficiaries who first met LTSS criteria during the demonstration period were removed from the regression model to address analytic issues in estimating results. Results should be interpreted with caution as there may be important observable and unobservable factors specific to the LTSS population that are not included in the propensity score model and weights.

SOURCE: RTI International analysis of Medicare data.

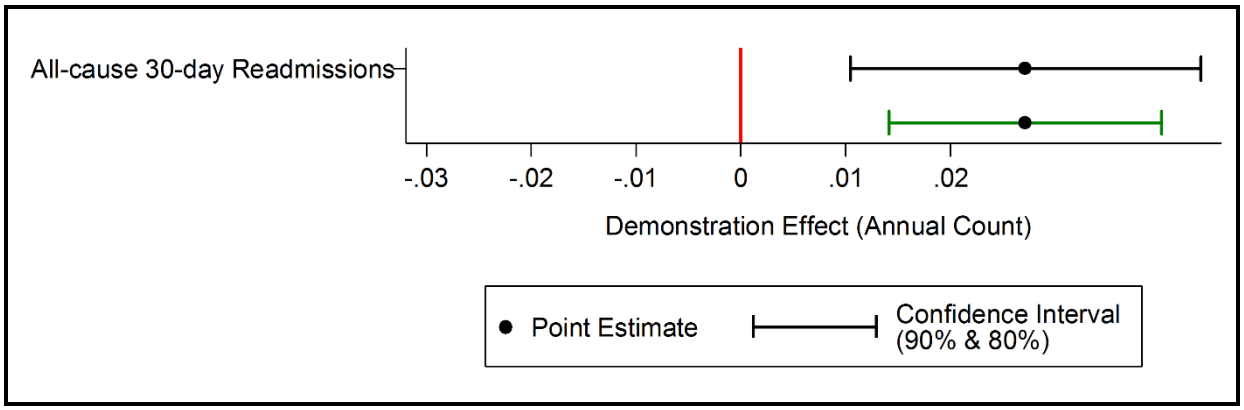
Figure 5 displays demonstration effects on RTI quality of care and care coordination measures for the demonstration eligible population who were LTSS users through demonstration year 1. The Illinois demonstration increased the probability of a 30-day readmission by 2.72 percentage points annually among those with LTSS use (90 percent CI: 0.0104, 0.0439). The demonstration did not have a statistically significant effect on preventable ER visits, ACSC admissions (chronic and overall), and monthly follow-up care after a mental health discharge.

Figure 5
Demonstration effects on RTI quality of care and care coordination for eligible beneficiaries with LTSS use in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence intervals)



(continued)

Figure 5 (continued)
Demonstration effects on RTI quality of care and care coordination for eligible beneficiaries with LTSS use in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence intervals)



ACSC = ambulatory care sensitive conditions; ER = emergency room.

NOTES: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green. Beneficiaries who first met LTSS criteria during the demonstration period were removed from the regression model to address analytic issues in estimating results. Results should be interpreted with caution as there may be important observable and unobservable factors specific to the LTSS population that are not included in the propensity score model and weights.

SOURCE: RTI International analysis of Medicare data.

Table 23 displays the demonstration effects on RTI quality of care and care coordination measures for the demonstration eligible population with LTSS use for the first demonstration year. We have indicated the previously reported point estimates with their associated significance levels.

Table 23
Demonstration effects by year on quality of care and care coordination for eligible beneficiaries with LTSS use in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Quality of care and care coordination measures	Demonstration year 1 (3/14–12/15)
Preventable ER visits	−0.0002
Probability of ACSC admissions, overall	0.0001
Probability of ACSC admissions, chronic	0.0000

(continued)

Table 23 (continued)
Demonstration effects by year on quality of care and care coordination for eligible beneficiaries with LTSS use in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Quality of care and care coordination measures	Demonstration year 1 (3/14–12/15)
Probability of monthly follow-up after mental health discharges	−0.0215
All-cause 30-day readmissions	0.0272**

ACSC = ambulatory care sensitive conditions; ER = emergency room.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only. Beneficiaries who first met LTSS criteria during the demonstration period were removed from the regression model to address analytic issues in estimating results. Results should be interpreted with caution as there may be important observable and unobservable factors specific to the LTSS population that are not included in the propensity score model and weights.

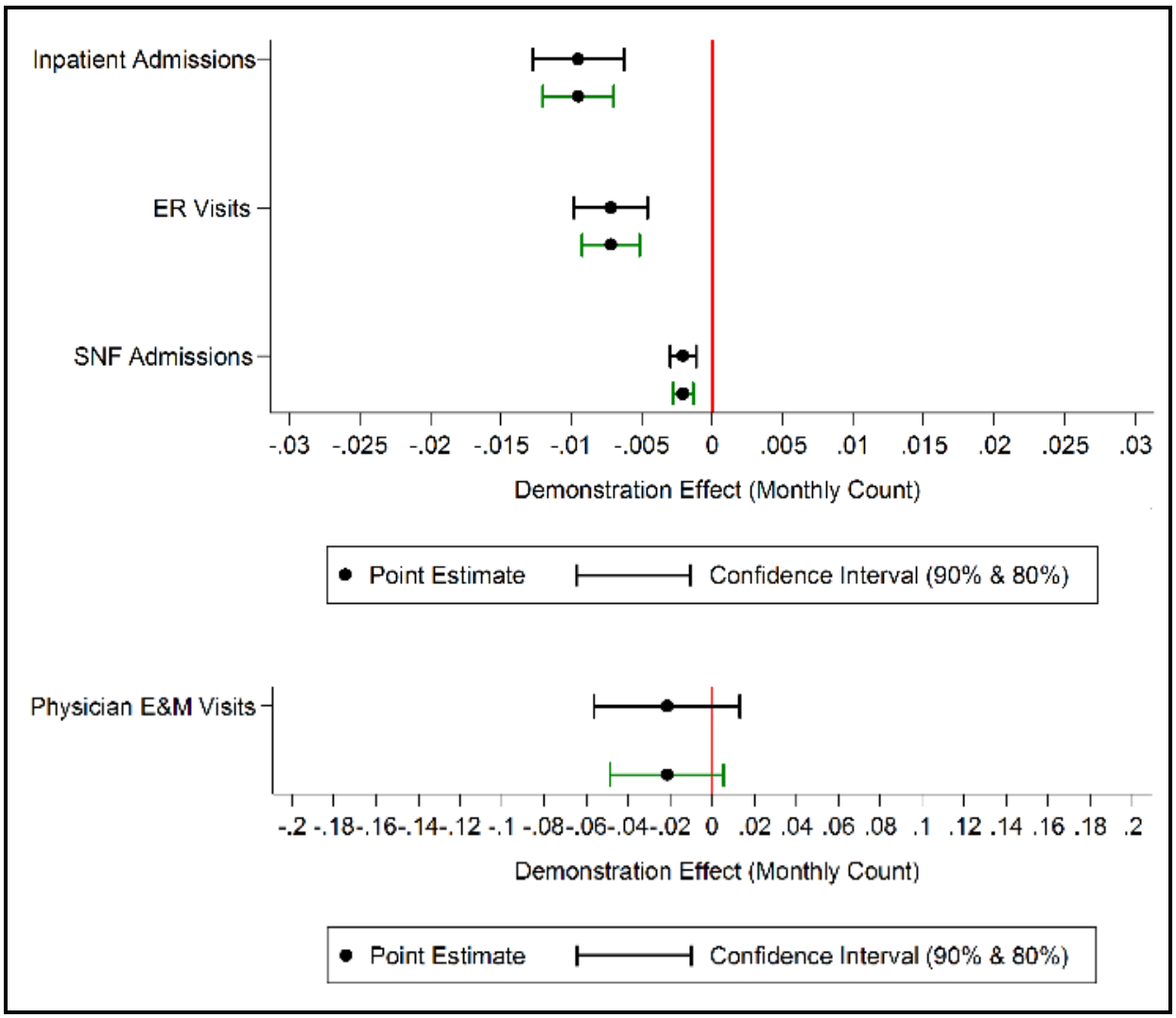
SOURCE: RTI International analysis of Medicare data.

8.2.3 Impact Analyses on the Demonstration Eligible Population with SPMI

Demonstration eligible beneficiaries were defined as having an SPMI if there were any inpatient or outpatient mental health visits for schizophrenia or bipolar disorders in the last 2 years. Approximately 33 percent of all eligible beneficiaries had an SPMI in demonstration year 1. As was true for the overall demonstration eligible population, demonstration eligible beneficiaries with SPMI had reduced monthly inpatient admissions, SNF admissions, ER visits, and the number of preventable ER use. However, the SPMI population in the demonstration group had a lower probability of follow-up care post mental health discharge, relative to the comparison group. The demonstration had no impact on E&M visits, all-cause 30-day readmissions, or the probability of ACSC admissions (chronic and overall) for beneficiaries with SPMI.

Figure 6 displays the demonstration's effects on key service utilization measures for the demonstration eligible population with an SPMI. The demonstration decreased monthly inpatient admissions by 0.0095 admissions per month (90 percent CI: −0.0127, −0.0063). After multiplying the monthly estimate by 12, the annual estimate corresponds to 0.11 fewer inpatient admissions per eligible beneficiary per year. The demonstration also decreased ER visits by 0.0072 visits per month (90 percent CI: −0.0098, −0.0046) and SNF admissions by 0.0021 visits per month (90 percent CI: –0.0030, −0.0012). There was no statistically significant demonstration effect on physician E&M visits.

Figure 6
Demonstration effects on service utilization for eligible beneficiaries with SPMI in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015



E&M = evaluation and management; ER = emergency room; SNF = skilled nursing facility.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green.

SOURCE: RTI International analysis of Medicare data.

Table 24 displays the demonstration effects on key service utilization measures among beneficiaries with SPMI for each demonstration year. We have indicated the previously reported point estimates with their associated significance levels.

Table 24
Annual demonstration effects on service utilization for eligible beneficiaries with SPMI in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Utilization measure (per month)	Demonstration year 1 (3/14–12/15)
Inpatient admissions	−0.0095**
ER visits	−0.0072**
Physician E&M visits	−0.0215
SNF admissions	−0.0021**

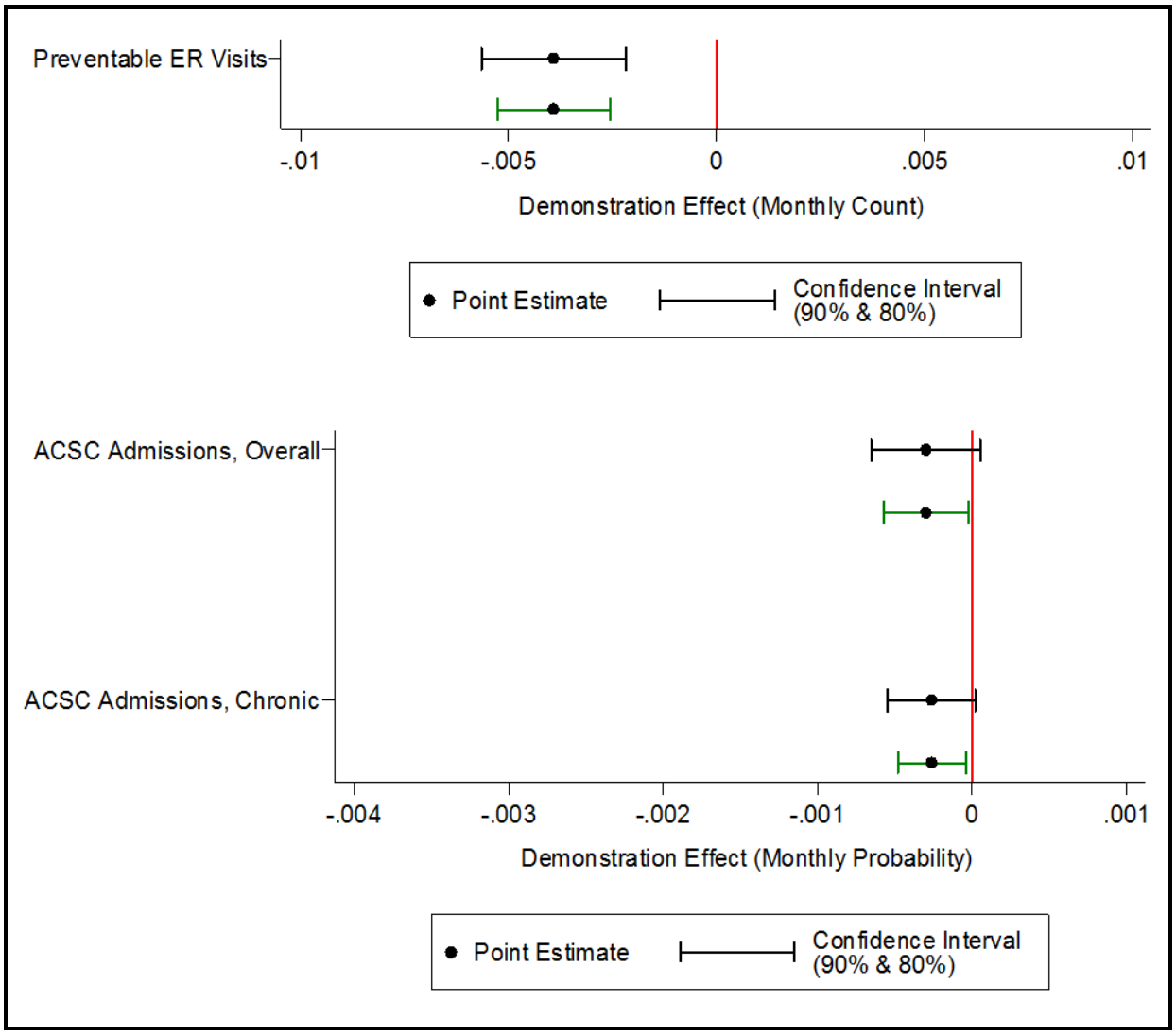
E&M = evaluation and management; ER = emergency room; SNF = skilled nursing facility.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only.

SOURCE: RTI International analysis of Medicare data.

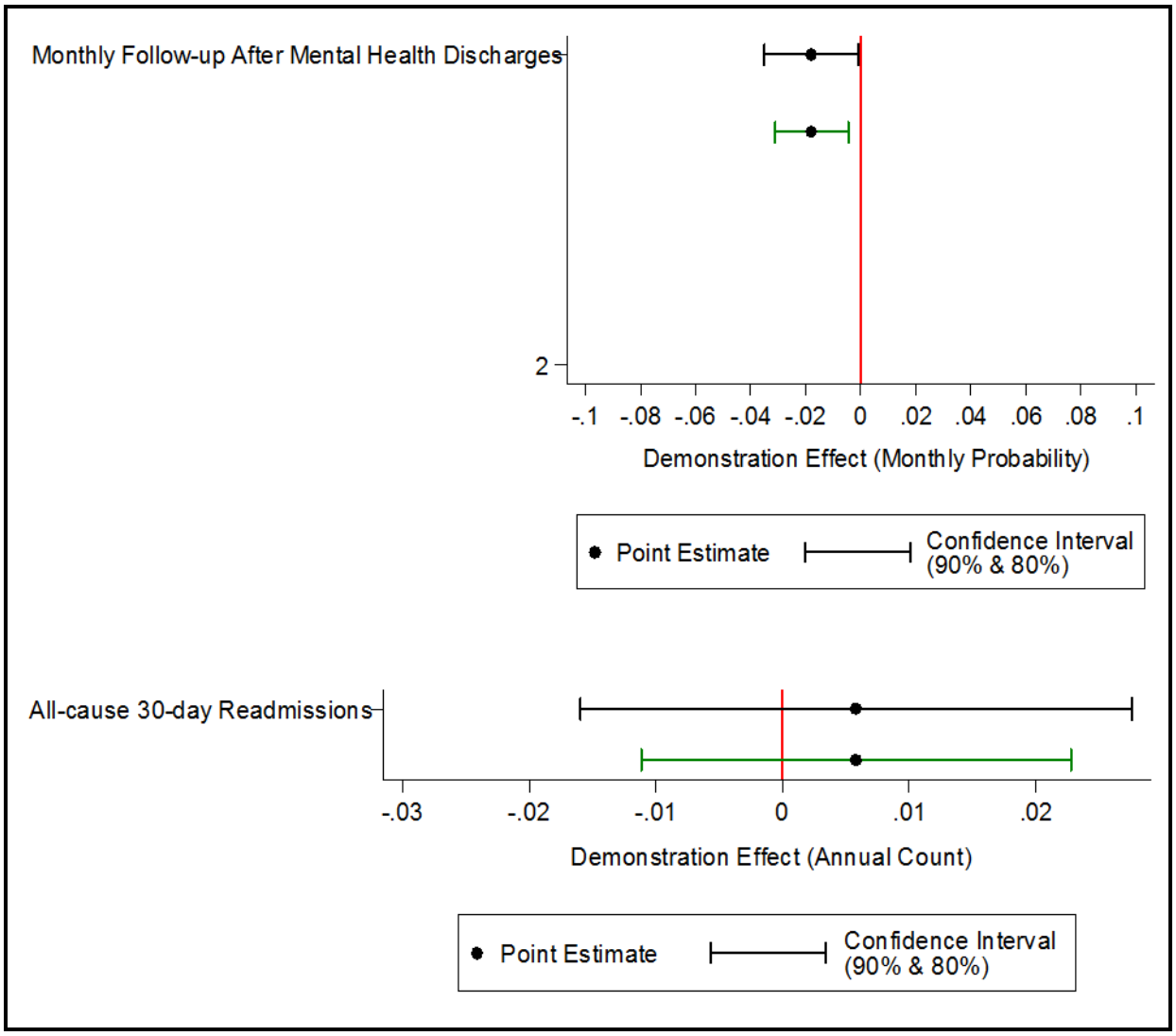
Figure 7 displays demonstration effects on RTI quality of care and care coordination measures for the demonstration eligible population with SPMI through demonstration year 1. The Illinois demonstration decreased the number of monthly preventable ER visits by 0.0039 visits per month (90 percent CI: −0.0056, −0.0022). The probability of monthly follow-up of mental health discharges also decreased by 1.79 percentage points per month (90 percent CI: −0.0349, −0.0008) and the demonstration decreased monthly preventable ER visits by 0.0039 visits (90 percent CI: −0.0056, −0.0022). There was no demonstration effect on the count of the all-cause 30-day readmissions, or the probability of monthly ACSC admissions (Chronic and Overall) among those with SPMI.

Figure 7
Demonstration effects on quality of care and care coordination for eligible beneficiaries with SPMI in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence internals)



(continued)

Figure 7 (continued)
Demonstration effects on quality of care and care coordination for eligible beneficiaries with SPMI in Illinois—Difference-in-differences regression results for the demonstration period, March 1, 2014–December 31, 2015
(90 and 80 percent confidence internals)



ACSC = ambulatory care sensitive conditions; ER = emergency room.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher. 80 percent confidence intervals are provided here for comparison purposes only. The 90 percent intervals are black, and the 80 percent intervals are green.

SOURCE: RTI International analysis of Medicare data.

Table 25 displays the demonstration effects on RTI quality of care and care coordination measures for the demonstration eligible population with an SPMI in the first demonstration year. We have indicated the previously reported point estimates with their associated significance levels.

Table 25
Demonstration effects by year on quality of care and care coordination for eligible beneficiaries with SPMI in Illinois
(* indicates significant at $p < 0.20$, ** indicates significant at $p < 0.10$)

Quality of care and care coordination measures	Demonstration year 1 (3/14–12/15)
Preventable ER visits	−0.0039**
Probability of ACSC admissions, overall	−0.0003
Probability of ACSC admissions, chronic	−0.0003
Probability of monthly follow-up after mental health discharges	−0.0179**
All-cause 30-day readmissions	0.0058

ACSC = ambulatory care sensitive conditions; ER = emergency room.

NOTE: Standard statistical practice is to use confidence intervals of 90 percent or higher. Significance based on 80 percent confidence intervals are provided here for comparison purposes only.

SOURCE: RTI International analysis of Medicare data.

8.2.4 Service Use for Enrollee and Non-Enrollee Populations

Tables C-4 and ***C-5*** in ***Appendix C*** present descriptive statistics for the enrolled population, compared to those demonstration eligible beneficiaries who were not enrolled, for each service by demonstration year, to help understand the utilization experience over time.

The eligible enrollees generally had lower utilization than the eligible non-enrolled group across most service settings (***Table C-4***). For the quality of care and care coordination measures, enrollees and non-enrollees have a similar probability of ACSC admissions and rates of all-cause 30-day readmissions, whereas non-enrollees had a higher rate of follow-up care after a mental health discharge (***Table C-5***).

8.2.5 Service Use by Demographic Characteristics of Eligible Beneficiaries

To examine any differences in racial and ethnic groups, ***Figures 8***, ***9***, and ***10*** provide month-level results for five settings of interest: inpatient admissions, ED (non-admit), primary care E&M visits, outpatient therapy (physical therapy [PT], occupational therapy [OT], and speech therapy [ST]), and hospice. Results across these five settings are displayed using three measures: percentage with any use of the respective service, counts per 1,000 demonstration eligible beneficiaries, and counts per 1,000 eligible beneficiaries with any use of the respective service.

Figure 8 presents the percentage of use of selected Medicare services. Asians had the lowest use of most of the five service settings. Blacks had the highest percentage use in inpatient

admissions and ED visits, whereas Whites had the highest use in hospice admissions, primary care E&M visits, and outpatient therapy visits.

Regarding counts of services used among users of each respective service, as presented in ***Figure 9***, the counts of inpatient admissions, ED visits, and hospice admissions were very similar across different racial and ethnic groups. Whites had the most primary care E&M visits, followed by Blacks, Hispanics, and then Asians, respectively. Outpatient therapy visits had the most variation across racial and ethnic groups analyzed.

Figure 10 presents counts of services across all demonstration eligible beneficiaries, regardless of having any use of the respective services. Trends for inpatient admissions, ED visits, and hospice admissions were broadly similar to those displayed in ***Figure 8***.

Figure 8
Percent with use of selected Medicare services

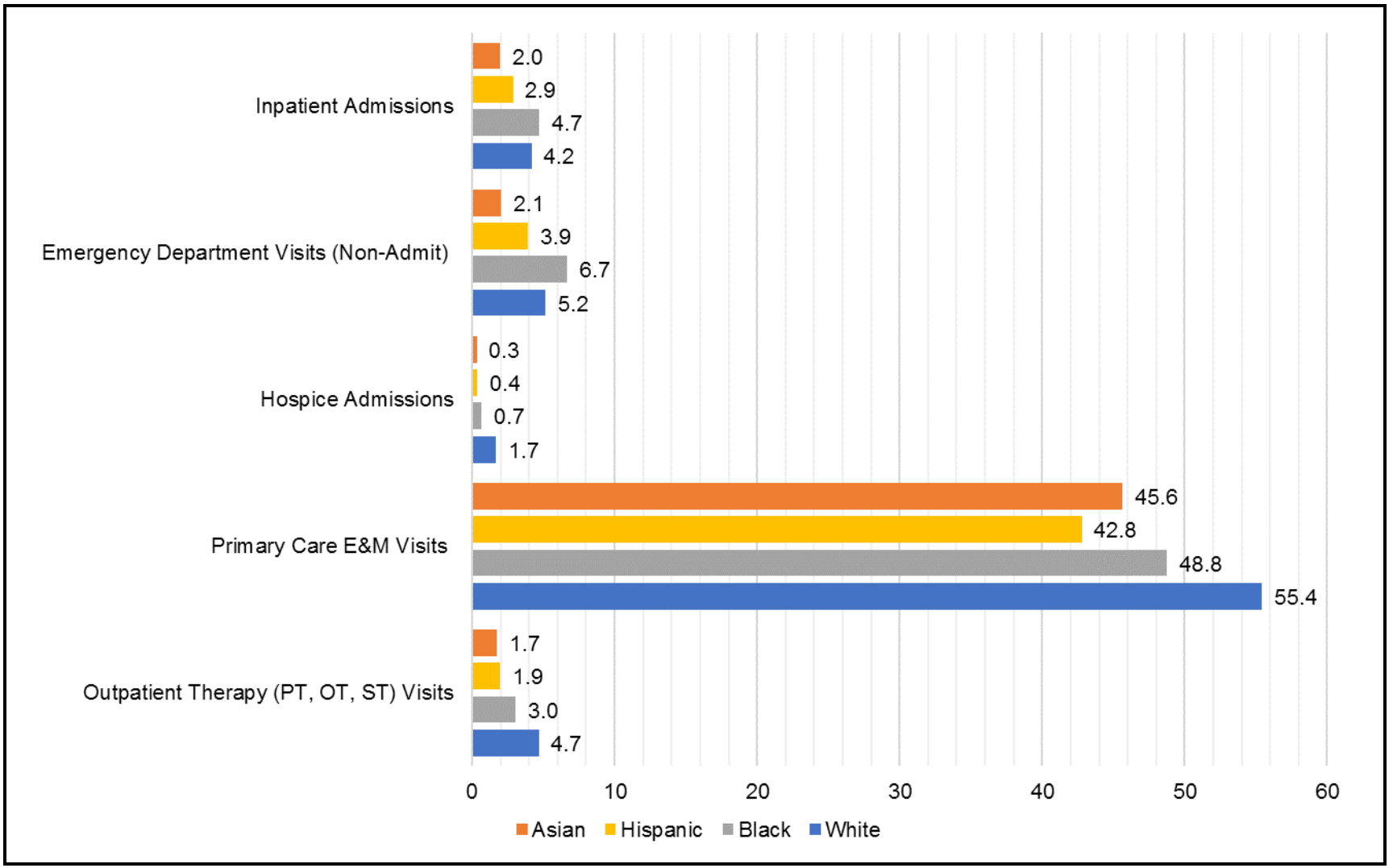


Figure 9
Service use among all demonstration eligible beneficiaries with use of service per 1,000 user months

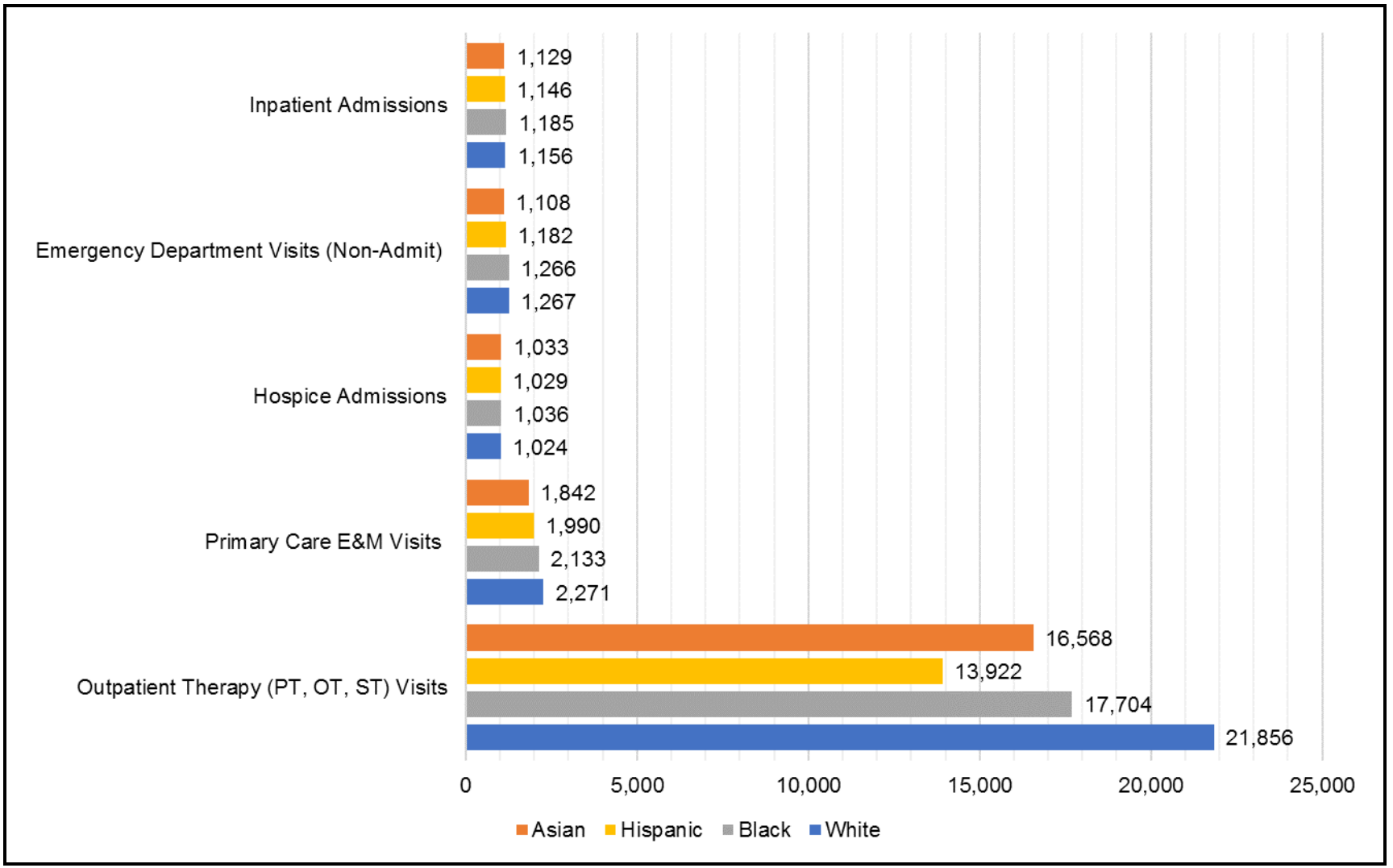
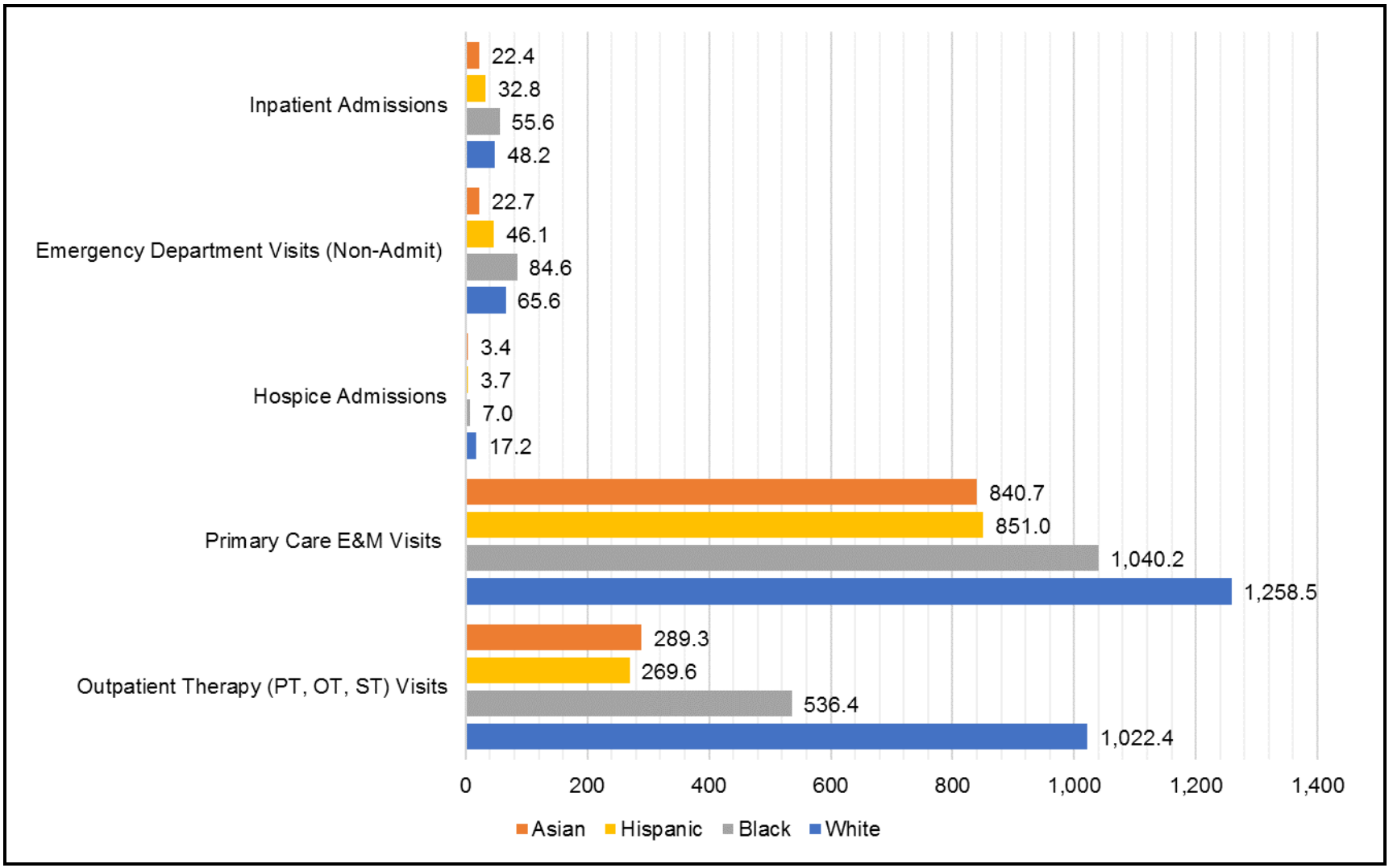


Figure 10
Service use among all demonstration eligible beneficiaries per 1,000 eligible months



9. Quality of Care

Highlights

- Illinois allows MMPs to collaborate on quality improvement projects in MMAI and Medicaid managed care. In addition to working on the same topics and comparing data, health plans test the same interventions for some topics.
- In 2016, Illinois replaced most of the State-specific quality measures planned for demonstration years 2–5 with HEDIS measures to align with Illinois Medicaid managed care programs and enable comparisons between Illinois health plans and national benchmarks.
- HEDIS measure performance for 2015 varied across MMPs, and there was no consistent trend across measures for one MMP in comparison to others. Illinois MMPs performed well compared to the national Medicare Advantage benchmarks for two measures, although most plans performed below the benchmark value for other measures. MMP performance on HEDIS measures may change over time as the plans gain experience working with the demonstration population.

9.1 Quality Measures

The Illinois demonstration requires that MMPs report standardized quality measures. These measures include:

- A set of core measures specific to all capitated model demonstrations under the Financial Alignment Initiative that address domains of access, assessment, care coordination, enrollee protection, organization structure and staffing, performance and quality improvement, provider network, and systems and service utilization (*https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/InformationandGuidanceforPlans.html*). The Illinois demonstration used supplementary reporting guidance for three core measures: members with an assessment completed within 90 days of enrollment, members with an assessment completed, and members with an annual reassessment. Illinois allows MMPs to report completion of a Health Risk Screening (see ***Section 4.1.1, Assessments***) as a completed assessment for their low-risk members (CMS, 2016a).

- A set of State-specific measures were selected by the Illinois Department of Healthcare and Family Services (HFS) staff in consultation with CMS. State officials said that in developing their initial slate of State-specific measures, they sought to align measures for MMAI with the Integrated Care Program, and reflect stakeholder input. The initial set included 26 measures in seven areas of reporting: access, assessment, care coordination, enrollee protections, organizational structure and

staffing, performance and quality improvement, and utilization (CMS, 2014c, p. 2). HFS revised the State-specific measures for demonstration years 2–5, as discussed below.

CMS uses reporting and performance on several of the core and State-specific measures to determine what portion of the capitation rates retained by the State as a "quality withhold" will be repaid to the plan.

The demonstration also utilizes quality measures required of Medicare Advantage plans, including applicable measures from the Part C and Part D Reporting Requirements such as appeals and grievances, pharmacy access, payment structures, and medication therapy management.

MMPs are required to submit three additional measure sets as part of the Medicare Advantage requirement:

- A modified version of the Medicare Advantage Prescription Drug plan (MA-PD) Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey that, in addition to the core survey used by Medicare Advantage plans, includes 10 supplemental questions proposed by the RTI Evaluation Team to capture beneficiary experience specific to integration, behavioral health and LTSS (see ***Section 5*** for CAHPS findings);

- The subset of Medicare Healthcare Effectiveness Data and Information Set (HEDIS) measures, a standard measurement set used extensively by managed care plans, that are required of all Medicare Advantage plans; and

- Selected Health Outcomes Survey (HOS) measures based on a recurring survey of a random sample of Medicare beneficiaries to assess physical and mental health outcomes (three-way contract, 2014).

Data related to these measures are reported in relevant sections of this report.

In addition, 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, ED use) (Walsh et.al., 2013, pp. 77–85)

9.1.1 Early Experience with Quality Measures

In 2016, Illinois revised the State-specific measures for demonstration years 2–5 (January 1, 2016–December 31, 2019). Sixteen of the original State-specific measures were suspended; 10 were retained; and 12 HEDIS measures from the set used by Illinois Medicaid MCOs were designated as State-specific measures (personal communication with HFS, 2017). State officials said the changes require no additional MMP reporting requirements, because

MMPs already report all of the measures to CMS, which is sharing the data with the State.[17] One of the retained State-specific measures—movement of members within service populations, which measures changes during the year in the percentage of enrollees residing in nursing facilities—was revised to align with measure specifications used for the ICP program.

State officials said the increased use of HEDIS measures was part of an HFS initiative to align quality measures across Medicaid managed care programs and facilitate comparisons with national benchmarks. Illinois uses HEDIS results in a Medicaid health plan report card. The 2015 report card was published online in December 2016, using data from the FHP/ACA and ICP programs (HFS, 2016). Health plans did not comment directly on the increased use of HEDIS measures, but plans interviewed in 2017 frequently mentioned their efforts to close care gaps for HEDIS measures and align quality improvement activities across all of their Illinois Medicaid products, including MMAI.

9.1.2 Withhold Measures

For demonstration year 1, five measures were designated as withhold measures: two core measures that applied to all of the capitated demonstrations, and three State-specific measures. The core measures were members with an assessment completed within 90 days of enrollment, and establishment of a consumer advisory board. The Illinois State-specific measures were: enrollees with documented discussions of care goals; moderate- and high-risk enrollees with comprehensive assessments completed within 90 days of enrollment; and completion and implementation of an Americans with Disabilities Act (ADA) compliance plan. The External Quality Review Organization (EQRO) validated MMP data for the State-specific measures, and CMS validated the core withhold measures and calculated the payments. For each measure, MMP performance was rated as "met" or "not met" depending on whether the MMP achieved the benchmark level. The benchmark for the care coordination measures was set at 90 percent, whereas the two process measures (ADA and consumer advisory board) required 100 percent completion.

Analysis of the CY 2014 quality withhold measures was completed in 2017 (CMS, n.d.-b). One of the eight plans operating that year met the benchmarks for all five measures, and two other plans met four of the five benchmarks (see also ***7.1.3, Performance Withhold***). All of the plans implemented consumer advisory boards, and six plans implemented ADA compliance plans. Plans had more difficulty achieving the benchmarks for the care coordination measures: two plans met the benchmark for completion of assessments, three met the benchmark for comprehensive assessments for moderate and high-risk members, and four met the benchmark for documentation of care goals. State officials said that staff turnover may have resulted in plans failing to correct some problems that had been brought to their attention by the EQRO.

For demonstration years 2 through 5, two HEDIS measures will be used as Illinois-specific withhold measures: initiation and engagement of alcohol and other drug dependence treatment, and care for older adults. Illinois is using demonstration year 1 HEDIS data that CMS collected from the MMPs to establish the baselines for the withhold measures. The third Illinois-specific withhold measure will be movement of members within service populations, which

[17] Most of the state-specified measures added for demonstration years 2–5 are included in ***Table 20, Selected HEDIS measures for Medicare Medicaid Alignment Initiative Plans, 2015.***

measures any change in the percentage of plans' enrollees classified as being in long-term care during the year, with being in long-term care defined as residing in a nursing facility for more than 90 days. For this measure, plans will earn a pass for timely and accurate reporting according to the measure specifications, rather than for achieving a specific performance rate.

9.2 Quality Management Structures and Activities

This section examines the components of the MMAI quality management system, including its interface with CMS, MMPs, and other independent entities, and describes how well the quality management system is working from various perspectives.

9.2.1 State and CMS Quality Management Structures and Activities

The State and CMS have overseen the quality of plan performance and demonstration implementation generally through the CMT, described in ***Section 2, Integration of Medicare and Medicaid***. The CMT has relied on plan reporting, external quality reviews, and the complaint tracking module (CTM) to identify emerging issues and areas of technical assistance needs. Through these mechanisms, the State and CMS identified issues such as the completion rates for health risk assessments and care plans, as well as the quality of care plans and the care planning process.

At the State level, two agencies within the Department of Healthcare and Family Services have played a leading role in quality oversight: the Bureau of Managed Care (BMC) and the Bureau of Quality Management (BQM). BMC staff have selected performance measures in collaboration with the BQM, developed the quality improvement program, developed a system for receiving plan measure reports, and overseen the plan readiness reviews. BQM staff have managed the medical record review process, developed standards for evaluating plans and for HCBS record reviews, and overseen the EQRO contract, which entailed participating in site visits and reviews, establishing the process for selecting a sample of medical records for review, discussing results, approving reports, and identifying training needs.

BMC and BQM review quality data submitted by plans to identify trends, benchmarks for performance, and outliers. Staff have periodically created a de-identified summary report that has been shared with plans to review their performance as part of technical assistance training. Plan-level compliance has also been monitored based on complaints submitted through the CTM. Issues surfaced have been brought to monthly plan meetings or all-plan calls.

9.2.2 Independent Quality Management Structures and Activities

External quality review strategies played a significant role in the demonstration's quality management work during the first three years. Before enrollment began, a readiness review was conducted to ensure plans were compliant and prepared to deliver benefits under the contract. The readiness review consisted of a desk review of policies and procedures, an on-site review including an in-depth systems audit, and post-review to ensure compliance, with review responsibilities divided between CMS, the State, and their contractors. All findings from the review were shared among the State, CMS, and the EQRO.

The State's EQRO, Health Services Advisory Group (HSAG), performs quality review activities, including validating performance measures and quality improvement projects (QIPs), and conducting on-site compliance reviews. State officials credited the on-site reviews of care coordination with identifying challenges with care planning (see ***Section 4.1.2, Care Planning Process***). The EQRO has performed reviews for State-selected samples of electronic health records for Medicare-Medicaid enrollees who participate in the HCBS waiver to ensure that their records include signed care plans. The EQRO has also convened quarterly operational meetings with plans to review findings or provide trainings.

The MMAI Ombudsman program, operated by the Long-Term Care Ombudsman Program in the Illinois Department of Aging (see ***Section 5.2.9***, ***Beneficiary Protections***), receives beneficiary complaints about MMAI. Monthly meetings between Ombudsman staff and the CMT provide opportunities to provide implementation updates and discuss enrollee complaints, questions, and outreach.

9.2.3 MMP Quality Management Activities

Under the three-way contract, MMPs are required to implement quality improvement projects (QIPs) and chronic care improvement projects (CCIPs) (Illinois three-way contract, 2013, pp.142–143). Plans were required to submit two QIPs, a care coordination project and a behavioral health project. The care coordination study tested the impact of interventions for moderate and high-risk members on inpatient readmissions and use of community resources after discharge. The behavioral health study examined the effect of specified activities following hospitalization for mental health conditions (CMS, 2014a). The two QIPs were selected to align with performance improvement projects that Illinois Medicaid had already launched for plans participating in the ICP program; the behavioral health QIP is also aligned with a HEDIS measure. State officials reported that MMPs were initially required to submit CCIPs on hypertension management, but CMS no longer requires plans to report on CCIPs, although they are still required to conduct the projects.

Illinois Medicaid encourages MMPs to collaborate on quality improvement initiatives. Plans work on the same topics, test some of the same interventions, and compare results. To facilitate collaboration, HFS convenes health plans for two-day quarterly quality meetings at HFS offices, facilitated by the EQRO. Initially "it was like pulling teeth to get [the plans] to talk but now we really do see the sharing of information and best practices," a State official said, adding that the plans recognize that they can have more impact on outcomes by collaborating. State officials said it had been more challenging to engage plans in collaboration on the QIPs than on Medicaid performance improvement projects (PIPs), because QIPs are a Medicare Advantage requirement and health plans often have their Medicare quality staff based in other States, while their Medicaid quality staff are based in Illinois.

State officials expressed disappointment with QIPs in the first year and noted inconsistencies in timeframes for baseline data that made comparisons impossible, as well as a lack of alignment between interventions and barriers. To address these challenges, State officials said they had provided guidance for the plans and set 2015 as the baseline year, rather than 2014. State officials also expressed frustration that CMS eliminated the upload function for submitting QIP data thus preventing plans from submitting complete QIP information. Later in 2017, States

assumed responsibility for managing the MMPs' QIPs, and will develop guidance, collect and review the QIPs.

One plan said its quality initiatives engage teams working on MMAI, other Medicaid products, the quality team, and provider relations. Another MMP mentioned that its population health and utilization management teams are engaged in reducing inpatient readmissions. One plan also mentioned that its consumer advisory committee plays a role in quality improvement through feedback about services, care coordination, and communications. For example, committee members provided positive feedback after the plan mailed out reminders about preventive services that include the locations of nearby providers.

9.3 Results for Selected Quality Measures

9.3.1 HEDIS Quality Measures Reported for MMAI Plans

Fourteen Medicare HEDIS measures for MMAI enrollees are reported in ***Table 26***. RTI identified these measures for reporting in this Evaluation Report after reviewing the list of measures we previously identified in RTI's Aggregate Evaluation Plan as well as the available HEDIS data on these measures for completeness, reasonability, and sample size; 2015 calendar year (CY) data were available for eight MMPs. Detailed descriptions of the measures can be found in the RTI Aggregate Evaluation Plan (Walsh et al., 2013). Results were reported for measures where sample size was greater than 30 beneficiaries. In addition to reporting the results for each MMP, the mean value for Medicare Advantage plans for each measure is provided for comparison.

We provide national benchmarks from Medicare Advantage plans, where available, with the understanding that Medicare Advantage enrollees and demonstration enrollees may have different health and sociographic characteristics that would affect the results. Previous studies on health plan performance reveal poorer quality ratings for plans serving a higher proportion of dual eligible beneficiaries and beneficiaries with disabilities. In particular, HEDIS measure performance is slightly worse among plans active in areas with lower income and populations with a higher proportion of minorities (Office of the Assistant Secretary for Planning and Evaluation, 2016). Benchmarks should be considered with that limitation in mind.

These findings on Illinois MMP HEDIS measure performance represent the early experience in the demonstration, and are likely to change over time as MMPs gain more experience in working with enrollees. Monitoring trends over time in MMP performance may be more important than the comparison to the national Medicare Advantage plans, given the population differences. Several years of HEDIS results are likely needed to know how well MMPs perform relative to each other and whether they perform above or below any potential benchmark.

For each measure, results across MMPs vary, and there is no consistent trend across measures for one MMP in comparison to others. For one measure reported (initiation and engagement of alcohol and other drug dependence treatment), all eight plans performed better than the national Medicare Advantage benchmark value. For two other measures—annual monitoring for members on digoxin (for patients on persistent medications), and effective

continuation phase treatment for antidepressant medication management—more than half of the plans performed better than the national benchmark values.

For the remaining measures, most plans performed below the benchmark value. These measures related to adults' access to preventive/ambulatory health services, annual monitoring for patients on persistent medications, blood pressure control, comprehensive diabetes care, disease modifying anti-rheumatic drug therapy in rheumatoid arthritis, follow-up after hospitalization for mental illness, plan all-cause readmissions, and ambulatory care.

Table 26
Selected HEDIS measures for Medicare Medicaid Alignment Initiative Plans, 2015

Measure	National Medicare Advantage Plan Mean (2015) (%)	Aetna (2015) (%)	BlueCross BlueShield (2015) (%)	Cigna-HealthSpring (2015) (%)	Health Alliance (2015) (%)	Humana (2015) (%)	IlliniCare (2015) (%)	Meridian (2015) (%)	Molina (2015) (%)
Adult BMI assessment	93.0	N/A	N/A	92.9	N/A	96.0	N/A	N/A	N/A
Adults' access to preventive/ambulatory health services	94.7	81.1	88.6	85.3	94.9	86.6	96.0	80.1	89.9
Annual monitoring for patients on persistent medications									
Annual monitoring for members on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB)	92.6	88.0	90.5	89.9	94.1	90.4	94.4	89.8	93.8
Annual monitoring for members on digoxin	57.4	82.5	42.6	63.9	84.9	64.0	45.5	81.8	64.7
Annual monitoring for members on diuretics	92.9	89.4	90.7	90.5	94.2	90.5	95.9	89.5	94.3
Total rate of members on persistent medications receiving annual monitoring	91.9	88.5	90.0	89.7	94.0	90.0	94.1	89.5	93.4
Antidepressant medication management									
Effective acute phase treatment[1]	69.6	100.0	53.3	64.8	74.2	77.7	N/A	68.6	73.8
Effective continuation phase treatment[2]	55.6	96.7	36.7	56.1	61.3	78.5	N/A	51.0	58.3
Blood pressure control[3]	67.6	43.3	24.5	48.9	62.5	63.3	50.7	41.6	38.0
Breast cancer screening	72.3	N/A	N/A	70.2	N/A	64.4	N/A	N/A	N/A

(continued)

Table 26 (continued)
Selected HEDIS measures for Medicare Medicaid Alignment Initiative Plans, 2015

Measure	National Medicare Advantage Plan Mean (2015) (%)	Aetna (2015) (%)	BlueCross BlueShield (2015) (%)	Cigna-HealthSpring (2015) (%)	Health Alliance (2015) (%)	Humana (2015) (%)	IlliniCare (2015) (%)	Meridian (2015) (%)	Molina (2015) (%)
Care of older adults									
Advance care planning	N/A	5.3	N/A	28.2	NA	N/A	11.6	8.5	49.9
Medication review	N/A	28.9	N/A	52.1	NA	N/A	52.5	33.1	72.4
Functional status assessment	N/A	13.9	N/A	35.8	NA	N/A	79.4	19.3	53.6
Pain assessment	N/A	25.9	N/A	44.8	NA	N/A	84.9	30.7	72.6
Colorectal cancer screening	66.7	N/A	N/A	70.1	NA	66.4	N/A	N/A	N/A
Comprehensive diabetes care									
Received Hemoglobin A1c (HbA1c) testing	93.1	84.7	87.6	90.0	88.3	86.6	91.9	82.2	91.0
Poor control of HbA1c level (>9.0%) (higher is worse)	28.4	56.0	76.2	44.8	96.4	34.3	57.7	69.6	49.9
Good control of HbA1c level (<8.0%)	61.8	36.3	20.8	45.7	3.4	56.9	37.5	27.2	40.4
Received eye exam (retinal)	68.3	38.9	49.5	52.6	51.0	57.9	65.8	51.4	40.4
Received medical attention for nephropathy	95.5	88.2	94.3	95.6	93.2	92.9	93.8	89.8	93.6
Blood pressure control (<140/90 mm Hg)	60.9	35.0	21.9	49.4	0.2	59.1	43.4	29.9	61.8
Disease modifying anti-rheumatic drug therapy in rheumatoid arthritis	76.7	57.1	75.0	63.8	76.6	72.7	N/A	N/A	N/A
Follow-up after hospitalization for mental illness	51.0	49.8	34.3	48.9	69.2	34.1	36.2	34.2	58.0

(continued)

Table 26 (continued)
Selected HEDIS measures for Medicare Medicaid Alignment Initiative Plans, 2015

Measure	National Medicare Advantage Plan Mean (2015) (%)	Aetna (2015) (%)	BlueCross BlueShield (2015) (%)	Cigna-HealthSpring (2015) (%)	Health Alliance (2015) (%)	Humana (2015) (%)	IlliniCare (2015) (%)	Meridian (2015) (%)	Molina (2015) (%)
Initiation and engagement of alcohol and other drug (AOD) dependence treatment Initiation of AOD treatment[4]	32.3	39.2	43.8	43.2	40.4	42.3	72.4	47.7	39.9
Engagement of AOD treatment[5]	3.2	7.7	3.6	3.8	8.3	3.3	17.1	7.1	5.0
Plan all-cause readmissions (Average adjusted probability total) (higher is worse)	17.3	24.3	21.3	24.5	23.7	23.3	28.1	18.8	23.3
Ambulatory care (Per 1,000 members)									
Outpatient visits	9,161.2	7,648.2	14,982.6	8,373.9	9,128.3	6,397.4	6,701.8	8,020.0	7,455.3
Emergency department visits (higher is worse)	607.8	779.9	726.2	726.7	1,471.0	690.3	928.0	671.8	1,191.7

N/A = Not available. Health Alliance ended their MMP operations on 12/31/15.

[1]Represents the percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).
[2]Represents the percentage of members who remained on an antidepressant medication for at least 180 days (6 months).
[3]The following criteria were used to determine adequate blood pressure control: less than 140/90 mm Hg for members 18–59 years of age; diagnosis of diabetes and <140/90 mm Hg for members 60–85 years of age; no diagnosis of diabetes and <150/90 mm Hg for members 60–85 years of age.
[4]Represents percentage of members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis.
[5]Represents the percentage of members who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.

NOTES: Data for fall risk management, physical activity in older adults, and management of urinary incontinence in older adults are not available for CY 2015. Medicare Advantage benchmark values were not available for all measures (e.g., care of older adults measures). Data for which the final sample size was <30 were determined too small to present; in cases where final sample size was unavailable, RTI used eligible population to make this determination. Detailed descriptions of HEDIS measures presented can be found in the RTI Aggregate Evaluation Plan: https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/EvalPlanFullReport.pdf.

SOURCE: RTI analysis of 2015 HEDIS measures.

10. Cost Savings Calculation

Highlights

- RTI conducted a preliminary estimate of Medicare savings using a difference-in-differences analysis examining beneficiaries eligible for the demonstration in the Illinois demonstration area and comparison areas.
- The results of the preliminary cost analyses of beneficiaries eligible for the demonstration show statistically significant savings as a result of the demonstration.

As part of the Illinois capitated model demonstration under the Financial Alignment Initiative, Illinois, CMS, and health plans have entered into a three-way contract to provide services to Medicare-Medicaid enrollees (CMS, 2013). Participating health plans receive prospective blended capitation payment to provide both Medicare and Medicaid services for enrollees. CMS and Illinois developed risk adjusted capitation rates for Medicare Parts A, B, and D, and Medicaid services to reflect the characteristics of enrollees. The Medicare component of the payment is risk adjusted using CMS' hierarchical risk adjustment model. The rate development process is described in greater detail in the Memorandum of Understanding and the three-way contract, and a description of both the risk-adjusted Medicare and Medicaid components of the rate are described in the Rate Reports (CMS and State of Illinois, 2013c).

The capitation payment incorporates savings assumptions over the course of the demonstration. The same savings percentage is prospectively applied to both the Medicare Parts A and B and Medicaid components of the capitation payment, so that both payers can recognize proportional savings from this integrated payment approach, regardless of whether the savings is driven disproportionately by changes in utilization of services typically covered by Medicare or Medicaid. The goal of this methodology is to minimize cost shifting, to align incentives between Medicare and Medicaid, and to support the best possible outcomes for enrollees.

This chapter presents preliminary Medicare Parts A and B savings calculations for the first 22 months of the demonstration period using an intent-to-treat (ITT) analytic framework that includes beneficiaries eligible for the demonstration rather than only those who enrolled. Approximately 153,000 Medicare-Medicaid beneficiaries in Illinois were eligible for and over 46,000 (30 percent) enrolled in the demonstration as of December 2016.

The Medicare calculation presented here uses the capitation rate that CMS pays to MMAI plans for beneficiaries enrolled in the demonstration, and not the actual payments that plans made to providers for services, so the savings are calculated from the perspective of the Medicare program. A similar approach will be applied to the Medicaid savings calculation when data is available. Part D costs are not included in the savings analysis.

The results shown here reflect quality withhold repayments for the period May 2014 to December 2015. Note that Medicare and Medicaid savings calculations will be conducted by RTI for each year of the demonstration as data are available.

The following sections discuss the analytic approach and results of these analyses.

10.1 Evaluation Design

To assess the impact of the demonstration on Medicare costs for Medicare-Medicaid enrollees, RTI used an ITT approach comparing the population eligible for the Illinois demonstration with a comparison group not affected by the demonstration. An ITT approach diminishes the potential for selection bias and highlights the effect of the demonstration on all beneficiaries in the demonstration eligible population. All Medicare-Medicaid enrollees eligible for the demonstration constitute the evaluation sample, regardless of whether they enrolled in the demonstration or actively participated in the demonstration care model. Therefore, the analyses presented here cover demonstration eligible beneficiaries including those who opted out, or who participated but subsequently disenrolled; who were eligible but were not contacted by the State or participating plans; and those who enrolled but did not seek services.

Beneficiaries eligible for the demonstration were identified using quarterly files submitted by the State of Illinois. These files include information on all beneficiaries eligible for the demonstration, as well as indicators for whether each beneficiary was enrolled.

A comparison group was identified in two steps. First, RTI identified comparison areas that are most similar to Illinois with regard to area-level measures of health care market characteristics such as Medicare and Medicaid spending and State policy affecting Medicaid-Medicare enrollees. Second, beneficiaries were selected using a propensity score model (described in further detail below). Further discussion of the comparison group selection process is detailed in ***Appendix A***.

RTI used a difference-in-differences (DID) approach to evaluate the impact of the demonstration on Medicare costs. DID refers to an analytic strategy whereby two groups—one affected by the policy intervention and one not affected by it—are compared on an outcome of interest before and after the policy intervention. The predemonstration period included 2 years prior to the start of the Illinois demonstration (March 1, 2012–February 28, 2014) and the first demonstration period (demonstration year 1) included the first 22 months of the demonstration (March 1, 2014–December 31, 2015).

To estimate the average treatment effect on the demonstration eligible population for monthly Medicare expenditures, RTI ran generalized linear models (GLMs) with a gamma distribution and a log link. This is a commonly used approach in analysis of skewed data or in cases where a high proportion of observations may have values equal to zero. The model also employed propensity score weighting and adjusted for clustering of observations at the county level.

The GLM model included indicators for demonstration period, an indicator for assignment to the demonstration group versus the comparison group, and an interaction term for demonstration period and demonstration assignment. The model also included demographic

variables and area-level variables. The interaction term represents the combined effect of being part of the demonstration eligible group during the demonstration periods and is the key policy variable of interest. The interaction term is a way to measure the impact of both time and demonstration group status. Because the DID variable was estimated using a non-linear model, RTI employed a post-estimation procedure to obtain the marginal effects of demonstration impact. The aggregation of the individual marginal effects represents the net demonstration impact and are reported below.

- Demographic variables included in the model were:
  - Gender
  - Race
  - ESRD status
- Area-level variables included in the savings model were:
  - Medicare spending per Medicare-Medicaid enrollee age 19 or older
  - Medicare Advantage penetration rate
  - Medicaid-to-Medicare fee for service (FFS) fee index for all services
  - Medicaid spending per Medicare-Medicaid enrollee age 19 or older
  - Proportion of Medicare-Medicaid enrollees using
    - Nursing facilities age 65 or older
    - Home and community-based services (HCBS) age 65 or older
    - Personal care age 65 or older
    - Medicaid managed care age 19 or older
  - Population per square mile, and physicians per 1,000 population

Additional area-based variables—such as the percent of adults with a college degree and proximity to hospitals or nursing facilities—were used as proxies for sociodemographic indicators and local area characteristics. Note that these variables were also used in the comparison group selection process. Individual beneficiary demographic characteristics are controlled for in the models and are also accounted for in the propensity score weights used in the analysis.

In addition to the variables noted here, the propensity score weights used in the cost savings analyses also include Hierarchical Condition Category (HCC) risk score. HCC risk score is not included as an independent variable in the regression models predicting costs because

HCC risk score is directly related to capitated payments. Due to the potential for differences in diagnoses coding for enrollees compared to beneficiaries in FFS after the start of the demonstration, the HCC risk score used to calculate the weights was "frozen" to the value at the start of the demonstration period. Diagnoses codes are the basis for risk score calculations, and by freezing the score prior to any potential impact of the demonstration, we are able to control for baseline health status using diagnosis codes available prior to the demonstration.

10.2 Medicare Expenditures: Constructing the Dependent Variable

RTI gathered predemonstration and demonstration monthly Medicare expenditure data for both the demonstration and comparison groups from two data sources. Capitation payments paid to Medicare Advantage plans in the predemonstration and demonstration periods and paid to MMAI plans during the demonstration period were obtained from CMS Medicare Advantage and Prescription Drug system (MARx) data. The capitation payments were the final reconciled payments paid by the Medicare program after taking into account risk score reconciliation and any associated retroactive adjustments in the system at the time of the data pull (April 2017). Medicare claims were used to calculate Medicare Parts A and B expenditures for fee-for-service beneficiaries. ***Table 27*** summarizes the data sources for Medicare expenditure data.

Table 27
Data sources for monthly Medicare expenditures

Group	Predemonstration March 1, 2012–February 28, 2014	Demonstration period March 1, 2014–December 31, 2015
Demonstration group	Medicare FFS	Medicare FFS for non-enrollees
	Medicare Advantage Capitation	Medicare Advantage Capitation for non-enrollees
		MMAI Capitation for enrollees
Comparison group	Medicare FFS	Medicare FFS
	Medicare Advantage Capitation	Medicare Advantage Capitation

FFS = fee for service.

A number of adjustments were made to the monthly Medicare expenditures to ensure that observed expenditures variations are not due to differences in Medicare payment policies in different areas of the country or the construction of the capitation rates. ***Table 28*** summarizes each adjustment and the application of the adjustments to FFS expenditures or to the capitation rate.

The capitation payments MARx reflect the savings assumptions applied to the MMAI and Medicare components of the rate (1 percent for March 1, 2014–December 31, 2015), but do not reflect the quality withhold amounts (withhold of 1 percent in the first demonstration period). The results shown here reflect quality withhold repayments for the first demonstration period.

Table 28
Adjustments to Medicare expenditures variable

Data source	Adjustment description	Reason for adjustment	Adjustment detail
FFS	Indirect Medical Education (IME)	Capitation rates do not include IME	Do not include IME amount from FFS payments
FFS	Disproportionate Share Hospital (DSH) Payments and Uncompensated Care Payments (UCP)	Capitation rates reflect DSH and UCP adjustments	Include DSH and UCP payments in total FFS payment amounts.
FFS	Medicare Sequestration Payment Reductions	Under sequestration Medicare payments were reduced by 2% starting April 1, 2013 (reflected in the claims data). Because the pre-demonstration period includes months prior to April 1, 2013 it is necessary to apply the adjustment to these months of data so that any observed changes are not due to sequestration.	Reduced FFS claim payments incurred before April 2013 by 2% so all claims reflect this adjustment.
Capitation rate (MA and MMP)	Medicare Sequestration Payment Reductions	Under sequestration Medicare payments were reduced by 2% starting April 1, 2013. Sequestration is not reflected in the capitation rates.	Reduced capitation rate by 2%
Capitation rate (MA)	Bad debt	The capitation rate includes an upward adjustment to account for bad debt. Bad debt is not part of FFS claim payment amount and therefore needs to be removed from the capitation rate for the savings analysis. (Note, “bad debt” is reflected in the hospital “pass through” payment separate from the total claim payment amount)	Reduced capitation rate to account for bad debt load (historical bad debt baseline percentage). This is 0.93 for CY12, 0.91 for CY13, 0.89 for CY14, 0.89 and for CY15.
Capitation rate (MMP)	Bad debt	The capitation rate includes an upward adjustment to account for bad debt. Bad debt is not part of FFS claim payment amount and therefore needs to be removed from the capitation rate for the savings analysis. (Note, “bad debt” is reflected in the hospital “pass through” payment separate from the total claim payment amount)	Reduced blended capitation rate to account for bad debt load (historical bad debt baseline percentage). This is 0.87 for CY13, 0.88 for CY14, and 0.89 for CY15. Reduced the FFS portion of the capitation rate by an additional 1.89% for CY 2014 and by an additional 1.71% for CY 2015to account for the disproportional share of bad debt attributable to Medicare-Medicaid enrollees in Medicare FFS.

(continued)

Table 28 (continued)
Adjustments to Medicare expenditures variable – Revised 4/14/18

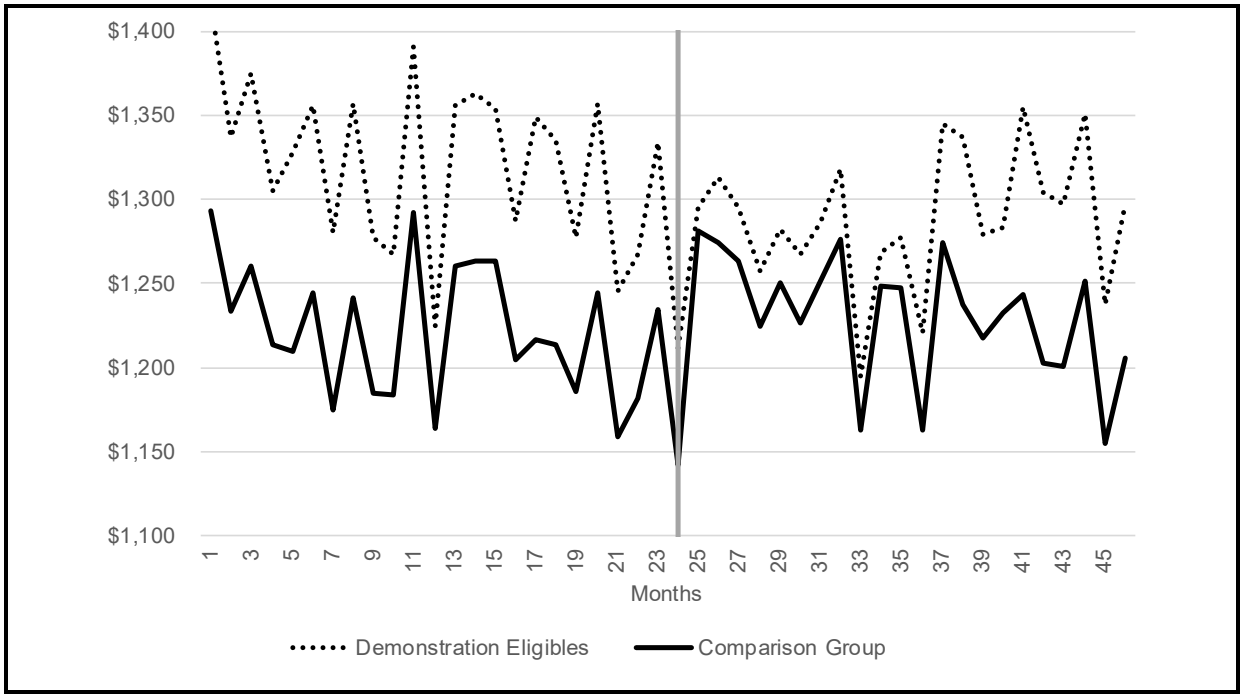
Data source	Adjustment description	Reason for adjustment	Adjustment detail
FFS and capitation rate (MA and MMP)	Average Geographic Adjustments (AGA)	The Medicare portion of the capitation rate reflects the most current hospital wage index and physician geographic practice cost index by county. FFS claims also reflect geographic payment adjustments. In order to ensure that change over time is not related to differential change in geographic payment adjustments, both the FFS and the capitation rates were "unadjusted" using the appropriate county-specific AGA factor.	Medicare expenditures were divided by the appropriate county-specific AGA factor for each year. Note that for 2014 and 2015, a single year-specific AGA factor based on claims paid in the year, rather than the AGA factor used in Medicare Advantage (based on 5 years of data and lagged 3 years) was used to account for year specific policies. Note also that the AGA factor applied to the capitated rates for 2014 reflected the 50/50 blend that was applicable to the payment year.
Capitation rate (MA and MMP)	Education user fee	No adjustment needed.	Capitation rates in the MARX database do not reflect the education user fee adjustment (this adjustment is applied retrospectively). Education user fees are not applicable in the FFS context and do not cover specific Part A and Part B services. While they result in a small reduction in the capitation payment received, we did not account for this reduction in the capitated rate.
Capitation rate (MMP)	Quality withhold	A 1% quality withhold was applied in the first demonstration year but the withholds are not reflected in the capitation rate used in the analysis.	Final quality withhold repayments were incorporated into the dependent variable construction for the first demonstration year.

FFS = fee for service, MMP = Medicare-Medicaid Plan.

10.3 Results

The first step in the analysis was to plot the unweighted mean monthly Medicare expenditures for both the demonstration group and the comparison group. ***Figure 11*** indicates that the demonstration group and the comparison group had parallel trends in mean monthly expenditures during the 24-month predemonstration period, which is an important assumption to the DID analysis.

Figure 11
Mean monthly Medicare expenditures, predemonstration and demonstration period, MMAI eligible and comparison group, March 2012–December 2015



SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output/ Figure_1&2 2OCT2018).

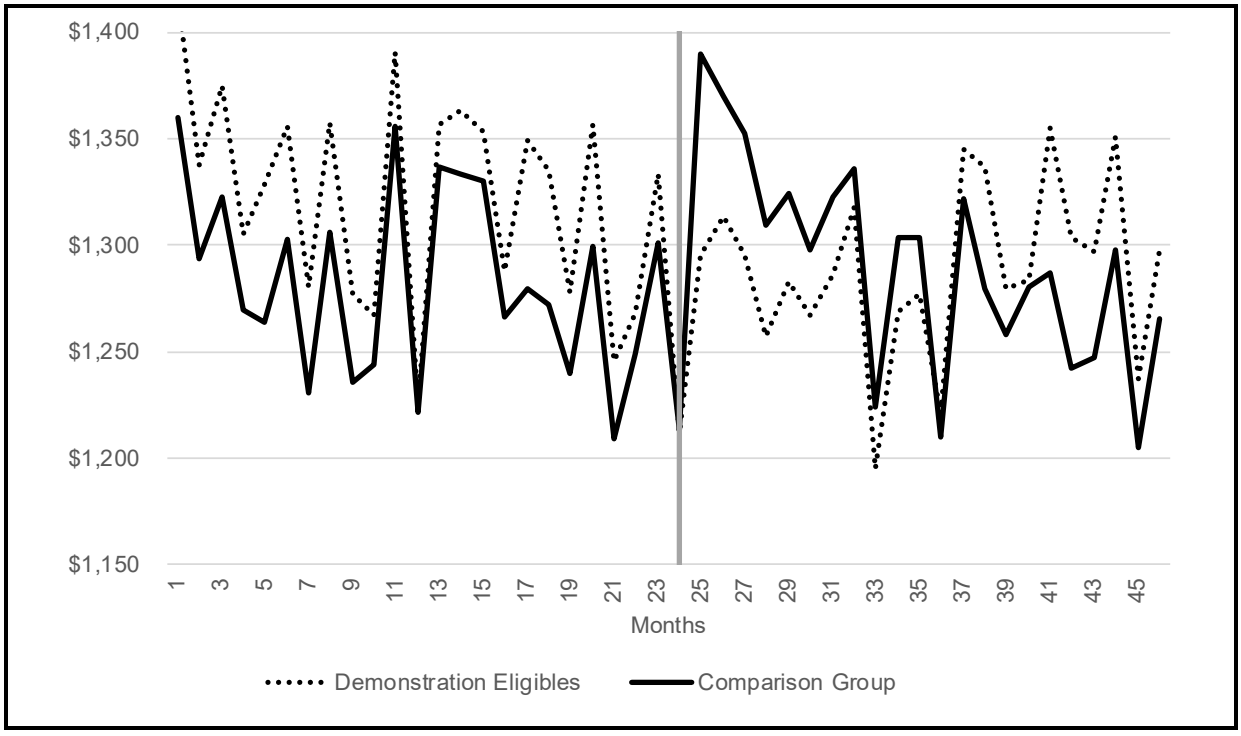
Figure 12 demonstrates the same plot of mean monthly Medicare expenditures for both the demonstration group and the comparison group, after applying the propensity weights and establishes the parallel trends for both groups.

Table 29 shows the mean monthly Medicare expenditures for the demonstration group and comparison group in the predemonstration and the demonstration period, unweighted. The unweighted table show an increase in mean monthly Medicare expenditures during demonstration period 1 for both the demonstration group and the comparison group. The unweighted mean decrease in demonstration period 1 was $30 for demonstration eligible beneficiaries and the unweighted mean increase was $12 for the comparison group. A similar pattern was observed for demonstration period 1 for both the demonstration group and the comparison group in the weighted table (***Table 30***).

The DID values in each table represent the overall impact on savings using descriptive statistics. These effects are descriptive in that they are arithmetic combinations of simple means, without controlling for covariates. The change in the demonstration group minus the change in the comparison group is the DID value. This value would be equal to zero if the differences between predemonstration and the demonstration period were the same for both the demonstration group and the comparison group. A negative value would indicate savings for the demonstration group, and a positive value would indicate losses for the demonstration group.

The DID values in demonstration period 1 are positive, but not statistically significant (illustrated by the 95 percent confidence intervals that include 0).

Figure 12
Mean monthly Medicare expenditures (weighted), predemonstration and demonstration period, MMAI eligibles and comparison group, March 2012–December 2015



SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output/ Figure_1&2 OCT2018)

Table 29
Mean monthly Medicare expenditures for MMAI eligibles and comparison group, predemonstration period and demonstration period 1, unweighted

Group	Predemonstration period Mar 2012–Feb 2014	Demonstration period 1 Mar 2014–Dec 2015	Difference
Demonstration group	$1,319 ($1,295.0; $1,342.5)	$1,289 ($1,266.3; $1,312.1)	−$30 (−$35.2; −$23.9)
Comparison group	$1,219 ($1,171.9; $1,266.9)	1,231 ($1,187.0; $1,275.5)	$12 (−$0.1; $23.7)
Difference-in-difference	—	—	-$41 (−$54.5; −$28.3)

— = data not available.

NOTE: 95 percent confidence intervals are shown in parentheses below estimates.

SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output/Descriptives OCT2018).

Table 30
Mean monthly Medicare expenditures for MMAI eligibles and comparison group, predemonstration period and demonstration period 1, weighted

Group	Predemonstration period Mar 2012–Feb 2014	Demonstration period 1 Mar 2014–Dec 2015	Difference
Demonstration group	$1,319 ($1,295.0; $1,342.5)	$1,289 ($1,266.3; $1,312.1)	−$30 (−$35.2; −$23.9)
Comparison group	$1,280 ($1,228.9; $1,332.0)	$1,291 ($1,238.6; $1,344.0)	$11 (−$7.3; $29.0)
Difference-in-difference	—	—	−$40 (−$59.5; −$21.4)

— = data not available.

NOTE: 95 percent confidence intervals are shown in parentheses below estimates.

SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output/ il_cs485_check_C_20SEP2018).

10.3.1 Regression Analysis

While the descriptive statistics are informative, to get a more accurate estimate of savings, RTI conducted a multivariate regression analysis to estimate savings controlling for beneficiary and area-level characteristics. Given the structure of the data, RTI used the GLM procedure in Stata with a gamma distribution and a log link, and adjusted for clustering at the county level.

In addition to controlling for beneficiary and market area characteristics, the model included a time trend variable (coded as months 1–46), a dichotomous variable for whether the observation was from the predemonstration or demonstration period ("Post"), a variable to indicate whether the observation was from a beneficiary in the comparison group or the demonstration group ("Intervention"), and an interaction term ("Intervention*Post") which is the DID estimate in the multivariate model for the net effect of demonstration eligibility.

Table 31 shows the main results from the DID analysis for demonstration year 1 controlling for beneficiary demographics and market characteristics. To obtain the effect of the demonstration from the non-linear model we calculated the marginal effect of coefficient of the interaction term. The marginal effect of the demonstration for the intervention group over the first demonstration period was negative (−28.89) and statistically significant, indicating gross savings to Medicare as a result of the demonstration using the ITT analysis framework.

Table 31
Demonstration effects on Medicare savings for eligible beneficiaries—Difference-in-difference regression results, MMAI eligibles and comparison group

Covariate	Adjusted coefficient DID	*p*-value	95% confidence interval	90% confidence interval	80% confidence interval[1]
Intervention *DemoYear1 (March 2014–December 2015)	−28.89	0.0045	−48.8; −8.9	−45.6; −12.2	−41.9; −15.8

[1] 80 percent confidence intervals are provided for comparison purposes only.

SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output/il_cs485_check_C_20SEP2018).

Table 32 shows the magnitude of the DID estimate relative to the adjusted mean outcome value in the predemonstration and demonstration periods. The second and third columns represent the post-regression, mean predicted savings or loss for each group and period, based on the composition of a reference population (the comparison group in the demonstration period). These values show how different the two groups were in each period, and the relative direction of any potential effect in each group over time. The remaining columns show the DID estimate (the coefficient on Intervention*Post), the *p*-value demonstrating significance, and the relative percent change of the DID estimate compared to the mean monthly Medicare expenditures for the comparison group in the demonstration period.

Table 32
Adjusted means and overall impact estimate for eligible beneficiaries in the demonstration and comparison groups, MMAI Illinois eligibles and comparison group

Group	Adjusted mean for predemonstration period	Adjusted mean for demonstration period	Relative difference (%)	Adjusted coefficient DID	*p*-value
Demonstration group	1,245 (1,151.3; 1,338.2)	1,305 (1,210.5; 1,400.3)	−2.22	-28.89 (95% CI: −48.8; −8.9) (90% CI: −45.6; −12.2)	0.0045
Comparison group	1,215 (1,165.4; 1,264.6)	1,302 (1,248.8; 1,355.2)			

CI = confidence interval; DID = difference-in-differences

SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (IL AR1 output/ Relative Percent OCT2018).

The adjusted mean for monthly expenditures increased between the predemonstration and demonstration period for the demonstration and comparison groups. The DID estimate of 28.89 (the coefficient on Intervention*Post) is negative and statistically significant ($p < 0.0045$), indicating that there were statistically significant savings in Medicare Parts A and B from the demonstration, using the ITT analysis framework. The DID estimate for demonstration year 1 reflected an annual relative cost decrease of 2.22 percent, and this was statistically significant.

In addition to the cost savings analysis on all eligible beneficiaries (ITT approach), RTI conducted several sensitivity analyses to provide additional information on potential savings or losses associated with the demonstration overall and for the subset of beneficiaries enrolled in the demonstration. These sensitivity analyses included (1) simulating capitated rates for eligible enrollees not enrolled in the demonstration and comparing these rates to actual FFS expenditures; (2) predicting FFS expenditures for beneficiaries enrolled in the demonstration and comparing to the actual capitated rates; and (3) calculating a DID estimate based on a subgroup of beneficiaries enrolled in the demonstration with at least 3 months of eligibility in the baseline period. The results of these analyses are presented in ***Appendix C***.

The findings of the sensitivity analyses indicate that the predicted capitated rates are statistically significantly lower than actual FFS expenditures for non-enrollees and that predicted FFS expenditures are higher than actual capitated rates for enrollees. Enrollees had lower expenditures and lower risk scores in the baseline period compared to non-enrollees. The enrollee subgroup DID analysis indicates additional costs compared to a comparison group, and this finding is statistically significant. For further discussion regarding sensitivity analysis see ***Appendix C***. Note that these analyses do not control for unobservable characteristics that may be related to the decision to enroll in the demonstration. The enrollee subgroup DID analysis was conducted to learn more about the potential impact of the demonstration on the subset of beneficiaries touched by the demonstration for at least 3 months. Note that similar 3-month eligibility criteria were applied to the comparison group for the baseline and demonstration periods for this analysis and weights were recalculated. The enrollee subgroup analysis is limited by the absence of person-level data on characteristics that potentially would lead an individual in a comparison area to enroll in a similar demonstration, and thus the results should be considered in the context of this limitation.

10.4 Discussion

The results of the preliminary multivariate analyses presented here indicate statistically significant savings during the first 22 months of the Illinois demonstration. The savings calculated here are based on capitation rates paid for enrollees and the FFS expenditures and Medicare Advantage capitation rates for eligible beneficiaries that did not enroll in the demonstration. The estimates do not take into account actual payments for services incurred by enrollees and paid by the MMAI plans.

RTI will continue to examine these results and will rerun the analyses when more data become available. Once Medicaid data become available for the first demonstration period and a similar calculation can be conducted on the Medicaid costs, it will be possible to have a more complete understanding of potential savings from the Illinois MMAI demonstration. Additional Medicare and Medicaid savings calculations will be conducted by the evaluation contractor for each year of the demonstration as data are available, and future reports will show updated results for the first year of the demonstration based on data reflecting additional claims runout, risk score reconciliation, and any retroactive adjustments.

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11. Conclusions

11.1 Implementation-related Successes, Challenges, and Lessons Learned

In implementing MMAI, Illinois has experienced significant challenges in the areas of enrollment, care coordination, and maintaining MMP participation in the Central Illinois region. Implementation has also been challenged by the State's budget situation.

Early in the demonstration, many beneficiaries opted out or disenrolled; at the end of 2016, approximately 30 percent of eligible beneficiaries remained enrolled. Over the past 3 years, State officials have taken several steps to maintain enrollment, most notably by implementing mandatory MLTSS. The launch of MLTSS in 2016 helped to increase opt-in enrollment in MMAI to some extent, and State officials and MMPs hoped that over time more beneficiaries who use LTSS would chose to opt into the MMAI.

State officials also worked to develop more effective messages about the advantages of MMAI. Advocates, however, said the design of the two programs, MMAI and MLTSS, makes it challenging to explain the advantages of the demonstration, because both programs have care coordination and flexible benefits. Advocates said that MLTSS appeals to many beneficiaries because enrollees can remain in original Medicare and have more choice of providers, while the advantages of Medicare-Medicaid integration under MMAI are harder to explain.

Early in the demonstration, misalignment between the Medicaid and Medicare systems created challenges for State officials and MMPs, but those issues have largely been resolved by developing manual processes. State officials look forward to pending systems changes that will automate passive enrollment, facilitate timely Medicaid eligibility redeterminations, and allow rapid re-enrollment into MMPs after enrollees temporarily lose Medicaid eligibility.

Many beneficiaries who were enrolled in MMAI in 2016 were satisfied with their MMPs, based on findings from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey results, as well as beneficiary focus groups. Many focus group participants responded favorably to care coordination and flexible benefits such as no copayments for prescription drugs, additional dental services, and over-the-counter product benefits.

By most accounts, the quality of care coordination has been uneven, with some enrollees pleased with care coordinators' engagement and support, while other enrollees are unable to identify their care coordinators. As MMPs have improved their ability to locate enrollees and complete assessments and care plans, State officials have shifted their attention to improving the effectiveness of care coordination and addressing enrollees' individual goals, needs, and preferences.

The Central Illinois region has posed a challenge since 2015, when one of the two MMPs operating in the region withdrew from MMAI for financial reasons. More recently, the State disenrolled beneficiaries from the remaining plan in six counties due to concerns about network adequacy. State officials said that adding another MMP in Central Illinois is a priority, and in 2018 they plan to consider bids from existing MMPs to expand their service areas for 2019.

The Illinois demonstration was implemented in the context of a long-running State budget crisis, understaffing, and a legislative mandate to implement managed care. State officials noted that launching multiple managed care programs simultaneously had been a challenge. This challenge impacted the demonstration because State officials delayed the launch of mandatory MLTSS, originally planned for implementation concurrent with MMAI. The evaluation team also noted that limited resources might have hampered the State's ability to engage beneficiaries and stakeholders.

Faced with limited resources, State officials have sought administrative efficiencies by aligning some key requirements (e.g., quality measures and quality improvement projects) across managed care programs. The alignment of quality measures was well received by the MMPs, and health plan collaboration on quality improvement projects may increase the impact. State officials also indicated that their multi-pronged approach to improving care plans seemed to be effective.

11.2 Demonstration Impact on Service Utilization and Cost Analysis

Impact analyses from the first demonstration year of the Illinois demonstration reveal changes in service utilization patterns, attributable to the demonstration, mostly consistent with overall improvements in beneficiaries' reported experience. In particular, results show decreases in inpatient admissions, skilled nursing facility admissions, emergency room (ER) visits, preventable ER visits, and ambulatory care sensitive condition admissions (both overall and those specific to chronic care). There was no change in the 30-day all-cause readmission rate. One measure—the rate of long-stay nursing facility admissions—increased. Prior to implementation, State officials had expected the demonstration to reduce hospital readmissions and ED utilization, based on an independent evaluation of the first year of Illinois's Integrated Care Program (ICP), which uses a similar care coordination model for aged, blind, and disabled Medicaid enrollees (Heller et al., 2013, pp. viii–ix).

Results from subgroup analyses for the long-term support services (LTSS) population—defined as those who used either long-stay nursing facility or home and community-based services—were qualitatively different from the broader demonstration eligible population described above. Results suggest that 30-day all-cause readmissions, skilled nursing facility admissions, and physician E&M visits increased as a result of the demonstration for the LTSS group, concurrent with no other observed changes. On the other hand, results for the population with a serious and persistent mental illness (SPMI) were qualitatively similar to those for the overall demonstration eligible population. State officials said that most of the MMPs were contracting with a community behavioral health provider with experience in the ICP program to provide care coordination for high-risk members with behavioral health needs. MMPs had less experience with LTSS, as Medicaid LTSS services were not added to the ICP program until 2013.

The observed service use changes for the overall demonstration eligible population, as well as the SPMI subgroup, may be interpreted to be a result of the demonstration, including new features such as access to care coordinators that guide beneficiaries to the most appropriate treatment settings. However, the launch of mandatory MLTSS in 2016 for the LTSS population

may complicate how to interpret the effect of the demonstration for this group going forward, because both MMAI and MLTSS enrollees will have access to care coordination.

The results of the preliminary multivariate analyses presented here indicate statistically significant Medicare savings during the first 22 months of the Illinois demonstration. The Medicare savings calculated here are based on capitation rates paid for enrollees and the FFS expenditures and Medicare Advantage capitation rates for eligible beneficiaries that did not enroll in the demonstration. The estimates do not take into account actual payments for services incurred by enrollees and paid by the MMAI plans. RTI will continue to examine these results and will rerun the analyses when more data become available. Once Medicaid data become available for the first demonstration period and a similar calculation can be conducted on the Medicaid costs, it will be possible to have a more complete understanding of potential savings from the Illinois MMAI demonstration. Additional Medicare and Medicaid savings calculations will be conducted by the evaluation contractor for each year of the demonstration as data are available.

11.3 Next Steps

The RTI evaluation team will continue to collect information on a quarterly basis from Illinois officials through the online State Data Reporting System, covering enrollment statistics and updates on key aspects of implementation. The RTI evaluation team will continue conducting quarterly calls with the Illinois State staff and will request the results of any evaluation activities conducted by the State or other entities, such as results from the CAHPS and State-specific demonstration measures the MMPs are required to report to CMS. RTI will conduct additional qualitative and quantitative analyses over the course of the demonstration.

The next report will include a qualitative update on demonstration implementation and regression-based analyses of cost, quality, and utilization measures for those eligible for the demonstration and for an out-of-State comparison group. As noted previously, Illinois requested an extension from CMS to continue the demonstration through December 31, 2019, which will provide further opportunities to evaluate the demonstration's performance.

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References

Centers for Medicare & Medicaid Services (CMS). Balancing Incentive Program. https://www.medicaid.gov/medicaid/ltss/balancing/incentive/index.html. N.d. As obtained on June 1, 2017.

Centers for Medicare & Medicaid Services (CMS). Illinois Medicare-Medicaid Plan Quality Withhold Analysis Results: Calendar Year 2014. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/ILQualityWithholdAnalysisResultsReport2014.pdf. N.d.-b As obtained on October 25, 2014.

Centers for Medicare & Medicaid Services (CMS): Special Needs Plan Comprehensive Report: October 2013. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Special-Needs-Plan-SNP-Data-Items/SNP-Comprehensive-Report-2013-10.html?DLPage=5&DLEntries=10&DLSort=1&DLSortDir=descending. 2013. As obtained on May 1, 2017.

Centers for Medicare & Medicaid Services (CMS): Contract Year 2014 Chronic Care Improvement Program and Quality Improvement Project Information for Medicare-Medicaid Plans in Illinois. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/MMPCCIPQIPGuidanceIL.pdf. 2014a. As obtained on April 9, 2017.

Centers for Medicare & Medicaid Services (CMS): Funding to Support Options Counseling for Medicare-Medicaid Enrollees. http://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/FundingtoSupportOptionsCounselingforMedicare-MedicaidEnrollees-.html. 2014b. As obtained on November 7, 2014.

Centers for Medicare & Medicaid Services (CMS): Medicare-Medicaid Capitated Financial Alignment Model Reporting Requirements. https:/www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/FinalCY2014CoreReportingRequirements.pdf. 2014c. As obtained on October 25, 2014.

Centers for Medicare & Medicaid Services (CMS): Medicare-Medicaid Capitated Financial Alignment Model Reporting Requirements: Illinois-Specific Requirements (Effective as of October 1, 2015, Issued April 21, 2016). https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/FinalCY2015CoreReportingRequirementsIL042116.pdf. 2016. As obtained May 15, 2017.

Centers for Medicare & Medicaid Services (CMS): Special Needs Plan Comprehensive Report: April 2017. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Special-Needs-Plan-SNP-Data-Items/SNP-Comprehensive-Report-2017-04.html?DLPage=1&DLEntries=10&DLSort=1&DLSortDir=descending. 2017. As obtained on April 28, 2017.

Centers for Medicare & Medicaid Services (CMS) and State of Illinois: Memorandum of Understanding (MOU) Regarding a Federal-State Partnership to Test a Capitated Financial Alignment Model for Medicare-Medicaid Enrollees. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/ILMOU.pdf. 2013a. As obtained on November 19, 2014.

Centers for Medicare & Medicaid Services (CMS) and State of Illinois: Contract between United States Department of Health and Human Services Centers for Medicare & Medicaid Services in partnership with State of Illinois Department of Healthcare and Family Services. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/IllinoisContract.pdf. 2013b. As obtained on May 28, 2015.

Centers for Medicare & Medicaid Services (CMS) and State of Illinois: Medicare-Medicaid Alignment Initiative CY 204 Rate Report. https://www.illinois.gov/hfs/SiteCollectionDocuments/ILCY2014RateReport.pdf. 2013c. As obtained on July 24, 2018.

Centers for Medicare & Medicaid Services (CMS) and State of Illinois: Contract between United States Department of Health and Human Services Centers for Medicare & Medicaid Services in partnership with State of Illinois Department of Healthcare and Family Services. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/IllinoisContractAmendment092016.pdf. 2016. As obtained on January 24, 2016.

Gold, M., Jacobson, G., Damico, A., and Neuman, T.: Medicare Advantage 2014 Spotlight: Enrollment Market Update. Kaiser Family Foundation, Washington, DC, https://www.kff.org/medicare/issue-brief/medicare-advantage-2014-spotlight-enrollment-market-update/. 2014. As obtained on November 19, 2014.

Heller, T., Mitchell, D., Owen, R., et al.: An independent evaluation of the Integrated Care Program: Results from the first year. Chicago, IL. University of Illinois at Chicago, Department of Disability and Human Development. 2013. http://www2.illinois.gov/hfs/SiteCollectionDocuments/UICEvaluationICP.pdf. As obtained on October 12, 2014.

Illinois Department of Healthcare and Family Services (HFS): Illinois Client Enrollment Services: Compare Plans. https://www.enrollhfs.illinois.gov/node/13. N.d.-a. As obtained on February 1, 2017.

Illinois Department of Healthcare and Family Services (HFS): Medicaid Advisory Committee (MAC) Overview. https://www.illinois.gov/hfs/About/BoardsandCommisions/MAC/Pages/default.aspx. N.d.-b. As obtained on May 6, 2017.

Illinois Department of Healthcare and Family Services (HFS): Illinois Names Eight Healthcare Plans to Care for Medicaid and Medicare Clients. https://www3.illinois.gov/PressReleases/ShowPressRelease.cfm?SubjectID=2&RecNum=10692. 2012a. As obtained on October 13, 2014.

Illinois Department of Healthcare and Family Services (HFS): State of Illinois Solicitation document: Medicare-Medicaid Alignment Initiative/2013-24-003. http://www2.illinois.gov/hfs/SiteCollectionDocuments/Final%20Dual%20Capitation%20RFP%20051412%20CI.pdf. 2012b. As obtained on November 19, 2014.

Illinois Department of Healthcare and Family Services (HFS): State of Illinois Solicitation document: Medicare-Medicaid Alignment Initiative/2013-24-004. http://www2.illinois.gov/hfs/SiteCollectionDocuments/Final%20Dual%20Capitation%20RFP%20051412%20GC.pdf. 2012c. As obtained on November 19, 2014.

Illinois Department of Healthcare and Family Services (HFS): Pathways to Community Living. https://www.mfp.illinois.gov/. 2013. As obtained on November 7, 2014.

Illinois Department of Healthcare and Family Services (HFS): Integrated Care Program: Expansion Timeline and Health Plans Selected. http://www2.illinois.gov/hfs/PublicInvolvement/cc/Pages/timeline.aspx. 2014. As obtained on November 19, 2014.

Illinois Department of Healthcare and Family Services (HFS): 2015 Illinois Medicaid Plan Report Card. https://www.illinois.gov/hfs/SiteCollectionDocuments/IL_2015%20Combined%20Report%20Card_FINAL.pdf. 2016. As obtained on May 25, 2017.

Illinois Department of Healthcare and Family Services (HFS): Medicare-Medicaid Alignment Initiative (MMAI) – Central Illinois Region Managed Care Updates. https://www.illinois.gov/hfs/MedicalProviders/notices/Pages/prn170407c.aspx. 2017. As obtained on April 25, 2017.

Illinois Department of Healthcare and Family Services (HFS) and Centers for Medicare & Medicaid Services (CMS): Medicare-Medicaid Alignment Initiative: CY 2014 Rate Report. http://www2.illinois.gov/hfs/SiteCollectionDocuments/ILCY2014RateReport.pdf. 2013. As obtained on November 3, 2014.

Illinois Department of Human Services, Division of Mental Health: Williams Consent Decree Implementation Plan. https://www.dhs.state.il.us/page.aspx?item=56446. 2011. As obtained on November 7, 2014.

Milliman: Medicare-Medicaid Alignment Initiative Rates – Calendar Year 2016 Medicaid Capitation Rate Development, January 1, 2016 through December 31, 2016. 2016. As obtained on May 12, 2016.

RTI International: State Data Reporting System (SDRS). 2015, 2016, and 2017.

State of Illinois: Public Act 096-1501. http://www.ilga.gov/legislation/publicacts/96/096-1501.htm. 2011. As obtained on November 19, 2014.

State of Illinois: Proposal to the Centers for Medicare and Medicaid Services: Medicare-Medicaid Alignment Initiative. http://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/IllinoisProposal.pdf. 2012. As obtained on November 7, 2014.

State of Illinois: Public Act 098-0651. https://www.ilga.gov/legislation/publicacts/98/098-0651.htm. 2014. As obtained on April 30, 2017.

Walsh, E. G., Anderson, W., Greene, A., et al.: Measurement, Monitoring, and Evaluation of State Demonstrations to Integrate Care for Dual Eligible Individuals: Aggregate Evaluation Plan. Contract No. HHSM500201000021i TO #3. Waltham, MA. RTI International. 2013. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/EvalPlanFullReport.pdf

Appendix A:
Identification of the Illinois Comparison Group

CMS contracted with RTI International to monitor the implementation of demonstrations under the Financial Alignment Initiative (FAI) and to evaluate their impact on beneficiary experience, quality, utilization, and cost. This document presents the comparison group selection and assessment results for the FAI demonstration in the State of Illinois, known as the Medicare-Medicaid Alignment Initiative.

This document lists the geographic comparison areas for Illinois, provides propensity model estimates, and shows the similarities between the comparison and demonstration groups in terms of their propensity score distributions. Separate analyses were conducted for three time periods for the Illinois demonstration: baseline year 1 (March 1, 2012–February 28, 2013), baseline year 2 (March 1, 2013–February 28, 2014), and the first demonstration year (22 months from March 1, 2014–December 31, 2015). Analyses were conducted for each period because eligible beneficiaries are identified separately for each period.

A.1 Comparison Areas

The Illinois demonstration area consists of two service areas: Greater Chicago and Central Illinois. The Greater Chicago service area includes the following six counties: Cook, Lake, Kane, DuPage, Will, and Kankakee. The Central Illinois service area includes the following 15 counties: Knox, Peoria, Tazewell, McLean, Logan, DeWitt, Sangamon, Macon, Christian, Piatt, Champaign, Vermilion, Ford, Menard, and Stark. Using the distance score methodology described in the Technical Appendix, the comparison area is drawn from 28 metropolitan statistical areas (MSAs) from 10 States. The pool of States was limited to those with timely submission of Medicaid data to CMS. All comparison areas are listed in ***Table A-1***.

Table A-1
Metropolitan statistical areas in 10 comparison States

Alabama MSAs
- Anniston-Oxford-Jacksonville
- Auburn-Opelika
- Huntsville

California MSAs
- San Francisco-Oakland-Hayward

Georgia MSAs
- Atlanta-Sandy Springs-Roswell
- Gainesville

Illinois MSAs
- Carbondale-Marion
- Chicago-Naperville-Elgin
- Davenport-Moline-Rock Island
- Rockford
- St. Louis
- Rest of State

Massachusetts MSAs
- Providence-Warwick

New Jersey MSAs
- New York-Newark-Jersey City
- Philadelphia-Camden-Wilmington
- Trenton

New York MSAs
- New York-Newark-Jersey City

Pennsylvania MSAs
- Allentown-Bethlehem-Easton
- Philadelphia-Camden-Wilmington

Texas MSAs
- Abilene
- Beaumont-Port Arthur
- Longview
- San Angelo
- Sherman-Denison
- Texarkana
- Tyler

Virginia MSAs
- Lynchburg
- Winchester

The Illinois demonstration included some dual eligible beneficiaries with limited participation in other Federal Medicare shared savings initiatives, and these beneficiaries were included in the analyses. Attribution to other shared savings initiatives was ascertained using the beneficiary-level version of the CMS' Master Data Management (MDM) file. Beneficiaries in the demonstration group during the demonstration period were identified from quarterly finder files of participants in the Illinois Medicare-Medicaid Alignment Initiative. Beneficiaries qualified for the demonstration 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 and comparison groups. Beneficiaries were omitted from further analyses if they had missing geography data; died before the beginning of the analysis period; had zero months of eligibility as a dual eligible; lived in both a demonstration area and a comparison area during the analysis period; or were missing covariates such as Hierarchical Condition Code (HCC) risk scores during a year.

Table A-2 below shows the distribution of beneficiaries by comparison State in the first baseline year. New Jersey and Pennsylvania contributed the largest share of comparison beneficiaries. State shares were very similar in baseline year 2 and demonstration year 1. Since at least three States were included and no State contributed more than half of the total comparison beneficiaries, per RTI's comparison group selection methodology it was not necessary to do any sampling to reduce the influence of a single State. The total number of comparison beneficiaries was relatively stable during the baseline periods (635,845 in baseline year 1, 643,819 in baseline year 2), and then rose to 761,525 in the first demonstration year, presumably because of the longer time period.

Table A-2
Distribution of comparison group beneficiaries for the Illinois demonstration, first baseline year, by comparison State

Comparison State	Percent of comparison beneficiaries
New Jersey	24.1
Pennsylvania	22.2
California	19.3
Illinois	12.3
Georgia	8.2
Texas	4.2
Massachusetts	3.7
New York	3.5
Alabama	1.5
Virginia	1.1
Total percent	100
Total beneficiaries	*635,845*

A.2 Propensity Score Estimates

RTI's methodology uses propensity scores to examine initial differences between the demonstration and comparison groups and then to weight the data to improve the match between them. The comparability of the two groups is examined with respect to both individual beneficiary characteristics as well as the overall distributions of propensity scores. This section describes the results of the model that generates propensity scores and future sections show how weighting eliminates initial differences between the groups.

A propensity score (PS) is the predicted probability that a beneficiary is a member of the demonstration group conditional on a set of observed variables. Our propensity score models include a combination of beneficiary-level and region-level characteristics measured at the ZIP code (ZIP Code Tabulation Area) level. Region-level covariates were drawn from a factor analysis of ZIP-based variables for the adult population. These covariates capture features of the age, employment, marital, and family status of households in each region. Measures of the distance to hospitals and nursing homes were also included.

The logistic regression coefficients, standard errors, and z-values for the covariates included in the propensity model for Illinois are shown in ***Table A-3***. These coefficients and the underlying data are used to generate propensity scores for each beneficiary in the model. In general, individual covariates had similar effects in each period. The coefficients for several variables reflected differences between the demonstration and comparison groups. The largest relative differences in each period were that demonstration participants were more likely to be Black and to live closer to the nearest nursing home than the beneficiaries in the comparison group. The magnitude of these differences may also be seen in ***Tables A-4a*** through ***A-4c***.

Table A-3
Logistic regression estimates for Illinois propensity score models

	Baseline Year 1			Baseline Year 2			Demonstration Year 1		
	Coeff.	Std. Err.	z-score	Coeff.	Std. Err.	z-score	Coeff.	Std. Err.	z-score
Age (years)	−0.002	0.000	−10.60	−0.002	0.000	−8.73	0.004	0.000	18.38
Died during year (0/1)	−0.180	0.012	−14.76	−0.233	0.012	−18.76	−0.399	0.010	−39.47
Female (0/1)	0.019	0.006	3.31	0.015	0.006	2.59	0.015	0.006	2.51
White (0/1)	0.442	0.008	56.27	0.416	0.008	54.09	0.323	0.008	42.14
Black (0/1)	0.740	0.009	85.68	0.761	0.008	90.05	0.693	0.008	82.41
Disability as reason for original Medicare entitlement (0/1)	0.043	0.008	5.54	0.031	0.008	4.03	−0.036	0.008	−4.58
ESRD (0/1)	0.138	0.015	9.37	0.119	0.015	8.10	0.051	0.016	3.24
Prop. mos. eligible during period	−0.426	0.012	−35.29	−0.445	0.012	−37.09	−0.772	0.009	−87.82
HCC risk score	0.005	0.003	1.82	0.007	0.002	2.72	0.003	0.003	1.04
Other MDM	0.668	0.007	90.59	0.548	0.006	88.34	0.088	0.006	13.64
MSA (0/1)	0.133	0.020	6.68	0.099	0.020	4.95	0.203	0.022	9.33
% of pop. living in married household	−0.005	0.000	−18.96	−0.002	0.000	−7.21	−0.001	0.000	−3.12
% of households w/ member >= 60 yrs.	−0.015	0.000	−38.35	−0.013	0.000	−33.47	−0.019	0.000	−45.85
% of adults with college education	0.004	0.000	15.58	0.002	0.000	6.73	−0.001	0.000	−2.94
% of adults with self-care limitation	−0.099	0.002	−42.34	−0.089	0.002	−40.11	−0.100	0.002	−44.06
% of households w/ member < 18 yrs.	0.020	0.000	57.22	0.018	0.000	53.26	0.013	0.000	37.54
Distance to nearest hospital (mi.)	−0.012	0.001	−11.79	−0.017	0.001	−17.42	−0.020	0.001	−19.22
Distance to nearest nursing home (mi.)	−0.112	0.002	−63.52	−0.114	0.002	−64.68	−0.125	0.002	−66.52
Intercept	−0.508	0.036	−14.06	−0.648	0.036	−17.97	−0.581	0.037	−15.87

A.3 Propensity Score Overlap

Propensity score weighting is used to mitigate the potential for selection bias by increasing the equivalence between the demonstration and comparison groups. Any beneficiaries who have estimated propensity scores below the smallest estimated value in the demonstration group are removed from the comparison group. This resulted in the removal of 251 comparison beneficiaries in baseline year 1, 175 in baseline year 2, but only 4 beneficiaries in the first demonstration year.

The distributions of propensity scores by group are shown for each time period in ***Figures A-1a*** to ***A-1c*** before and after propensity score weighting. Estimated scores covered nearly the entire probability range in both groups. In each period, demonstration group scores were skewed to the right and had a mean probability of approximately 0.30. A similarly shaped distribution was seen in the comparisons.

The figures show that Inverse Probability of Treatment Weighting (IPTW) pulls the distribution of weighted comparison group propensity scores (dotted line) much closer to that of the demonstration group (solid line). Weighting shifted the comparison group distribution to the right, increasing the comparability of the demonstration and comparison groups.

Figure A-1
Distribution of beneficiary-level propensity scores in the Illinois demonstration and comparison groups, weighted and unweighted, Baseline year 1

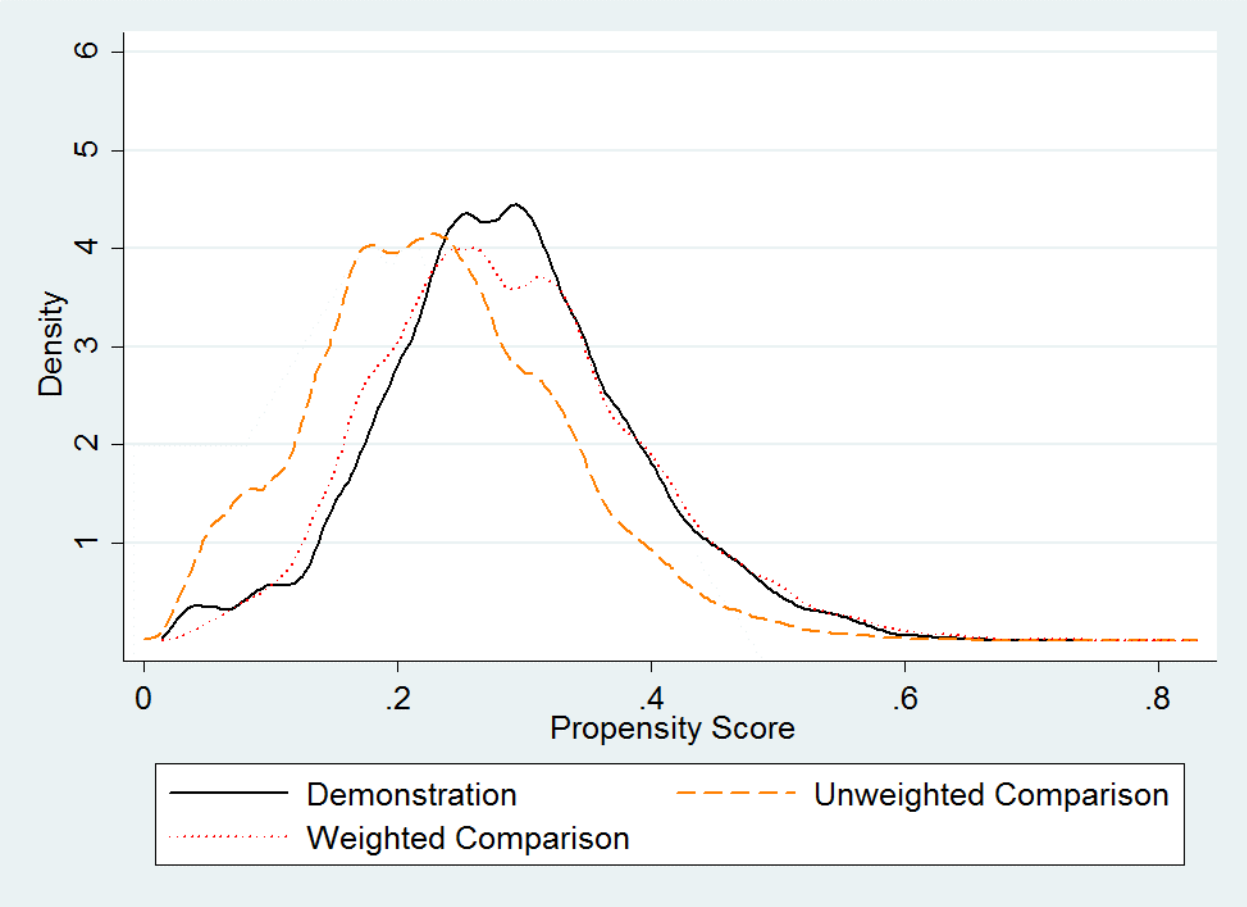


Figure A-2
Distribution of beneficiary-level propensity scores in the Illinois demonstration and comparison groups, weighted and unweighted, Baseline year 2

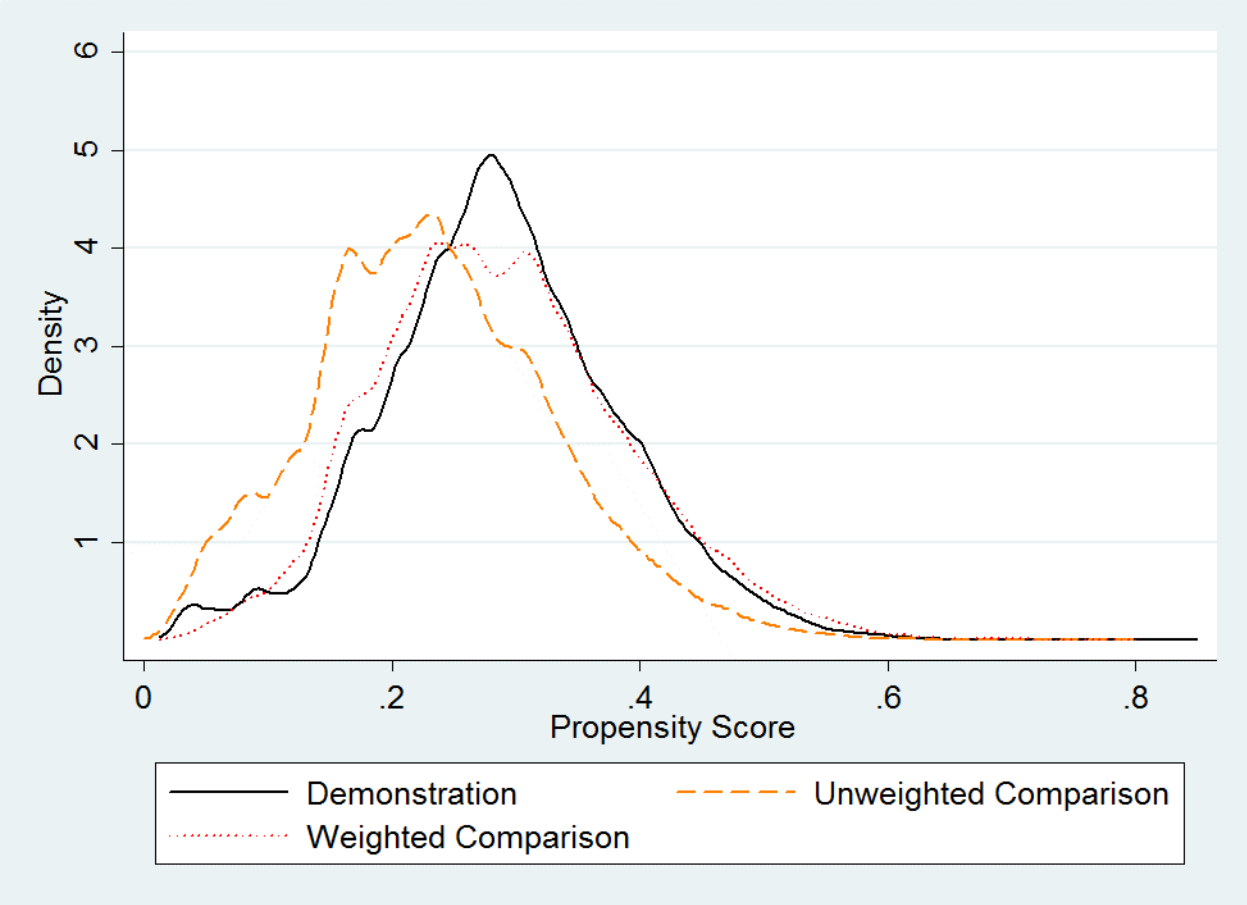
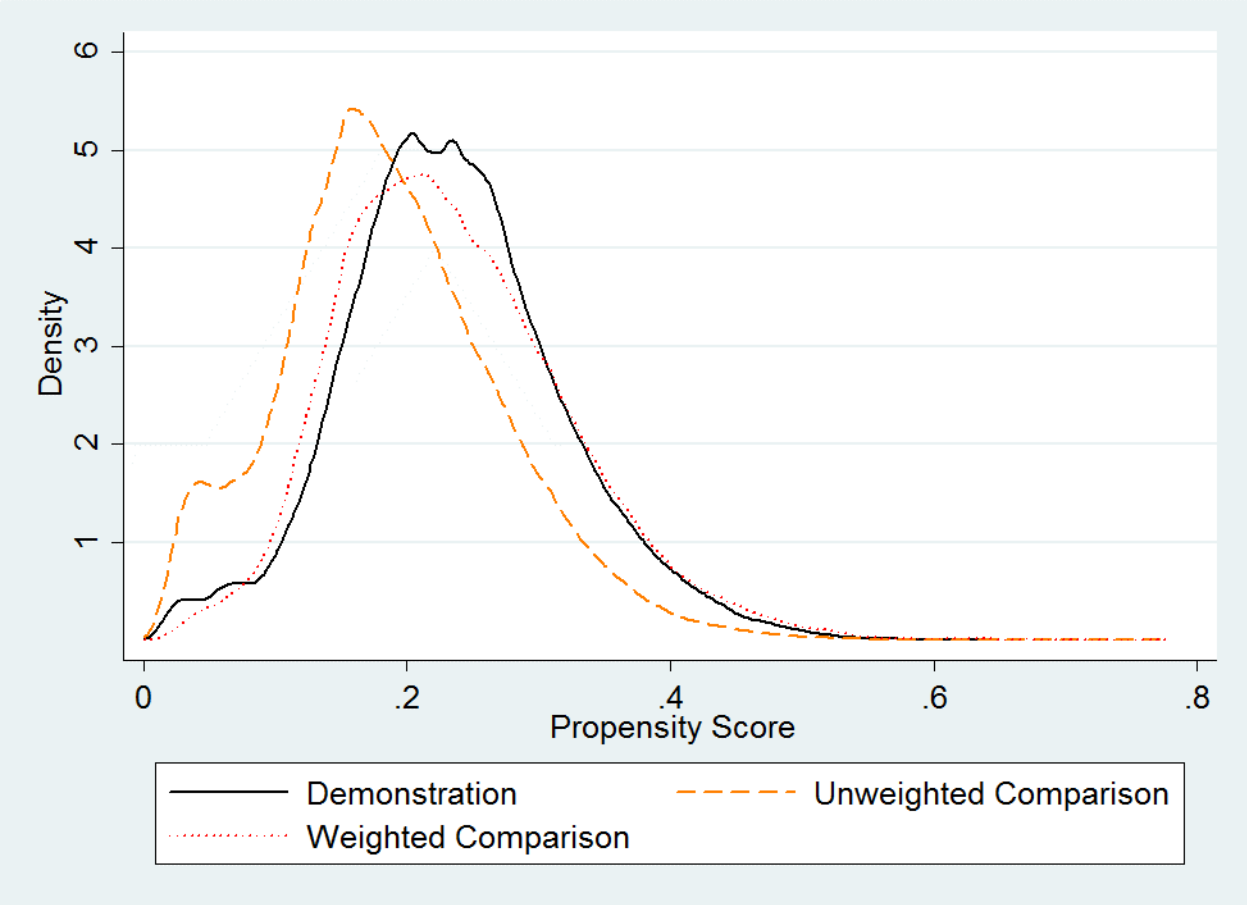


Figure A-3
Distribution of beneficiary-level propensity scores in the Illinois demonstration and comparison groups, weighted and unweighted, demonstration year 1



A.4 Group Comparability

Covariate balance refers to the extent to which the characteristics used in the propensity score model are similar (or "balanced") for the demonstration and comparison groups. Group differences are measured by a standardized difference (the difference in group means divided by the pooled standard deviation of the covariate). We follow an informal standard that has developed within the literature; groups are considered comparable if the standardized covariate difference is less than 0.10 standard deviations.

The group means and standardized differences for all beneficiary characteristics are shown for each time period in ***Tables A-4a*** through ***A-4c***. The column of unweighted standardized differences indicates that several of these variables were not balanced before running the propensity model. Most individual and area-level variables exhibited unweighted standardized differences greater than 0.10 standard deviations across the three time periods.

The results of propensity score weighting for Illinois are illustrated in the far-right column (weighted standardized differences) in ***Tables A-4a*** through ***A-4c***. In each period propensity weighting pulled comparison group means closer to the demonstration group means, thereby reducing the standardized differences and improving the match between the two groups. In each year, weighting reduced the magnitude of the group differences far below the desired standard of 0.10 SDs for all covariates.

Table A-4
Illinois dual eligible beneficiary covariate means by group before and after weighting by propensity score—Baseline period 1: March 1, 2012–February 28, 2013

Year 1	Demo mean	Comp Group mean	PS-Weighted Comp Group mean	Unweighted standardized difference	Weighted standardized difference
Age	64.202	65.835	64.041	−0.093	0.009
Died	0.063	0.071	0.063	−0.034	−0.002
Female	0.597	0.615	0.597	−0.037	0.000
White	0.492	0.548	0.489	−0.111	0.008
Black	0.366	0.254	0.375	0.246	−0.017
Disability as reason for original Medicare entitlement	0.473	0.433	0.477	0.080	−0.008
ESRD	0.036	0.027	0.037	0.055	−0.005
Share mos. elig. during period	0.881	0.894	0.881	−0.054	0.000
HCC score	1.345	1.341	1.343	0.004	0.002
Other MDM	0.176	0.101	0.178	0.220	−0.003
MSA	0.982	0.939	0.982	0.224	0.004
% of Pop. living in married household	63.064	66.076	62.775	−0.173	0.016
% of Households w/ member greater than age 60	32.308	34.252	32.335	−0.246	−0.004
% of Adults with college degree	26.318	25.975	26.084	0.021	0.014
% of Adults with self-care limitation	3.166	3.391	3.166	−0.134	0.000
% of Households w/ member less than age 18	34.487	32.915	34.519	0.168	−0.003
Distance to nearest hospital	3.860	5.001	3.925	−0.270	−0.018
Distance to nearest nursing home	2.663	3.532	2.679	−0.328	−0.008

Table A-5
Illinois dual eligible beneficiary covariate means by group before and after weighting by propensity score—Baseline period 2: March 1, 2013–February 28, 2014

Year 2	Demo mean	Comp Group mean	PS-Weighted Comp Group mean	Unweighted standardized difference	Weighted standardized difference
Age	64.383	65.743	64.180	−0.078	0.012
Died	0.058	0.066	0.058	−0.035	0.001
Female	0.596	0.612	0.595	−0.032	0.003
White	0.484	0.540	0.479	−0.111	0.009
Black	0.370	0.256	0.378	0.247	−0.018
Disability as reason for original Medicare entitlement	0.475	0.440	0.480	0.069	−0.010
ESRD	0.036	0.027	0.036	0.052	−0.004
Share mos. elig. during period	0.884	0.898	0.884	−0.059	−0.002
HCC score	1.405	1.391	1.400	0.012	0.004
Other MDM	0.258	0.168	0.258	0.220	−0.002
MSA	0.983	0.942	0.982	0.217	0.004
% of Pop. living in married household	62.828	65.550	62.533	−0.157	0.016
% of Households w/ member greater than age 60	33.162	34.845	33.162	−0.214	0.000
% of Adults with college degree	26.404	26.273	26.118	0.008	0.017
% of Adults with self-care limitation	3.209	3.424	3.212	−0.126	−0.002
% of Households w/ member less than age 18	34.143	32.629	34.183	0.163	−0.004
Distance to nearest hospital	3.835	4.964	3.889	−0.270	−0.015
Distance to nearest nursing home	2.649	3.509	2.661	−0.328	−0.006

Table A-6
Illinois dual eligible beneficiary covariate means by group before and after weighting by propensity score—Demonstration year 1: March 1, 2014–December 31, 2015

Year 3	Demo mean	Comp Group mean	PS-Weighted Comp Group mean	Unweighted standardized difference	Weighted standardized difference
Age	66.823	66.182	66.777	0.038	0.003
Died	0.097	0.105	0.098	−0.024	−0.003
Female	0.593	0.606	0.593	−0.026	−0.001
White	0.463	0.537	0.459	−0.149	0.009
Black	0.368	0.255	0.376	0.247	−0.016
Disability as reason for original Medicare entitlement	0.422	0.445	0.424	−0.046	−0.003
ESRD	0.032	0.026	0.032	0.032	−0.003
Share mos. elig. during period	0.750	0.806	0.749	−0.178	0.001
HCC score	1.353	1.334	1.354	0.017	−0.001
Other MDM	0.223	0.215	0.221	0.019	0.006
MSA	0.984	0.941	0.984	0.231	0.004
% of Pop. living in married household	62.140	65.252	61.856	−0.178	0.016
% of Households w/member greater than age 60	33.592	35.564	33.600	−0.253	−0.001
% of Adults with college degree	26.659	26.542	26.401	0.007	0.015
% of Adults with self-care limitation	3.205	3.437	3.214	−0.133	−0.006
% of Households w/member less than age 18	33.809	32.503	33.846	0.142	−0.004
Distance to nearest hospital	3.741	5.006	3.772	−0.305	−0.009
Distance to nearest nursing home	2.594	3.533	2.596	−0.363	−0.001

A.5 Summary

Our analyses revealed differences between the Illinois demonstration and comparison groups before covariate balancing with regard to several individual and area-level characteristics. However, the propensity score-based weighting process reduced these disparities to standardized differences of less than 0.10 in all three time periods. The weighted data reduce the risk that selection bias will contaminate outcome analyses of the Illinois demonstration.

The propensity weights account for observed differences between the demonstration and comparison groups when computing descriptive statistics for each Evaluation Report. In addition, most of these covariates will be incorporated in the multiple regression models used to estimate demonstration effects for the Final Report. This will further reduce the potential for biased estimates.

Appendix B:
Analysis Methodology

Methodology

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

Evaluation Design

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

Results for special populations within each of the demonstration and comparison groups are also presented in this section (e.g., those with any long-term services and supports [LTSS] use in the demonstration and comparison groups; those with any behavioral health claims in the demonstration and comparison groups). In addition, one group for which descriptive results are also reported are *not* compared to the comparison group because this group does not exist within the comparison group: Illinois demonstration enrollees. For this group, we compare them to in-State non-enrollees.

Comparison Group Identification

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

To construct Illinois's comparison group, we used both in-State and out-of-State areas. We compared demonstration and potential comparison areas on a range of predemonstration period measures, including spending per Medicare-Medicaid enrollee by each program, the shares of LTSS delivered in facility-based and community settings, and the extent of Medicare and Medicaid managed care penetration. Using statistical analysis, we selected the individual comparison metropolitan statistical areas (MSAs) that most closely match the values found in the demonstration area on the selected measures. We also considered other factors when selecting

comparison States, such as timeliness of Medicaid data submission to CMS. We identified a comparison group from MSAs in Illinois, New York, New Jersey, Pennsylvania, Texas, Alabama, California, Georgia, Massachusetts, and Virginia. For details of the comparison group identification strategy, see ***Appendix A***.

Data

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

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

Populations and Services Analyzed

The populations analyzed in the report include all demonstration eligible beneficiaries, as well as the following special populations: those using any long-term services and supports; those with any behavioral health service use in the last 2 years for a severe and persistent mental illness (SPMI); demonstration enrollees; and demographic groups (race/ethnicity).

For all demonstration eligible beneficiaries and service types analyzed, we provide estimates of three access to care and utilization measures: the percent of demonstration eligible beneficiaries with any use of a service, and counts of service use for both all eligible beneficiaries and users of the respective service.

The 14 service settings analyzed include both institutional (inpatient, inpatient psychiatric, inpatient non-psychiatric, ED visits not leading to admission, ED psychiatric visits, observation stays, skilled nursing facility, and hospice) and community settings (primary care, outpatient as well as independent physical, speech, and occupational therapy, and other hospital outpatient services).

In addition, six quality measures representing specific utilization types of interest are presented: 30-day all-cause risk-standardized readmission rate; preventable emergency room visits; rate of 30-day follow-up after hospitalization for mental illness; ambulatory care sensitive condition overall composite rate (Agency for Healthcare Research and Quality [AHRQ] Prevention Quality Indicator [PQI] #90); ambulatory care sensitive condition chronic composite rate (AHRQ PQI#92); and depression screening rate.

Five nursing facility-related measures are presented from the Minimum Data Set: two measures of annual NF utilization (admission rate and percentage of long-stay NF users) and three characteristics of new long-stay NF residents at admission (functional status, percent with severe cognitive impairment, percent with low level of care need).

The analyses were conducted for each of the years in the 2-year predemonstration period (March 1, 2012 to February 28, 2014) and for the first demonstration period (March 1, 2014 to December 31, 2015) for both the demonstration and comparison groups in each of the three analytic periods.

Table B-1 presents descriptive statistics on the independent variables used in multivariate difference-in-differences regressions for impact analyses. Independent variables include demographic and health characteristics and market- and area-level characteristics. Results are presented for six groups: all demonstration eligible beneficiaries in the FAI State, its comparison group, demonstration enrollees, non-enrollees, demonstration eligible beneficiaries with any long-stay nursing facility use, and demonstration eligible beneficiaries with an SPMI.

The most prevalent age group overall as well as among those with SPMI were under 65 years old, although most people among the LTSS user group were over 75 years old. In the comparison group, 41 percent were under 65, whereas 38.5 percent were under 65 in the demonstration group. Across all groups, the majority of eligible beneficiaries were female (LTSS was 63.6 percent; SPMI was 59 percent), and a plurality were White (44.5 and 46.3 percent in the enrollee and demonstration group, respectively). Over half of the SPMI population were had a disability as the reason for their Medicaid enrollment (57.7 percent). HCC scores ranged from 1.4 in the demonstration and comparison group to 1.8 in the LTSS user group. The Hierarchical Condition Category (HCC) score is a measure of the predicted relative annual cost of a Medicare beneficiary based on the diagnosis codes present in recent Medicare claims. Beneficiaries with a score of 1 are predicted to have average cost in terms of annual Medicare expenditures. Beneficiaries with HCC scores less than 1 are predicted to have below average costs, whereas beneficiaries with scores of 2 are predicted to have twice the average annual cost. The vast majority of eligible beneficiaries resided in the metropolitan areas, compared to non-metropolitan areas. The percent of months of dual eligibility was lowest among those who did not enroll in the demonstration.

There were limited differences in area- and market-level characteristics. Those who were in the comparison group resided in counties with a lower population density, relative to those in the demonstration group (2,255.37 vs 1,354.9). Additionally, those in the comparison group resided in counties with lower Medicaid spending per dual eligible, relative to counties in the demonstration group ($24,399 vs $32,395). Non-enrollees resided in counties with a higher percentage of adults with a college degree, relative to enrollees (27.3 vs 26 percent).

Table B-1
Characteristics of demonstration eligible beneficiaries in current demonstration year by group

Characteristics	Demonstration	Comparison	Enrollees	Non-enrollees	LTSS users	SPMI diagnosis
Number of beneficiaries	187,094	761,521	91,404	95,690	79,645	61,025
Demographic characteristics						
Age						
0 to 64	38.5	41.0	42.9	34.3	23.8	54.4
65 to 74	29.8	25.9	28.8	30.7	25.9	19.9
75 and older	31.7	33.1	28.2	35.0	50.3	25.7
Female						
No	40.7	39.4	43.7	37.9	36.4	41.0
Yes	59.3	60.6	56.3	62.1	63.6	59.0
Race/Ethnicity						
White	46.3	53.7	44.5	48.0	52.1	57.7
Black	36.8	25.5	37.0	36.6	36.3	32.6
Hispanic	8.7	6.6	10.1	7.3	4.2	5.8
Asian	5.2	9.6	5.5	4.8	5.1	2.1
Disability as reason for original Medicare entitlement						
No (0)	58.3	55.9	54.1	62.2	69.3	41.4
Yes (1)	41.7	44.1	45.9	37.8	30.7	58.6
ESRD status						
No (0)	97.0	97.5	97.2	96.7	96.1	97.4
Yes (1)	3.0	2.5	2.8	3.3	3.9	2.6
MSA						
Non-metro (0)	1.6	5.9	1.6	1.5	1.7	1.6
Metro (1)	98.4	94.1	98.4	98.5	98.3	98.4
Months with full-dual eligibility during year (%)	0.7	0.7	0.9	0.6	0.8	0.8
HCC score	1.35	1.35	1.26	1.45	1.82	1.67

(continued)

Table B-1 (continued)
Characteristics of demonstration eligible beneficiaries in current demonstration year by group

Characteristics	Demonstration	Comparison	Enrollees	Non-enrollees	LTSS users	SPMI diagnosis
Market characteristics						
Medicare spending per dual, ages 19+ ($)	9,573.3	9,239.8	9,572.2	9,574.5	9,569.6	9,570.7
MA penetration rate	0.2	0.3	0.2	0.2	0.2	0.2
Medicaid-to-Medicare fee index (FFS)	0.6	0.6	0.6	0.6	0.6	0.6
Medicaid spending per dual, ages 19+ ($)	11,857.2	19,791.2	11,830.2	11,883.0	11,969.4	11,931.1
Fraction of duals using NF, ages 65+	0.2	0.2	0.2	0.2	0.2	0.2
Fraction of duals using HCBS, ages 65+	0.3	0.1	0.3	0.3	0.3	0.3
Fraction of duals using personal care, ages 65+	0.0	0.1	0.0	0.0	0.0	0.0
Fraction of duals with Medicaid managed care, ages 19+	0.0	0.8	0.0	0.0	0.0	0.0
Population per square mile, all ages	2,255.4	1,354.9	2,218.0	2,291.1	2,256.7	2,222.8
Patient care physicians per 1,000 population	0.9	0.9	0.9	0.9	0.9	0.9
Area characteristics						
% of pop. living in married households	62.1	61.9	62.0	62.2	63.4	64.4
% of adults with college education	26.7	26.4	26.0	27.3	28.9	28.8
% of adults with self-care limitations	3.2	3.2	3.2	3.2	3.2	3.1
% of household with individuals younger than 18	33.8	33.8	34.0	33.6	32.7	32.8
% of household with individuals older than 60	33.6	33.6	33.4	33.7	33.9	33.3
Distance to nearest hospital	3.7	3.8	3.8	3.7	3.8	3.8
Distance to nearest nursing facility	2.6	2.6	2.6	2.6	2.6	2.6

ESRD = end-stage renal disease; FFS = fee for service; HCC = Hierarchical Condition Category; LTSS = long-term services and supports; MA = Medicare Advantage, MSA = metropolitan statistical area; NF = nursing facility; SPMI = severe and persistent mental illness.

Detailed 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 period preceding the demonstration implementation date are identified by applying the eligibility criteria in each separate predemonstration quarter.

Additional special populations were identified for the analyses as follows:

- *Enrollees*. A beneficiary was defined as an enrollee if they were enrolled in the demonstration during the demonstration period.

- *Age*. Age was defined as a categorical variable where beneficiaries were identified as *0 to 64*, *65 to 74, and 75 years and older* during the observation year (e.g., predemonstration period 1, predemonstration period 2, and demonstration period 1).

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

- *Race/Ethnicity*. Race/ethnicity was defined as a categorical variable where beneficiaries were categorized as *White*, *Black*, *Hispanic*, or *Asian*.

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

- *Severe and persistent mental illness (SPMI).* A beneficiary was defined as having a SPMI if a beneficiary had incurred a claim for severe and persistent mental illness within the past 2 years.

Detailed Utilization and Expenditure Measure Definitions

For any health care service type, the methodology for estimating average monthly utilization and the percentage of users 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 predemonstration or demonstration period. That is, an individual can meet the demonstration's eligibility criteria for 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 5***, 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 dual eligible beneficiaries in each month of the observation year.

The utilization measures below were calculated as the aggregate sum of the unit of measurement (e.g., counts) divided by the aggregated number of eligible member months [and user months] within each group (*g*) where group is defined as (1) Illinois base year 1, (2) Comparison base year 1, (3) Illinois base year 2, (4) Comparison base year 2, (5) Illinois demonstration year 1, (6) Comparison demonstration year 1.

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

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

Where

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

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

n_{ig} = the total number of $\frac{1}{1{,}000}$ eligible/user months for individual *i* in group *g*.

The denominator above is scaled by such that the result is interpreted in terms of average monthly utilization per 1,000 eligible beneficiaries. 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 predemonstration 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, for the Appendix tables of descriptive statistics, 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, except for the average 30-day all-cause risk-standardized readmission rate and the 30-day follow-up after hospitalization for mental illness, which are reported as percentages.

Average 30-day all-cause risk-standardized readmission rate (percent) was calculated as follows:

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

Where

C = the national average of 30-day readmission rate, .238.

X_{ig} = the total number of readmissions for individual *i* in group *g*.

n_{ig} = the total number of hospital admissions for individual *i* in group *g*.

$Prob_g$ = the annual average adjusted probability of readmission for individuals in group *g*. The average adjusted probability equals:

Average adjusted probability of readmission by demonstration group

Demonstration group	Average adjusted probability of readmission
Predemonstration year 1	
Illinois	0.207
Comparison	0.202
Predemonstration year 2	
Illinois	0.212
Comparison	0.207
Demonstration year 1	
Illinois	0.213
Comparison	0.208

Rate of 30-day follow-up in a physician or outpatient setting after hospitalization for mental illness (percent) was calculated as follows:

$$MHFU\ = \frac{\Sigma_{ig} x_{ig}}{\Sigma_{ig} \mathrm{n}_{ig}} * 100$$

Where

MHFU = the average rate of 30-day follow-up care after hospitalization for a mental illness (percent) for individual*s in* group *g*.

X_{ig} = the total number of discharges from a hospital stay for mental health that had a follow-up for mental health within 30 days of discharge for individual *i* in group *g*.

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

Average ambulatory care sensitive condition admissions per eligible beneficiary, overall and chronic composite (PQI #90 and PQI #92) was calculated as follows:

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

Where

$ACSC_g$ = the average number of ambulatory care sensitive condition admissions per eligible month for overall/chronic composites for individuals in group *g*.

X_{ig} = the total number of discharges that meet the criteria for AHRQ PQI #90 [or PQI #92] for individual *i* in group *g*.

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

Preventable ER visits per eligible month was calculated as follows:

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

Where

ER_g = the average number of preventable ER visits per eligible month 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 per eligible month who received depression screening during the observation year was calculated as follows:

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

Where

D_g = the average number of beneficiaries per eligible month who received depression screening in group *g*.

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

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

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

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

Where

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

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

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

Minimum Data Set Measures

Two measures of annual nursing facility-related utilization are derived from the MDS. The rate of new long-stay NF admissions per 1,000 eligible beneficiaries is calculated as the number of NF admissions for whom there is no record of NF use in the 100 days prior to the current admission and who subsequently stay in the NF for 101 days or more. Individuals are included in this measure only if their NF admission occurred after their first month of demonstration eligibility. The percentage of long-stay NF users is calculated as the number of individuals who have stayed in a NF for 101 days or more, who were long-stay after the first month of demonstration eligibility. The probability of any long-stay NF use includes both new admissions from the community and continuation of a stay in a NF.

Characteristics of new long-stay NF residents at admission are also included in order to monitor nursing facility case mix and acuity levels. Functional status and low level of care need are determined by the Resource Utilization Groups Version IV (RUG-IV). Residents with low care need are defined as those who did not require physical assistance in any of the four late-loss activities of daily living (ADLs) and who were in the three lowest RUG-IV categories. Severe

cognitive impairment is assessed by the Brief Interview for Mental Status (BIMS), poor short-term memory, or severely impaired decision-making skills.

Regression Outcome Measures

Five utilization measures are used as dependent variables in regression analysis to estimate the difference-in-differences effect for the entire demonstration period as well as the effect in each demonstration year. These measures are derived from Medicare inpatient, outpatient, carrier, and skilled nursing facility claims and encounter data and MDS long-term nursing facility use. All dependent variables are based on a monthly basis except for the MDS long-stay nursing facility measure and 30-day inpatient readmission measure, which are annual.

The outcome measures include:

- *Monthly Inpatient Admissions* is the count of the number of inpatient admissions in which a beneficiary has an admission date within the observed month.

- *Monthly ED Use* is the count of the number of ED visits that occurred during the month that did not result in an inpatient admission.

- *Monthly Physician Visits* is the count of any E&M visit within the month where the visit occurred in the outpatient or office setting, nursing facility, domiciliary, rest home, or custodial care setting, a FQHC or a rural health center.

- *Monthly Skilled Nursing Facility Admissions* is the count of any skilled nursing facility admissions within the month.

- *Long-stay Nursing Facility Use* is the annual probability of residing in a nursing home for 101 days or more during the year.

In addition to the five measures above, this evaluation will estimate the demonstration effects on quality of care. The following quality of care and care coordination measures use claims/encounter-level information and are adopted from standardized HEDIS and NQF measures. The outcomes are reported monthly, with the exception of the 30-day all-cause risk-standardized readmission rate, which is annual.

- *30-day all-cause risk-standardized readmissions (NQF #1768)* is the count of the number risk-standardized readmissions, defined above, that occurs during the year.

- *Preventable ER visits* is the count of ER visits among adults. The lists of diagnoses that are considered as either preventable/avoidable, or treatable in a primary care setting were developed by researchers at the New York University Center for Health and Public Service Research.[18]

[18] http://wagner.nyu.edu/faculty/billings/nyued-background

- *30-day follow-up after hospitalization for mental illness (NQF #576)* is estimated as the monthly probability of any follow-up visits within 30-days post-hospitalization for a mental illness.

- *Ambulatory care sensitive condition (ACSC) admissions—overall composite (AHRQ PQI # 90)* is the monthly probability of any acute admissions that meet the AHRQ PQI #90 (Prevention Quality Overall Composite) criteria within the month.

- *ACSC admissions—chronic composite (AHRQ PQI # 92)* is the monthly probability of any admissions that meet the AHRQ PQI #92 criteria within the month.

Regression Methodology for Determining Demonstration Impact

The regressions across the entire demonstration period compare all demonstration eligible beneficiaries in the FAI State to its comparison group. The regression methodology accounts for both those with and without use of the specific service (e.g., for inpatient services, both those with and without any inpatient use). A restricted difference-in-differences equation will be estimated as follows:

$$Dependent\ variable_i = F(\beta_0 + \beta_1 PostYear + \beta_2 Demonstration + \beta_3 PostYear * Demonstration + \beta_4 Demographics + \beta_{5-j} Market + \varepsilon)$$

where separate models will be estimated for each dependent variable. *PostYear* is an indicator of whether the observation is from the pre- or postdemonstration period, *Demonstration* is an indicator of whether the beneficiary was in the demonstration group, and *PostYear * Demonstration* is an interaction term. *Demographics* and *Market* represent vectors of beneficiary and market characteristics, respectively.

Under this specification, the coefficient β_0 reflects the comparison group predemonstration period mean adjusted for demographic and market effects, β_1 reflects the average difference between postperiod and predemonstration period in the comparison group, β_2 reflects the difference in the demonstration group and comparison group at predemonstration, and β_3 is the overall average demonstration effect during the demonstration period. This last term is the difference-in-differences estimator and the primary policy variable of interest, but in all regression models, because of nonlinearities in the underlying distributions, post-regression predictions of demonstration impact are performed to obtain the marginal effects of demonstration impact.

In addition to estimating the model described in Equation 1, a less restrictive model was estimated to produce year-by-year effects of the demonstration. The specification of the unrestricted model is as follows:

$$Dependent\ variable = F\ (\beta_0 + \beta_{1-k} PostYear_{1-n} + \beta_2 Demonstration + \beta_{3-k} PostYear_{1-n} * Demonstration + \beta_4 Demographics + \beta_{5-j} Market + \varepsilon)$$

This equation differs from the previous one in that separate difference-in-differences coefficients are estimated for each year. Under this specification, the coefficients $\beta_{3\text{-}k}$ would

reflect the impact of the demonstration in each respective year, whereas the previous equation reflects the impact of the entire demonstration period. This specification measures whether changes in dependent variables occur in the first year of the demonstration only, continuously over time, or in some other pattern. Depending on the outcome of interest, we will estimate the equations using logistic regression, Generalized Linear Models with a log link, or count models such as negative binomial or Poisson regressions (e.g., for the number of inpatient admissions). We used regression results to calculate the marginal effects of demonstration impact.

Impact estimates across the entire demonstration period are determined using the difference-in-differences methodology and presented in figures for all demonstration eligible beneficiaries, and then for two special populations of interest—demonstration eligible beneficiaries with any LTSS use, and demonstration eligible beneficiaries with SPMI. A table follows each figure displaying the annual demonstration difference-in-differences effect for each separate demonstration period for each of these populations. In each figure, the point estimate is displayed for each measure, as well as the 90 percent confidence interval (black) and the 80 percent confidence interval (green). The 80 percent confidence interval is narrower than the 90 percent confidence interval. If the confidence interval includes the value of zero, it is not statistically significant at that confidence level.

For only the full demonstration eligible population and not each special population, an additional table presents estimates of the regression-adjusted mean values of the utilization measures for the demonstration and comparison groups by year for each service. The purpose of this table is to understand the magnitude of the difference-in-differences estimate relative to the adjusted mean outcome value in each period. The adjusted mean values show how different the two groups were in each period, and the relative direction of any potential effect in each group over time. The values in the third and fourth columns represent the post-regression, mean predicted value of the outcomes for each group and period, based on the composition of a reference population (the comparison group in the demonstration period). The difference-in-differences estimate is also provided for reference, along with the *p*-value and the relative percent change of the difference-in-differences estimate compared to an average mean use rate for the comparison group in the entire demonstration period.

The relative percent annual change for the difference-in-differences estimate for each outcome measure is calculated as [Overall difference-in-differences effect] / [Adjusted mean outcome value of comparison group in the demonstration period].

Table B-2 provides an illustrative example of the regression output for each independent variable in the negative binomial regression on monthly inpatient admissions across the entire demonstration period.

Table B-2
Negative binomial regression results on monthly inpatient admissions
(n = 34,801,515 person months)

Independent variables	Coefficient	Standard error	z-value	*p*-value
Post period	−0.0325	0.0143	−2.280	0.023
Demonstration group	0.1267	0.0389	3.250	0.001
Interaction of post period x demonstration group	−0.1236	0.0159	−7.760	0.000
Trend	−0.0024	0.0006	−4.240	0.000
Age	0.0005	0.0005	1.050	0.291
Female	−0.0488	0.0107	−4.560	0.000
Black	0.0404	0.0111	3.640	0.000
Asian	−0.4588	0.0153	−30.000	0.000
Hispanic	−0.2047	0.0175	−11.660	0.000
Other race	−0.3292	0.0167	−19.660	0.000
Disability as reason for original Medicare entitlement	0.1089	0.0209	5.210	0.000
End-stage renal disease	1.4003	0.0212	65.980	0.000
Hierarchical Condition Category (HCC) score	0.3666	0.0046	80.010	0.000
Percent of months of demonstration eligibility	−1.3340	0.0362	−36.890	0.000
Metropolitan statistical area (MSA) residence	0.0238	0.0388	0.610	0.540
Percent of population living in a married household	−0.0011	0.0008	−1.330	0.185
Percent of households with family member greater than or equal to 60 years old	−0.0032	0.0007	−4.730	0.000
Percent of households with family member less than 18 years old	−0.0028	0.0007	−4.260	0.000
Percent of adults with college education	−0.0012	0.0006	−2.090	0.037
Percent of adults with self-care limitation	0.0027	0.0024	1.120	0.262
Distance to nearest hospital	0.0007	0.0015	0.490	0.622
Distance to nearest nursing facility	0.0044	0.0032	1.390	0.163
Medicare spending per full-benefit dual eligible	0.0000	0.0000	0.670	0.503
Medicare Advantage penetration rate	−0.7411	0.1385	−5.350	0.000
Medicaid-to-Medicare fee index	0.0159	0.1090	0.150	0.884
Medicaid spending per full-benefit dual eligible	0.0000	0.0000	0.150	0.880
Nursing facility users per full-benefit dual eligible over 65	−0.0939	0.2138	−0.440	0.373
HCBS users per full-benefit dual eligible over 65	0.1927	0.1481	1.300	0.193
Medicaid managed care users per full-benefit dual eligible	−0.0065	0.0287	−0.230	0.820
Population per square mile	0.0000	0.0000	−0.240	0.809
Patient care physicians per 1,000 (total) population	−0.0572	0.0607	−0.940	0.346
Participating in shared savings program	0.2343	0.0403	5.810	0.000
Intercept	0.2343	0.0403	5.810	0.000

Appendix C:
Descriptive Tables

Tables in ***Appendix C*** present results on the average percentage of demonstration eligible beneficiaries using selected Medicare service types during the months in which they met demonstration eligibility criteria in the predemonstration and demonstration periods. In addition, average counts of service use and payments are presented across all such eligible months, and for the subset of these months in which eligible beneficiaries were users of each respective service type. Data is shown for the predemonstration and demonstration period for both Illinois eligible beneficiaries (a.k.a. the demonstration group) and the comparison group. Similar tables of Medicaid service utilization are also presented, as well as tables for the RTI quality of care and care coordination measures.

Tables are presented for the overall demonstration eligible population (***Tables C-1*** through ***C-3***), followed by tables on Illinois demonstration eligible beneficiaries who were enrollees and non-enrollees (***Tables C-4*** through ***C-5***).

Table C-1
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration eligible beneficiaries and comparison groups

Measures by setting	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
Number of demonstration eligible beneficiaries		206,943	211,883	187,094
Number of comparison eligible beneficiaries		635,594	643,644	761,521
Institutional setting				
Inpatient admissions[1]	Demonstration group			
% with use		4.8	4.4	4.1
Utilization per 1,000 user months		1,173.0	1,167.8	1,166.7
Utilization per 1,000 eligible months		56.3	51.5	47.6
Inpatient admissions[1]	Comparison group			
% with use		3.9	3.7	3.7
Utilization per 1,000 user months		1,144.5	1,140.9	1,145.4
Utilization per 1,000 eligible months		44.9	42.6	42.4
Inpatient psychiatric	Demonstration group			
% with use		0.5	0.5	0.5
Utilization per 1,000 user months		1,147.0	1,153.4	1,150.9
Utilization per 1,000 eligible months		5.9	5.5	5.4
Inpatient psychiatric	Comparison group			
% with use		0.4	0.4	0.3
Utilization per 1,000 user months		1,107.3	1,100.5	1,104.4
Utilization per 1,000 eligible months		4.2	3.9	3.5

(continued)

Table C-1 (continued)
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration eligible beneficiaries and comparison groups

Measures by setting	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
Inpatient non-psychiatric	Demonstration group			
% with use		4.3	4.0	3.7
Utilization per 1,000 user months		1,161.2	1,154.2	1,152.7
Utilization per 1,000 eligible months		50.4	45.9	42.2
Inpatient non-psychiatric	Comparison group			
% with use		3.6	3.4	3.4
Utilization per 1,000 user months		1,134.9	1,131.7	1,136.8
Utilization per 1,000 eligible months		40.7	38.6	38.9
Emergency department use (non-admit)	Demonstration group			
% with use		5.7	5.7	5.4
Utilization per 1,000 user months		1,252.4	1,268.3	1,256.0
Utilization per 1,000 eligible months		71.8	72.1	67.8
Emergency department use (non-admit)	Comparison group			
% with use		6.0	6.1	6.2
Utilization per 1,000 user months		1,297.9	1,302.5	1,299.1
Utilization per 1,000 eligible months		78.1	79.2	79.9
Emergency department use (psychiatric)	Demonstration group			
% with use		0.3	0.3	0.3
Utilization per 1,000 user months		1,177.1	1,199.0	1,190.4
Utilization per 1,000 eligible months		3.6	3.6	3.7
Emergency department use (psychiatric)	Comparison group			
% with use		0.4	0.4	0.4
Utilization per 1,000 user months		1,263.8	1,279.8	1,279.1
Utilization per 1,000 eligible months		4.9	4.9	4.9

(continued)

Table C-1 (continued)
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration eligible beneficiaries and comparison groups

Measures by setting	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
Observation stays	Demonstration group			
% with use		0.9	1.0	0.9
Utilization per 1,000 user months		1,043.2	1,064.0	1,067.6
Utilization per 1,000 eligible months		9.1	10.4	10.0
Observation stays	Comparison group			
% with use		0.6	0.6	0.7
Utilization per 1,000 user months		1,060.5	1,076.6	1,083.5
Utilization per 1,000 eligible months		6.1	6.8	8.0
Skilled nursing facility	Demonstration group			
% with use		1.3	1.2	1.2
Utilization per 1,000 user months		1,104.5	1,100.8	1,094.2
Utilization per 1,000 eligible months		14.1	12.9	12.9
Skilled nursing facility	Comparison group			
% with use		1.1	1.1	1.2
Utilization per 1,000 user months		1,093.9	1,092.6	1,088.6
Utilization per 1,000 eligible months		12.6	12.5	12.7
Hospice	Demonstration group			
% with use		1.2	1.1	1.1
Utilization per 1,000 user months		1,042.8	1,016.4	1,026.9
Utilization per 1,000 eligible months		12.5	11.6	11.1
Hospice	Comparison group			
% with use		1.2	1.1	1.1
Utilization per 1,000 user months		1,064.6	1,025.5	1,027.1
Utilization per 1,000 eligible months		12.3	11.1	11.3

(continued)

Table C-1 (continued)
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration eligible beneficiaries and comparison groups

Measures by setting	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
Non-institutional setting				
Primary care E&M visits	Demonstration group			
% with use		0.9	1.0	0.9
Utilization per 1,000 user months		1,043.2	1,064.0	1,067.6
Utilization per 1,000 eligible months		9.1	10.4	10.0
Primary care E&M visits	Comparison group			
% with use		0.6	0.6	0.7
Utilization per 1,000 user months		1,060.5	1,076.6	1,083.5
Utilization per 1,000 eligible months		6.1	6.8	8.0
Outpatient therapy (PT, OT, ST)	Demonstration group			
% with use		1.3	1.2	1.2
Utilization per 1,000 user months		1,104.5	1,100.8	1,094.2
Utilization per 1,000 eligible months		14.1	12.9	12.9
Outpatient therapy (PT, OT, ST)	Comparison group			
% with use		1.1	1.1	1.2
Utilization per 1,000 user months		1,093.9	1,092.6	1,088.6
Utilization per 1,000 eligible months		12.6	12.5	12.7
Independent therapy (PT, OT, ST)	Demonstration group			
% with use		1.2	1.1	1.1
Utilization per 1,000 user months		1,042.8	1,016.4	1,026.9
Utilization per 1,000 eligible months		12.5	11.6	11.1
Independent therapy (PT, OT, ST)	Comparison group			
% with use		1.2	1.1	1.1
Utilization per 1,000 user months		1,064.6	1,025.5	1,027.1
Utilization per 1,000 eligible months		12.3	11.1	11.3

(continued)

Table C-1 (continued)
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration eligible beneficiaries and comparison groups

Measures by setting	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
Other hospital outpatient services	Demonstration group			
% with use		25.5	25.5	22.6
Utilization per 1,000 user months		—	—	—
Utilization per 1,000 eligible months		—	—	—
Other hospital outpatient services	Comparison group			
% with use		22.7	22.8	22.3
Utilization per 1,000 user months		—	—	—
Utilization per 1,000 eligible months		—	—	—

— = data not available. 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] Results for the Demonstration group may be inflated due to a data anomaly under investigation.

SOURCE: RTI International analysis of Medicare data.

Table C-2
Quality of care and care coordination outcomes for demonstration eligible and comparison beneficiaries for the Illinois demonstration

Quality and care coordination measures	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
30-day all-cause risk-standardized readmission rate (%)	Demonstration group	22.7	21.4	21.2
	Comparison group	21.5	20.3	20.5
Preventable ER visits per eligible months	Demonstration group	0.0354	0.0347	0.0332
	Comparison group	0.0360	0.0356	0.0376
Rate of 30-day follow-up after hospitalization for mental illness (%)	Demonstration group	41.4	42.8	39.3
	Comparison group	41.6	41.0	40.4
Ambulatory care sensitive condition admissions per eligible months—overall composite (AHRQ PQI # 90)	Demonstration group	0.0081	0.0074	0.0072
	Comparison group	0.0068	0.0064	0.0066
Ambulatory care sensitive condition admissions per eligible months—chronic composite (AHRQ PQI # 92)	Demonstration group	0.0054	0.0050	0.0049
	Comparison group	0.0045	0.0043	0.0045
Screening for clinical depression per eligible months	Demonstration group	0.0003	0.0008	0.0015
	Comparison group	0.0002	0.0006	0.0026

AHRQ PQI =Agency for Healthcare Research and Quality Prevention Quality Indicator; ER = emergency room.

NOTES: The last quarter of demonstration year 1 (October–December 2015) was the first quarter of the switch from ICD9 to ICD10 codes. Some differences between demonstration year 1 and the predemonstration period may have resulted from misalignment of ICD9 and ICD10 codes.

SOURCE: RTI International analysis of Medicare data.

Table C-3
Minimum Data Set long-stay nursing facility utilization and characteristics at admission for the Illinois demonstration and comparison groups

Measures by setting	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1
Annual nursing facility utilization				
Number of demonstration eligible beneficiaries	Demonstration group	119,178	122,364	104,126
New long-stay nursing facility admissions per 1,000 eligible beneficiaries		11.8	11.6	22.8
Number of comparison beneficiaries	Comparison group	404,585	419,271	407,791
New long-stay nursing facility admissions per 1,000 eligible beneficiaries		12.8	12.7	23.6
Number of demonstration eligible beneficiaries	Demonstration group	136,811	137,953	117,954
Long-stay nursing facility users as % of eligible beneficiaries		14.4	12.8	14.7
Number of comparison beneficiaries	Comparison group	457,627	469,132	451,563
Long-stay nursing facility users as % of eligible beneficiaries		13.1	12.1	12.3
Characteristics of new long-stay nursing facility residents at admission				
Number of admitted demonstration beneficiaries	Demonstration group	1,405	1,425	2,379
Number of admitted comparison beneficiaries	Comparison group	5,181	5,332	9,614
Functional status (RUG-IV ADL scale)	Demonstration group	6.5	6.4	7.1
Functional status (RUG-IV ADL scale)	Comparison group	8.2	8.4	8.3
Percent with severe cognitive impairment	Demonstration group	32.7	29.2	32.0
Percent with severe cognitive impairment	Comparison group	41.7	40.1	40.9
Percent with low level of care need	Demonstration group	7.0	5.6	4.8
Percent with low level of care need	Comparison group	1.8	1.6	1.8

RUG-IV ADL = Resource Utilization Group IV Activities of Daily Living.

SOURCE: RTI International analysis of Minimum Data Set data.

Table C-4
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration enrollees and non-enrollees

Measures by setting	Group	Demonstration year 1
Number of enrollees		91,404
Number of non-enrollees		95,690
Institutional setting		
Inpatient admissions[1]	Enrollees	3.0
% with use		1,177.3
Utilization per 1,000 user months		34.9
Utilization per 1,000 eligible months		
Inpatient admissions[1]	Non-enrollees	4.5
% with use		1,161.1
Utilization per 1,000 user months		52.8
Utilization per 1,000 eligible months		
Inpatient psychiatric	Enrollees	0.5
% with use		1,151.4
Utilization per 1,000 user months		5.2
Utilization per 1,000 eligible months		
Inpatient psychiatric	Non-enrollees	0.4
% with use		1,141.2
Utilization per 1,000 user months		4.3
Utilization per 1,000 eligible months		
Inpatient non-psychiatric	Enrollees	2.6
% with use		1,161.0
Utilization per 1,000 user months		29.7
Utilization per 1,000 eligible months		
Inpatient non-psychiatric	Non-enrollees	
% with use		4.2
Utilization per 1,000 user months		1,151.1
Utilization per 1,000 eligible months		48.4
Emergency department use (non-admit)	Enrollees	
% with use		4.7
Utilization per 1,000 user months		1,266.5
Utilization per 1,000 eligible months		59.3
Emergency department use (non-admit)	Non-enrollees	
% with use		5.5
Utilization per 1,000 user months		1,248.0
Utilization per 1,000 eligible months		69.0

(continued)

Table C-4 (continued)
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration enrollees and non-enrollees

Measures by setting	Group	Demonstration year 1
Emergency department use (psychiatric)	Enrollees	
% with use		0.3
Utilization per 1,000 user months		1,197.7
Utilization per 1,000 eligible months		3.8
Emergency department use (psychiatric)	Non-enrollees	
% with use		0.3
Utilization per 1,000 user months		1,186.1
Utilization per 1,000 eligible months		3.1
Observation stays	Enrollees	
% with use		0.6
Utilization per 1,000 user months		1,074.4
Utilization per 1,000 eligible months		5.9
Observation stays	Non-enrollees	
% with use		1.1
Utilization per 1,000 user months		1,073.5
Utilization per 1,000 eligible months		11.8
Skilled nursing facility	Enrollees	
% with use		0.7
Utilization per 1,000 user months		1,075.4
Utilization per 1,000 eligible months		7.9
Skilled nursing facility	Non-enrollees	
% with use		1.3
Utilization per 1,000 user months		1,101.3
Utilization per 1,000 eligible months		14.6
Hospice	Enrollees	
% with use		0.8
Utilization per 1,000 user months		1,090.8
Utilization per 1,000 eligible months		8.6
Hospice	Non-enrollees	
% with use		1.4
Utilization per 1,000 user months		1,009.0
Utilization per 1,000 eligible months		14.3

(continued)

Table C-4 (continued)
Proportion and utilization for institutional and non-institutional services for the Illinois demonstration enrollees and non-enrollees

Measures by setting	Group	Demonstration year 1
Non-institutional setting		
Primary care E&M visits	Enrollees	
% with use		39.8
Utilization per 1,000 user months		2,189.3
Utilization per 1,000 eligible months		872.4
Primary care E&M visits	Non-enrollees	
% with use		56.8
Utilization per 1,000 user months		2,181.5
Utilization per 1,000 eligible months		1,239.0
Outpatient Therapy (PT, OT, ST)	Enrollees	
% with use		1.7
Utilization per 1,000 user months		11,709.4
Utilization per 1,000 eligible months		199.2
Outpatient therapy (PT, OT, ST)	Non-enrollees	
% with use		4.3
Utilization per 1,000 user months		20,505.4
Utilization per 1,000 eligible months		873.4
Independent therapy (PT, OT, ST)	Enrollees	
% with use		0.6
Utilization per 1,000 user months		13,959.7
Utilization per 1,000 eligible months		85.7
Independent therapy (PT, OT, ST)	Non-enrollees	
% with use		1.6
Utilization per 1,000 user months		14,077.5
Utilization per 1,000 eligible months		225.0
Other hospital outpatient services	Enrollees	
% with use		15.7
Utilization per 1,000 user months		NA
Utilization per 1,000 eligible months		0.0
Other hospital outpatient services	Non-enrollees	
% with use		26.7
Utilization per 1,000 user months		NA
Utilization per 1,000 eligible months		0.0

— = data not available. 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] Results for the demonstration group may be inflated due to a data anomaly under investigation.

SOURCE: RTI International analysis of Medicare data.

Table C-5
Quality of care and care coordination outcomes for enrollees and non-enrollees for the Illinois demonstration

Quality and care coordination measures	Group	Demonstration year 1
30-day all-cause risk-standardized readmission rate (%)	Enrollees	20.7
	Non-enrollees	21.6
Preventable emergency room visits per eligible months	Enrollees	0.0296
	Non-enrollees	0.0336
Rate of 30-day follow-up after hospitalization for mental illness (%)	Enrollees	34.7
	Non-enrollees	43.6
Ambulatory care sensitive condition admissions per eligible months—overall composite (AHRQ PQI # 90)	Enrollees	0.0027
	Non-enrollees	0.0083
Ambulatory care sensitive condition admissions per eligible months—chronic composite (AHRQ PQI # 92)	Enrollees	0.0019
	Non-enrollees	0.0056
Screening for clinical depression per eligible months	Enrollees	0.0006
	Non-enrollees	0.0021

AHRQ PQI =Agency for Healthcare Research and Quality Prevention Quality Indicator; ER = emergency room.

SOURCE: RTI International analysis of Medicare data.

Appendix D:
Sensitivity Analysis Tables

Tables in ***Appendix D*** present results from sensitivity analyses focusing on the Illinois demonstration cost saving models.

D.1 Predicting Capitated Rates for Non-Enrollees

The goal of this analysis was to identify beneficiaries eligible for the Illinois demonstration in the first demonstration period (March 2014–December 2015) and to look at what the capitation rate would have been (had they enrolled) compared to their actual fee-for-service (FFS) expenditures in the demonstration period.

D.1.1 Sample Identification

- Eligible but non-enrolled Illinois beneficiaries in demonstration period 1 (March 1, 2014–December 31, 2015). Predicted capitated rates were calculated using the beneficiary risk score and the county of residence.

D.1.2 Calculating the Capitated Rate for Eligible by Non-Enrolled Beneficiaries

- Predicted capitated rates were calculated using the monthly beneficiary risk score (final resolved) and the base rate associated with the beneficiary's county of residence.

- Mean predicted capitated rates were compared to mean FFS expenditures (non-Winsorized). Note that bad debt was removed from the capitated rate as this is not reflected in FFS payments. Sequestration was reflected in both the FFS payments and the capitated payment. Disproportionate share hospital payments and uncompensated care payment amounts were included in the FFS expenditures, as these amounts are reflected in the capitated rates.

- The predicted capitated rate was $1,451 compared to actual FFS expenditures of $1,641 suggesting potential gross Medicare savings for the non-enrolled beneficiary population had this population been enrolled during demonstration period 1.

Table D-1
Observed FFS and predicted capitated rates for eligible but not enrolled beneficiaries

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Predicted cap	1,663,804	1,451.0	1.2	1,510.3	1,448.7	1,453.3
Observed FFS	1,663,804	1,640.6	4.6	5,925.2	1,631.6	1,649.6
Difference	1,663,804	−189.6	4.4	5,699.8	−198.3	−181.0

FFS = fee for service.

NOTES: RTI also tested the accuracy of the predicted capitated rate by generating a predicted capitated rate for enrollees and comparing it to the actual capitated rate from the plan payment files. RTI's mean predicted capitated rate for enrollees was $1,350.4 compared to an actual capitated rate of $1316.0 (difference of −$34.4). Observed FFS and predicted capitated values reflect parallel adjustments.

D.2 Predicting FFS Expenditures for Enrollees

The goal of this analysis is the converse of what is presented in Analysis C.1. Here, we look at predicted FFS expenditures for enrollees based on a model predicting FFS expenditures for non-enrollees.

D.2.1 Methods

A data set with observations from base year 2 and from demonstration year 1 was created from the full data set to allow us to look at expenditures between the two periods. Beneficiary expenditures were summed across all months of each period and then "annualized" to represent the full 12 months of base year 2 (or 22 months of demonstration year 2).

The estimation process involved two steps. First, using non-enrollees, we regressed demonstration year 1 expenditures on base year 2 expenditures, base year 2 Hierarchical Condition Category (HCC) score, and a set of base year 2 demographic and area level variables. We used an unlogged dependent variable and ran ordinary least squares (OLS) models with and without propensity score weights (using the frozen HCC scores in the composition of the weights). The data were clustered by Federal Information Processing Standards (FIPS) code. This model explained 22.6 percent of the variation in expenditures for non-enrollees.

In the second step, we used the covariate values for demonstration enrollees estimated in the OLS non-enrollee model (from step 1) to calculate predicted expenditures for enrollees. We compared the predicted expenditure values for enrollees to the actual capitated payments made under the demonstration.

D.2.2 Results

Enrollees had lower expenditures in base year 2 ($1,000 for enrollees vs. $1,430 for non-enrollees) and a lower mean HCC score (1.257 for enrollees vs. 1.506 for non-enrollees).

Actual capitated payments for enrollees were, on average, $371 per month lower than the predicted mean expenditures for enrollees in demonstration year 1 suggesting gross Medicare savings under the capitated Medicare rates for the enrolled population compared to the predicted

FFS expenditures for this same population had they not been enrolled during demonstration period 1. Mean predicted expenditures for enrollees were $447 per month lower than actual expenditures for non-enrollees.

Table D-2
Mean values of model covariates by group

Covariate	Eligible, Not Enrolled (N = 60,278)	Enrolled (N = 74,252)
Average monthly FFS expenditures in demo year 1	$1,976	N/A
Average monthly capitated payment demo year 1	N/A	$1,159
Average monthly FFS expenditures in base year 2	$1,430	$1,000
HCC Health Risk Score	1.506	1.257
Age	66.572	62.368
Also in another CMS demonstration	0.403	0.262
Female	0.636	0.561
Black	0.360	0.371
Asian	0.053	0.056
Other	0.019	0.019
Hispanic	0.074	0.104
Disabled	0.407	0.480
ESRD	0.036	0.027
Patient care physicians per 1,000 population	0.890	0.885
% of households w/ member >= 60 yrs.	32.863	32.744
% of households w/ member < 18 yrs.	33.717	34.277
% of those aged < 65 years with college education	27.594	25.636
% of those aged < 65 years with self-care limitation	3.225	3.209
Fraction of duals with Medicaid managed care, ages 19	0.003	0.002
Medicare Advantage penetration rate, all enrl	0.191	0.198
% of pop. living in married household	62.687	62.209
Population per square mile, all ages	2,329.887	2,203.182
Medicaid spending per dual, ages 19+	$11,950	$11,839
Medicare spending per dual, ages 19+	$9,576	$9,571
Fraction of duals using nursing facilities, ages 65+	0.198	0.207
Fraction of duals using personal care, ages 65+	0.004	0.005
Distance to nearest hospital (miles)	3.660	3.759
Distance to nearest nursing home (miles)	2.494	2.620

ESRD = end-stage renal disease; HCC = Hierarchical Condition Category; FFS = fee for service.

RTI Program: predicting FFS: Summary statistics: mean by categories of: enrollee

Table D-3
Expenditure prediction results from an unweighted OLS model

Enrollee observations = 60,278	Mean expenditures over the first year of the demonstration (21 months)	95% confidence interval	
Predicted FFS for enrollees	$33,644	$33,386	$33,903
Actual PMPM for enrollees	$25,491	$25,254	$25,728
Difference	$8,153 ($371 per month)	P = 0.0000	

FFS = fee for service; OLS = ordinary least squares; PMPM = per member per month.

RTI program: predicting FFS unweighted FFS3b

D.3 Enrollee-Subgroup Analyses

The enrollee-subgroup analyses focused on a subgroup of beneficiaries identified as enrolled for at least 3 months in the demonstration period and with at least 3 months of baseline eligibility. Note that a subset of the comparison group developed for the ITT analysis was used in the enrollee subgroup analyses. Comparison group beneficiaries used in the enrollee subgroup analyses were required to have at least 3 months of eligibility in the demonstration period (March 1, 2014–December 31, 2015) and at least 3 months of eligibility in the predemonstration period (March 1, 2012–February 28, 2014), analogous to the criteria for identifying enrollees. The results indicate additional costs associated with enrollees. This enrollee sub-group analysis is limited by the absence of person-level data on characteristics that potentially would lead an individual in a comparison area to enroll in a similar demonstration, and thus the results should be considered in the context of this limitation.

Table D-4
Illinois demonstration, mean monthly Medicare expenditures, enrollee subgroup analysis, predemonstration period and demonstration period 1, weighted

Group	Predemonstration period Mar 2012–Feb 2014	Demonstration period 1 Mar 2014–Dec 2015	Difference
Demonstration group	843 (801.7; 885.2)	1,042 (1,000.4; 1,084.1)	199 (190.6; 207.1)
Comparison group	919 (890.3; 946.9)	1,048 (1,012.0; 1,083.3)	129 (111.9; 146.2)
Difference-in-difference	—	—	70 (50.8; 88.7)

SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output /enrl_only OCT2018).

Table D-5
Demonstration effects on Medicare savings, enrollee subgroup analysis, difference-in-difference regression results, Illinois demonstration (weighted)

Covariate	Adjusted coefficient DID	*p*-value	95% confidence interval	90% confidence interval	80% confidence interval[1]
Intervention *DemoYear1 (March 2014–December 2015)	82.6	0.0000	64.7; 100.6	67.6; 97.7	70.9; 94.4

[1] 80 percent confidence intervals are provided for comparison purposes only.

SOURCE: RTI Analysis of Illinois demonstration eligible and comparison group Medicare data (program: IL AR1 output /enrl only OCT2018).

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Appendix E:
Summary of Predemonstration and Demonstration Design Features for Medicare and Medicaid Beneficiaries in Illinois

Table E-1
Demonstration design features

Key features	Predemonstration	Demonstration
Summary of covered benefits		
Medicare	Medicare Parts A, B, and D	Medicare Parts A, B, and D
Medicaid	Medicaid State Plan services and HCBS waivers	Medicaid State Plan services and HCBS waivers, with care coordination by an MMP
Payment method (capitated/FFS/MFFS)		
Medicare	FFS or Medicare Advantage	Capitated
Medicaid (capitated or FFS)		
Primary/medical	FFS	Capitated
Behavioral health	FFS	Capitated
LTSS (excluding HCBS waiver services)	FFS	Capitated
HCBS waiver services	FFS	Capitated
Care coordination/case management		
Care coordination for medical, behavioral health, or LTSS and by whom	N/A	MMPs
Care coordination/case management for HCBS waivers and by whom	HCBS waiver enrollees receive case management from the agency administering their waivers.	MMP care coordinators are responsible for coordinating HCBS, but plans may contract with existing case management agencies. HCBS waiver administrative agency case managers will continue to administer assessments for eligibility determination.
Community mental health services	Case management is a community mental health service. Case managers coordinate transitions from institutions to communities and assist beneficiaries in accessing mental health and social services.	MMP care coordinators have overall responsibility for coordinating mental health services.
Clinical, integrated, or intensive care management	N/A	Care coordination by MMPs.

(continued)

Table E-1 (continued)
Demonstration design features

Key features	Predemonstration	Demonstration
Enrollment/assignment		
Enrollment method	N/A. Medicare-Medicaid enrollees were not eligible for Medicaid managed care.	Enrollment began with a period of opt-in enrollment, with opt-in enrollments effective on March 1, 2014. Passive enrollment began on June 1, 2014, and continued until the final enrollments took effect in February 2015. Before their effective enrollment date and monthly throughout the demonstration, beneficiaries may opt out of the demonstration, change plans, or disenroll and return to FFS Medicare.
Implementation		
Geographic area	N/A	Two regions: Greater Chicago and Central Illinois
Phase-in plan	N/A	The first enrollment period was opt-in only. First enrollments took effect on March 1, 2014. Passive enrollment began on June 1, 2014, and will continue for at least 6 months, with the final enrollments expected to take effect in February 2015. For passive enrollment, on the first day of each month, up to 5,000 enrollees in the Greater Chicago region and up to 3,000 beneficiaries in the Central Illinois region were enrolled into each plan.
Implementation date	N/A	March 1, 2014

FFS = fee for service; HCBS = home and community-based services; LTSS = long-term services and supports; MFFS = managed fee for service; MMP = Medicare-Medicaid Plan; N/A = not applicable.

SOURCES: CMS and State of Illinois: Contract between United States Department of Health and Human Services Centers for Medicare & Medicaid Services in partnership with State of Illinois Department of Healthcare and Family Services. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/IllinoisContract.pdf. 2013a. As obtained on November 19, 2014.

State of Illinois: Community Mental Health Services: Service definition and reimbursement guide. https://www.hfs.illinois.gov/assets/070107_cmph_guide.pdf. July 1, 2007. As obtained on November 21, 2014.