## FINANCIAL ALIGNMENT INITIATIVE

# MyCare Ohio Second Evaluation Report

March 2022



#### Prepared for

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### **Glossary of Acronyms**

AAA Area agency on aging

ACL Administration for Community Living

ACSC Ambulatory care sensitive condition

CAHPS Consumer Assessment of Healthcare Providers and Systems

CMS Centers for Medicare & Medicaid Services

CMT Contract Management Team

CTM Complaint Tracking Module

DinD Difference-in-differences

D-SNP Dual Eligible Special Needs Plan

EQRO External Quality Review Organization

FFS Fee-for-service

HCBS Home and community-based services

HCC Hierarchical Condition Category

HEDIS Healthcare Effectiveness Data and Information Set

HRA Health risk assessment

IRE Medicare Independent Review Entity

LTC Long term care

LTSS Long-term services and supports

MA Medicare Advantage

MARx Medicare Advantage and Part D Inquiry System

MCO Managed care organization

MDS Minimum Data Set

MLR Medical loss ratio

MMCO Medicare-Medicaid Coordination Office

MMP Medicare-Medicaid Plan

MOU Memorandum of Understanding

NF Nursing facility

PCP Primary care physician or provider

PHE Public Health Emergency

PMPM per member per month

SDRS State Data Reporting System

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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.

Ohio and CMS launched the MyCare Ohio demonstration in May 2014 to integrate care for Medicare-Medicaid beneficiaries in seven regions, covering 29 of Ohio's 88 counties. Five health plans were competitively selected by the State and CMS to operate Medicare-Medicaid Plans (MMPs). 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.

The MyCare Ohio MMPs serve full-benefit Medicare-Medicaid enrollees age 18 and older who are eligible for the demonstration. Beneficiaries who are not eligible for the demonstration include individuals with intellectual and developmental disabilities (IDD) who are served through an IDD 1915(c) home and community-based services waiver or intermediate care facilities for individuals with IDD (ICF/IDD), individuals with third-party creditable health care coverage, and enrollees in the Program of All-Inclusive Care for the Elderly. Medicare-Medicaid beneficiaries who choose not to receive their Medicare benefits through a MyCare Ohio MMP are not enrolled in the demonstration but are still required to receive their Medicaid benefits through a MyCare Ohio plan.

CMS contracted with RTI International to monitor demonstration implementation and to evaluate its impact on beneficiary experience, quality, utilization, and cost. The evaluation includes individual State-specific reports like this one. This second evaluation report for the Ohio demonstration describes implementation of the MyCare Ohio demonstration and early analysis of the demonstration's impacts. The report includes findings from qualitative data for 2017 through 2020 and quantitative results for the first 4 demonstration years, from May 2014 through December 2018.

#### **Highlights**

MyCare Ohio has emerged as a stable demonstration, with enrollment in 2020 at over 60 percent of those eligible, relatively high levels of beneficiary satisfaction, MMPs satisfied with the adequacy of rates, and many challenges associated with the initial rollout resolved. MyCare Ohio has also weathered the COVID-19 public health emergency (PHE), aided by the active engagement and collaboration of Ohio Department of Medicaid (ODM), CMS, and the MMPs. Many enrollees valued the role their care manager plays in helping them to access services and manage their health.

ODM has taken steps to address provider concerns about the burden of contracting with multiple plans. At the same time, during this reporting period (2017–2019), other enrollees and beneficiary advocates cited concerns about the quality of care management services, the quality of other services (particularly transportation), access to needed services, and a growing challenge with workforce shortages that impact MyCare Ohio and other LTSS programs in Ohio.

Integration of Medicare and	In 2021, LTSS providers continued to experience challenges with claims and reimbursement. ODM has taken steps aimed at reducing the administrative burden on providers.
Medicaid	MMPs were given flexibilities within the demonstration during the PHE, including increased use of telehealth and telephonic care management for enrollees.
Eligibility and	More than 134,000 Medicare-Medicaid beneficiaries were eligible for MyCare Ohio in December 2020, and more than 82,000 (61.7 percent) were enrolled.
Eligibility and Enrollment	In 2021, MMPs reported there had been a decline in the number of enrollees opting in compared to early in the demonstration; they attributed this change to competition from Medicare Advantage plans and D-SNPs.
Care	In 2017, ODM required MMPs to adopt a population health management model for care management, with specialized services and resources targeted to the populations of focus.
Management	MMPs reported that providing care management services by phone or videoconference during the PHE was an effective alternative, but not a perfect substitute, to meeting in person.
Stakeholder	After a 2-year pause, the State restarted its stakeholder workgroup in 2019. The group focused on increasing communication with providers and streamlining the delivery system, priorities that became even more important during the PHE.
Engagement	During the PHE, members of MMPs' beneficiary advisory committees participated in meetings virtually. The virtual meetings improved access for some members with transportation barriers or mobility limitations. Others found the technology to be a barrier to accessing meetings.
Financing and	Effective 2020, ODM developed Medicaid capitation rates based on the actual cost experience of the demonstration, rather than projecting what the costs would be absent the demonstration and making adjustments based on assumptions about the savings the MMPs could achieve, as they had in the past.
Payment	The State reported that Medicare and Medicaid expenditures had decreased for the MMPs as a result of the PHE, although the State and MMPs expressed uncertainty about the impact of pent-up enrollee demand for services on future expenditures.

	From 2015–2018, MMPs had mixed performance across HEDIS measures and across years.
Quality of Care	Due to the PHE, CMS suspended data collection for the Healthcare Effectiveness Data and Information Set (HEDIS) measures for the 2019 measurement year and the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey for the 2020 survey year, so the state implemented other quality improvement projects in 2020.
Beneficiary	Many focus group and individual beneficiary interview participants expressed satisfaction with MyCare Ohio overall and said they benefited from care management. At the same time, some participants noted continued challenges accessing needed services and dissatisfaction with the quality of some services.
Experience	The State, MMPs, provider and beneficiary advocates all identified beneficiary access to workers providing personal care and other inhome services as a major and worsening challenge in Ohio, that was exacerbated by the PHE.
Demonstration Impact on Service	As shown in <i>Table ES-1</i> , over the course of the first 4 demonstration years, the number of monthly physician evaluation and monitoring (E&M) visits and the probability of 30-day follow-up after mental health discharge increased among demonstration eligible beneficiaries, relative to the comparison group. There was also a decrease in inpatient admissions and the probability having any long-stay nursing facility (NF) use. However, the probability of ambulatory care sensitive condition (ACSC) admissions (overall and chronic), emergency department (ED) visits, and preventable ED visits also increased relative to the comparison group. There was no demonstration impact on SNF admissions or 30-day all-cause readmissions.
Utilization and Quality of Care	The demonstration impacted the population who receive long-term services and supports (LTSS) differently than the non-LTSS population ( <i>Table ES-1</i> ). The demonstration effect for those with LTSS use was an increase in the probability of inpatient admissions, the probability of skilled nursing facility (SNF) admissions, and the number of physician E&M visits, relative to the demonstration effect for the non-LTSS population. The demonstration was also associated with an increase in the probability of ED visits, and the probability of ACSC admissions (overall and chronic), relative to the demonstration effect for non-LTSS users.

Demonstration
Impact on
Service
Utilization and
Quality of Care
(continued)

**Table ES-1** shows the demonstration also impacted beneficiaries with serious and persistent mental illness (SPMI) differently than those without SPMI. The demonstration effect for those with SPMI was a decrease in inpatient admissions relative to the demonstration effect for the non-SPMI population. The demonstration was also associated with an increase in the number of monthly physician visits and the monthly number of preventable ED visits, relative to the demonstration effect for those without SPMI.

Demonstration Impact on Cost Savings As summarized in *Table ES-2*, relative to the comparison group, the demonstration was associated with statistically significant cost increases to the Medicare program during demonstration years 2 through 4,<sup>1</sup> although it was not associated with a statistically significant increase in Medicare costs during demonstration year 1. The cumulative impact estimate over all 4 demonstration years was statistically significant, suggesting that the demonstration was associated with overall increases in Medicare costs.

*Table ES-1* summarizes the cumulative impact estimates for the Ohio demonstration during demonstration years 1–4 (demonstration start through 2018), relative to the comparison group. It also shows the difference in the demonstration effect for LTSS users relative to non-LTSS users, and for beneficiaries with SPMI relative to those without SPMI.

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<sup>&</sup>lt;sup>1</sup> The demonstration year 1 and 2 effect estimate differs from the results shown in the <u>First Evaluation Report</u>. This difference is due to changes in our methodology. See *Appendix F* for more details.

Table ES-1
Summary of Ohio cumulative demonstration impact estimates for demonstration period,
May 1, 2014–December 31, 2018

Measure	Demonstration effect (all eligible beneficiaries)	Difference in demonstration effect (LTSS versus non- LTSS)	Difference in demonstration effect (SPMI versus non- SPMI)
Probability of inpatient admission	Decrease <sup>G</sup>	Increase <sup>R</sup>	Decrease <sup>G</sup>
Probability of ambulatory care sensitive condition (ACSC) admission, overall	Increase <sup>R</sup>	Increase <sup>R</sup>	NS
Probability of ACSC admission, chronic	Increase <sup>R</sup>	Increase <sup>R</sup>	NS
Count of all-cause 30-day readmissions	NS	NS	NS
Probability of emergency department (ED) visits	Increase <sup>R</sup>	NS	NS
Count of preventable ED visits	Increase <sup>R</sup>	NS	Increase <sup>R</sup>
Probability of 30-day follow-up after mental health discharge	Increase <sup>G</sup>	NS	N/A
Probability of skilled nursing facility (SNF) admission	NS	Increase <sup>R</sup>	NS
Probability of any long-stay nursing facility use	Decrease <sup>G</sup>	N/A	N/A
Count of physician evaluation and management visits	Increase <sup>G</sup>	Increase <sup>G</sup>	Increase <sup>G</sup>

LTSS = long-term services and supports; N/A = not applicable; NS = not statistically significant; SPMI = serious and persistent mental illness.

NOTES: Statistical significance is defined at the α = 0.05 level. For additional details on results, see *Tables E-1, E-2*, and *E-3* in *Appendix E*. Green and red color-coded shading indicates where the direction of the difference-in-differences (DinD) estimate was favorable or unfavorable; green indicates favorable, and red indicates unfavorable. To ensure accessibility for text readers and individuals with sight disabilities, cells shaded green or red receive, respectively, a superscript "G" or "R." Long-stay nursing facility use means stays lasting 101 days or more in a year. In the column for "Demonstration effect (all eligible beneficiaries)," an *Increase* or *Decrease* refers to the *relative* change in an outcome for the demonstration group compared to the comparison group, based on the DinD regression estimate of the demonstration effect during the demonstration period. The results shown in the two columns for "Difference in demonstration effect (LTSS versus non-LTSS)" and "Difference in demonstration effect (SPMI versus non-SPMI)" compare two separate DinD estimates of the demonstration effect—one for the special population of interest (e.g., LTSS users) and another for the rest of the eligible population (e.g., non-LTSS users)—and indicate whether the difference between the two effect estimates is statistically significant (regardless of whether there is an overall demonstration effect for the entire eligible population). In these two columns, an *Increase* or *Decrease* measures the *relative* change in an outcome for the special population of interest compared to the rest of the eligible population. For a given outcome, the result shown for the entire eligible population and that separately for the special population (LTSS users or those with SPMI) can be different from each other.

SOURCE: RTI analysis of Medicare fee-for-service claims and encounter data and Minimum Data Set data.

**Table ES-2** summarizes the demonstration effects on total Medicare Parts A and B expenditures for all eligible beneficiaries, including both the cumulative effect over the four-year demonstration period and the annual effect for each demonstration year.

Table ES-2 Summary of Ohio demonstration effects on total Medicare expenditures among all eligible beneficiaries, May 1, 2014-December 31, 2018

Measure	Measurement period	Demonstration effect
	Cumulative (demonstration years 1–4)	Increase <sup>R</sup>
	Demonstration year 1	NS
Medicare Parts A and B cost	Demonstration year 2	Increase <sup>R</sup>
	Demonstration year 3	Increase <sup>R</sup>
	Demonstration year 4	Increase <sup>R</sup>

NS = not statistically significant.

NOTES: Statistical significance is defined at the α = 0.05 level. For numeric estimates of the demonstration's effect on total Medicare expenditures, see *Figure 22* in *Section 6*. Green and red color-coded shading indicates where the direction of the difference-in-differences (DinD) estimate was favorable or unfavorable; green indicates favorable, and red indicates unfavorable. To ensure accessibility for text readers and individuals with sight disabilities, cells shaded green or red receive, respectively, a superscript "G" or "R." In the column for "Demonstration effect," an *Increase* or *Decrease* refers to the *relative* change in an outcome for the demonstration group compared to the comparison group, based on the DinD regression estimate of the demonstration effect during the demonstration period.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1480\_GLM.log).

# SECTION 1 Demonstration and Evaluation Overview



#### 1.1 Demonstration Description and Goals

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 (FAI) to test, in partnerships with States, integrated care models for Medicare-Medicaid enrollees. Under the MyCare Ohio demonstration, CMS and the Ohio Department of Medicaid (ODM) have entered into three-way contracts with five Medicare-Medicaid Plans (MMPs) to provide integrated benefits to all full-benefit Medicare-Medicaid enrollees age 18 and older. Medicare-Medicaid beneficiaries who choose not to receive their Medicare benefits through a MyCare Ohio MMP are not enrolled in the demonstration but are still required to receive their Medicaid benefits through a MyCare Ohio plan.<sup>2</sup> The competitively selected MyCare Ohio MMPs are paid a blended capitated rate for services provided to demonstration enrollees. The demonstration operates in seven regions, covering 29 of Ohio's 88 counties.



<sup>&</sup>lt;sup>2</sup> ODM refers to beneficiaries who receive only Medicaid benefits from a MyCare Ohio plan as the "opt-out" population because they opted out of receiving Medicare benefits through a MyCare Ohio plan. ODM refers to beneficiaries who receive both Medicare and Medicaid benefits through a MyCare Ohio plan as "opt-in" beneficiaries. For the purposes of this evaluation, we refer to the "opt-in" population as demonstration enrollees. The unenrolled Medicare-Medicaid beneficiaries are referred to as the opt-out population.

Launched May 1, 2014, the demonstration was originally contracted to end December 31, 2017. It has since been extended twice and will continue through December 31, 2022.

The <u>First Evaluation Report</u> includes extensive background information about the demonstration.

#### 1.2 Purpose of this Report



In this report we include qualitative evaluation information for calendar years 2017 through 2020 (demonstration years 3 through 6), with relevant updates from early 2021. We refer to this time period as the "reporting period" or "report period" in the qualitative sections. We provide updates to our previous evaluation report in key areas, including enrollment, care coordination, beneficiary experience, and stakeholder engagement activities, and discuss the challenges, successes, and emerging issues identified during the reporting period. We present quantitative analysis results on service utilization, quality of care, and costs for the demonstration period spanning May 1, 2014 through December 31, 2018. The difference in timeframes between qualitative and quantitative analyses is due to the longer lag of secondary data used in quantitative analysis.

#### 1.3 Data Sources

We used a variety of data sources to prepare this report (see below). See *Appendix A*, *Data Sources* for additional detail.

#### **Data Sources**



## KEY INFORMANT INTERVIEWS

Site visit and key informant interviews

Quarterly monitoring calls with CMS and Ohio Department of Medicaid (ODM) officials



#### DEMONSTRATION DATA AND MATERIALS

State Data Reporting System (SDRS) submissions

Demonstration policies, contracts, and other materials



## BENEFICIARY SATISFACTION DATA

Medicare Advantage and Prescription Drug Plan Consumer Assessment of Healthcare Providers and Systems (CAHPS)

Focus group and individual beneficiary interview data from RTI and another CMS contract



## COMPLAINTS AND APPEALS DATA

MMP data reported to ODM and CMS

Complaint Tracking Module (CTM)

Medicare Independent Review Entity (IRE)



#### **QUALITY DATA**

State-specific quality measures

Medicare Healthcare Effectiveness Data and Information Set (HEDIS) measures



#### SERVICE UTILIZATION DATA

CMS administrative files

CMS Medicare claims and encounter data

Medicaid enrollment files

Medicaid claims

Nursing Home Minimum Data Set

Medicare enrollment files

Area Health and Resources Files

American Community Survey



#### **COST DATA**

CMS Medicare Advantage and Part D Inquiry System (MARx) data

Quality withhold repayments

Medicare Part A claims

Medicare Part B claims

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# SECTION 2 Demonstration Design and State Context



#### 2.1 Changes in Demonstration Design

The MyCare Ohio Medicare-Medicaid plans (MMPs) operations under the demonstration are governed by a three-way contract among the State of Ohio, CMS, and the MMPs.<sup>3</sup> CMS and ODM amended the three-way contract two times during this reporting period, making changes to care management, financing, quality measures, and other operational aspects of the demonstration as shown in *Figure 1*. See *Section 3.1*, *Integration of Medicare and Medicaid; Section 3.3*, *Care Management*; *Section 3.5*, *Financing and Payment*; and *Section 3.6*, *Quality of Care* for more details on these changes.

Figure 1
Ohio three-way contract amendments



In response to the COVID-19 Public Health Emergency (PHE), CMS and ODM allowed greater flexibility in service delivery under the demonstration. On March 18, 2020, CMS and ODM sent a memo to all MyCare Ohio MMPs permitting increased flexibilities for certain care management requirements (see *Section 3.3, Care Management*). In May 2020, CMS also approved ODM's request to amend the MyCare Ohio waiver for the duration of the PHE. This

<sup>&</sup>lt;sup>3</sup> MyCare Ohio plans must also comply with a "two-way contract" between the plan and the State, referred to as the provider agreement. The provider agreement governs MyCare Ohio operations for those Medicare-Medicaid beneficiaries choosing to receive only their Medicaid covered services through their MyCare Ohio plan. To the greatest extent possible, State officials seek to achieve consistency between the provider agreement and the three-way contract; for demonstration operations, the provisions of the three-way contract take precedence if there is any inconsistency between the three-way contract and the provider agreement.

amendment expanded the settings in which certain services could be provided; allowed payment to family members for providing direct care services, permitted telephonic assessments and planning processes, and an extension for reassessments; waived signature requirements for durable medical equipment; and suspended or expedited service authorizations based on the individual's priority level (CMS, 2020).

#### 2.2 Overview of State Context

Although Ohio has a long history with Medicaid managed care, prior to the MyCare Ohio demonstration, Medicare-Medicaid beneficiaries were excluded from Ohio's managed care service delivery options.<sup>4</sup> MyCare Ohio is also Ohio's first managed LTSS program (MLTSS).<sup>5</sup> Although the Ohio General Assembly established a study committee in its fiscal year 2019–2020 budget bill, the State had not moved forward with implementation of MLTSS outside the demonstration area or for beneficiaries in the demonstration area who are dually eligible for Medicare and Medicaid. Instead, ODM was focused on the re-procurement process for traditional Medicaid managed care plans, as well as responding to the PHE.<sup>6</sup>

The <u>First Evaluation Report</u> describes Ohio's LTSS rebalancing efforts, including the modification to the State budget consolidating institutional and community-based care into a single line item for LTSS, as well as its participation in the Balancing Incentive Program and the Money Follows the Person demonstration. Although the State's Money Follows the Person program ended in 2018, the State continued its goal to transition more people with LTSS needs back to the community through their HOME Choice program. In 2020, State officials and MMPs mentioned improvements in rebalancing LTSS among demonstration enrollees.

In 2018, the State implemented a behavioral health redesign that carved behavioral health services into Medicaid managed care and overhauled the behavioral health benefit package. The biggest impact of the redesign for MyCare Ohio plans resulted from the changes made to the behavioral health benefit package, which included changes to how behavioral health providers delivered and billed for services, as well as updates to licensing and credentialing requirements (ODM and OhioMHAS, 2020). One MyCare Ohio plan said that the behavioral health redesign expanded the number of community and behavioral health providers participating in Medicare who had previously provided only Medicaid-funded services. This improved access to behavioral health services for beneficiaries.

In January 2019, ODM began implementing a phased approach to aligning four of the State's home and community-based services (HCBS) waivers, including MyCare Ohio, Ohio Home Care, PASSPORT, and Assisted Living waivers. The alignment process focuses on bringing some efficiencies and reducing administrative burden for managed care plans and the providers delivering waiver services. The intent is to establish a common set of service definitions and specifications and one set of clinical practice standards, as well as shared infrastructure, including one incident management system, one monitoring system for waiver providers, a consistent model of participant direction across the waiver delivery system, and a

<sup>&</sup>lt;sup>4</sup> The <u>First Evaluation Report</u> provides more detail about Ohio's experience with Medicaid managed care.

<sup>&</sup>lt;sup>5</sup> Both the MLTSS and MMPs are referred to as MyCare Ohio plans.

<sup>&</sup>lt;sup>6</sup> As of April 2021, Ohio completed the re-procurement for its traditional Medicaid program.

single point of entry for waiver providers (ODM 2019). As of early 2021, this initiative had been sidelined by the PHE.

Ohio was not among the 15 States awarded a demonstration design (planning) contract<sup>7</sup> from CMS under the FAI, and therefore was also ineligible to receive subsequent CMS funding for implementation support. The MyCare Ohio Ombudsman program received some Federal grant funding through the first 3 years of demonstration, which ended in March 2017. The program was awarded another Federal grant starting in January 2017 for regional ombudsman offices serving demonstration regions to conduct one-on-one counseling and beneficiary outreach. In 2020, an Ombudsman representative reported that the program had received funding from the State until 2019, and since then has relied only on Federal funding.

<sup>&</sup>lt;sup>7</sup> States awarded design contracts included California, Colorado, Connecticut, Massachusetts, Michigan, Minnesota, New York, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Vermont, Washington, and Wisconsin.

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# SECTION 3 Update on Demonstration Implementation



In this section, we provide updates on important aspects of the demonstration that have occurred since the <u>First Evaluation Report</u>. This includes updates on integration efforts, enrollment, care coordination activities, stakeholder engagement activities, financing and payment, and quality management strategies.

#### 3.1 Integration of Medicare and Medicaid

LTSS providers continued to experience challenges with claims and reimbursement. In early 2021, ODM took steps to reduce the administrative burden on providers.

MMPs reported being afforded flexibilities within the demonstration during the PHE, including increased use of telehealth and telephonic care management for enrollees.

Each of the five MyCare Ohio MMPs operates under a three-way contract with ODM and CMS. ODM and CMS jointly manage contracts as part of the Contract Management Team (CMT) which, in addition to its performance and quality monitoring functions,<sup>8</sup> has served as a vehicle for aligning Medicare and Medicaid policy and systems, streamlining communication with the MMPs, and providing technical assistance to them. The CMT met with the MMPs monthly with responsibility for agenda setting rotating each month among ODM, CMS, and the MMPs. Although ODM, CMS, and the MMPs continued to see the value of the CMT meetings, at the time of the 2020 site visit, two MMPs suggested the meetings should be less frequent now that MyCare Ohio is a mature demonstration and there is less need for technical assistance. During the PHE, CMT meetings included time to discuss COVID-19 and talk through any general issues or questions. ODM and MMPs reported increased communication and collaboration among MMPs during the PHE.

Each MyCare Ohio MMP has contracted with medical, behavioral health, and LTSS providers to provide integrated Medicare and Medicaid services. In general, the Ohio Medicaid program has a shortage of dental providers. According to ODM and the MMPs, Ohio has other provider shortages, that do not appear to be unique to the State's Medicaid program.

As discussed in the <u>First Evaluation Report</u>, early in the demonstration LTSS and behavioral health providers experienced lengthy payment delays. The providers were not experienced with managed care and the MMPs were not experienced working with LTSS and behavioral health providers. The MMPs formed collaboratives to address these problems. In early 2020, ODM reported that LTSS providers continued to experience challenges submitting clean claims. ODM has authority to impose penalties on those MMPs failing to pay "clean" claims timely. ODM's data show MMPs are meeting timeliness requirements for paying clean claims. Although ODM did not yet have a clear understanding of why payments were delayed, state officials believed part of the problem related to the complexity of submitting claims deemed to be clean according to the different requirements used by each of the five plans. In early 2021,

<sup>10</sup> See the Ohio three-way contract, Section 5.1.9.

<sup>&</sup>lt;sup>8</sup> See *Section 3.6.1*, *Quality Management Structures and Activities*, for more information about the quality and performance monitoring activities of the CMT.

<sup>&</sup>lt;sup>9</sup> A "clean claim" is a claim that can be processed without obtaining additional information from the service provider or from a third party (Ohio three-way contract, Section 1.15).

the State and MMPs said they believed the problem had been solved, but providers said they had simply stopped complaining and hired staff dedicated to submitting claims.

ODM responded to LTSS provider complaints about the administrative burden of working with multiple plans by developing a single-provider credentialing process to serve the needs of all Medicaid managed care plans, and to be consistent with the National Committee for Quality Assurance's credentialing requirements. The new centralized credentialing process is scheduled to be rolled out in 2021.

To address similar nursing facility concerns about the administrative burden of complying with multiple MyCare Ohio plans' requirements, as part of the 2019 amendment to the three-way contract, the MMPs were required to conduct a quality improvement project focused on reducing the administrative burden for nursing facilities (see *Section 3.6.1, Quality Management Structures and Activities*).

As discussed in *Section 2.2, Overview of State Context*, the State credited the MMPs with helping behavioral health providers adapt to the behavioral health redesign. With the redesign, behavioral health providers had to adapt to new ways of delivering services and 150 new service codes instead of the 12 previous service codes for behavioral health services. Although the transition to the redesigned services was challenging, according to ODM and MMPs, it was easier for providers already participating in MyCare Ohio who were familiar with the plans' systems.

MMPs have successfully implemented alternative payment arrangements with nursing facilities. For example, one MyCare Ohio MMP rewards nursing facilities for improving their quality metrics, as reported and tracked by CMS. Another MMP reported that negotiating risk-based alternative payment arrangements with providers is more difficult because enrollment is relatively small, when broken down by region and then by subsets of providers. In early 2021, one MMP updated the quality metrics in its quality incentive program with nursing homes to better reflect the MMP's current focus on issues such as emergency department (ED) visits and hospital readmissions.

CMS and the MMPs made several changes in response to the COVID-19 PHE. MMPs reported being afforded flexibilities within the demonstration during the PHE, such as increased use of telehealth and telephonic care management for enrollees. Telehealth and telemonitoring were most often conducted over the telephone. See further discussion of telehealth in *Section 4*, *Beneficiary Experience*. MMPs also reported that Medicaid was sometimes used to cover services Medicare did not cover. For example, telehealth services were less restrictive under Medicaid. Finally, ODM created a new benefit called health care isolation centers, which are nursing facilities providing a quarantine level of care.

#### 3.2 Eligibility and Enrollment

More than 134,000 Medicare-Medicaid beneficiaries were eligible for MyCare Ohio in December 2020, and more than 82,000 (61 percent) were enrolled.

Enrollment system glitches in 2019 and 2020 caused enrollment backlogs that have since been addressed.

MMPs reported there had been a decline in the number of beneficiaries opting in compared to early in the demonstration, and attributed this to competition from Medicare Advantage plans and D-SNPs.

In this section we provide updates in eligibility and enrollment processes, including integration of eligibility systems, enrollment methods, and outreach. We also discuss significant events affecting enrollment patterns during the timeframe covered by this report.

Enrollment in the MyCare Ohio demonstration increased each year from its beginning until 2019, although the rate of increase slowed over time (see *Table 1*). In 2019, enrollment declined by 5 percent, from 66 percent to 61 percent of eligible beneficiaries. In early 2020, MMPs voiced concerns about this decrease. In the fall of 2019, ODM identified an error that may at least partially explain this decrease. In particular, ODM found that it had incorrectly limited enrollment to only beneficiaries enrolled in Medicare Part C and excluded beneficiaries enrolled in traditional Medicare. As a result, 14,218 eligible beneficiaries were erroneously excluded from passive enrollment. This problem was remedied by the spring of 2020. In the fall of 2020, ODM identified another problem in the enrollment system that caused Ohio's Medicaid Management Information System (MMIS) to incorrectly identify ineligible employer-based coverages for approximately 500 MyCare Ohio enrollees and approximately 12,000 beneficiaries who were eligible for MyCare but had not yet been passively enrolled. The State planned to passively enroll these beneficiaries from March through May of 2021.

Correcting these system errors likely contributed to a 10 percent increase in eligible beneficiaries and an 11 percent increase in enrollees in 2020. The increase may also be partially explained by ODM's pausing Medicaid eligibility recertifications during the PHE, a flexibility granted states by CMS. As of December 2020, over 82,000 (62 percent) of more than 134,000 eligible beneficiaries were enrolled in the demonstration.

Table 1
Demonstration enrollment

Year	Beneficia	gibility ries eligible to the demonstration	Beneficiaries	Ilment enrolled in the estration	Percentage of eligible beneficiaries enrolled in the demonstration	
	Number	Percent Change	Number Percent Change			
2014	92,994		16,007		17.2%	
2015	90,811	-2%	60,321	277%	66.4%	
2016	100,816	11%	69,331	15%	68.8%	
2017	110,346	9%	74,597	8%	67.6%	
2018	118,839	8%	78,873	6%	66.4%	
2019	121,579	2%	74,698	-5%	61.0%	
2020	134,194	10%	82,863	11%	61.7%	

SOURCE: RTI International: State Data Reporting System (SDRS).

NOTE: This table presents the number of eligible and enrolled beneficiaries as of the last day of December of each year represented.

MMPs credited the design of MyCare Ohio with the relatively high rate of enrollment. All eligible Medicare-Medicaid beneficiaries must enroll in a MyCare Ohio plan, whether they receive integrated Medicare-Medicaid benefits through the MyCare Ohio plan, or only their Medicaid benefits. The passive enrollment process presumes that the beneficiary will participate in the demonstration and the beneficiary must opt out of the demonstration, or actively choose to receive only their Medicaid benefits through their MyCare Ohio plan.

Over the course of the demonstration, the number of errors occurring during the enrollment process and the resulting labor-intensive corrections have declined. In 2020, MMPs reported that they experienced fewer discrepancies between ODM's identification of beneficiaries eligible for passive enrollment and those determined eligible by CMS. In 2019, ODM implemented rapid reenrollment for demonstration enrollees involuntary disenrolled because they lost (but subsequently regained) their Medicaid eligibility. As of early 2020, ODM did not have enough experience with the rapid reenrollment to know whether this change had an impact on overall enrollment. This change did not apply in 2020 because of Ohio's compliance with Medicaid maintenance of effort requirements during the PHE.

In early 2021, MMPs reported higher proportions of enrollees opting out of the demonstration than early in the demonstration and attributed this to competition from Medicare Advantage plans, or to provider influence. One MMP planned to make its MyCare Ohio product more attractive to potential and existing enrollees by adding supplemental benefits in future years. This MMP explained that Dual Eligible Special Need Plans (D-SNPs) are competing for the same potential enrollees by offering richer supplemental benefits and it needs to keep up. Another MMP mentioned that D-SNPs are often able to provide more benefits than MMPs. They attributed this to the financial structure under which D-SNPs get paid bonuses based on star ratings, while MMPs are working under the withhold payment model.

In 2020, one MMP conducted a successful campaign to convert opt-out members to enrollees in the demonstration. This campaign involved mail and telephone contact that explained the benefits of opting in. The MMP planned to conduct a similar campaign in 2021.

#### 3.3 Care Management

With the October 2017 contract amendment, ODM began requiring MMPs to adopt a population health management model for care management, with specialized services and resources targeted to the populations of focus.

Although MMPs reported that providing care management services by phone or video conference during the PHE could be an effective alternative to meeting in person, they also noted that this method was not a perfect substitute.

In this section we provide a summary of the MyCare Ohio care management model.<sup>11</sup> We highlight the status of and major accomplishments in key care management components and processes: assessment, care planning, LTSS coordination, and information exchange.

#### 3.3.1 Care Management Model

Care management is a central function of MyCare Ohio, and MMPs are required to provide care management services to all enrollees through interdisciplinary care teams<sup>12</sup> consisting of the enrollee, a family caregiver, the care manager, the waiver service coordinator if appropriate, the primary care provider, and any other specialists or other providers as necessary to effectively meet the enrollee's needs. Aside from ensuring that plans' care management models are person-centered, promote enrollees' ability to live independently, and coordinate the full set of Medicare and Medicaid benefits (including medical, behavioral health, LTSS, and social support services), State officials gave the MMPs considerable flexibility in designing their care management processes (Ohio three-way contract, 2014, p. 31).

As noted in the <u>First Evaluation Report</u>, MyCare Ohio MMPs are required to contract with Area Agencies on Aging (AAAs) to coordinate waiver services for members who are age 60 or older. MMPs have the option to delegate waiver service coordination for enrollees under age 60, and care management for all other services for both the older and younger age groups. Three plans have designed their care model to retain all care management and waiver service coordination, partnering with the AAAs for waiver service coordination only for enrollees age 60 and older. In contrast, the remaining two MMPs have opted to fully delegate care management and waiver service coordination for all age groups to the AAAs, when the beneficiary is receiving HCBS.

Some beneficiary stakeholders believed that the AAA service coordinators are better equipped to serve people living with disabilities, including those members under age 60,

<sup>&</sup>lt;sup>11</sup> Ohio uses "care management" to describe the function MMPs use for taking responsibility for the whole person, across the continuum of care, including acute care, LTSS, and behavioral health.

<sup>&</sup>lt;sup>12</sup> In the Ohio MyCare demonstration, these teams are called "trans-disciplinary care teams."

<sup>&</sup>lt;sup>13</sup> MMPs may also contract with other entities that have experience working with people who have disabilities (Ohio three-way contract, 2019, p.44).

compared to the MMP care managers. These stakeholders noted that because AAAs have been coordinating waiver services for enrollees over and under age 60 for several years, the AAA coordinators tended to have a better understanding of the different needs of the younger populations with disabilities.

During 2019 and 2020, the MMPs reported increasing their focus on improving coordination and communication with the AAAs. For example, one MMP mentioned in 2019 that they had a dedicated plan manager for each of the AAAs with which it contracts, and the plan manager held regular committee meetings with the AAA coordinators. In early 2020, another MMP said that it recently initiated a pay-for-performance contract with the AAAs to encourage better care coordination among the plan's enrollees who use waiver services. In early 2020, beneficiary and provider stakeholders noted that MMPs were requiring the AAAs to take on increasing responsibilities—including increased reporting about enrollees—in care management for enrollees using waiver services.

As part of the October 2017 contract amendment, MMPs were required to adopt a population health management model for care management. The requirements included adding population stream categories (i.e., women of reproductive age, behavioral health, chronic conditions, and healthy adults) to their care management model. MMPs must describe the specialized services and resources tailored to each population stream (Ohio three-way contract, 2019, p. 44). These population health requirements align with those required for traditional Medicaid managed care plans. In 2019, ODM regularly held population health meetings where plans discussed which quality measures to use for the different population stream categories.

In early 2021, MMPs reported on their care management strategies for reducing health disparities. One MMP has a 5-year global plan for improving population health by 20 percent in four to six communities by improving the referral rate to social service agencies or community-based organizations for enrollees needing those services. Another MMP identified geographic areas where disparity is greater but uptake is low for people who need services. This MMP successfully increased uptake for COVID-19 testing by sponsoring testing in local churches used by target populations.

In response to the PHE, CMS granted ODM's request to modify the way MMPs provided care management. In particular, the MyCare Ohio §1915c waiver was modified for the duration of the PHE to allow MMPs to conduct telephonic assessments and planning processes; give MMPs an extension for conducting reassessments; waive signature requirements for durable medical equipment; and suspend or expedite service authorizations based on the enrollee's priority level. Disenrollment because of lost Medicaid eligibility was also suspended. To ensure that MMPs and AAAs had consistent guidance on how to provide care management during the PHE, ODM also developed an emergency case management protocol. The State described the protocol as a "living document," under constant revision as circumstances and information changed. The protocol included guidance on developing health, safety, and welfare plans when services could not be provided in the enrollee's home.

#### 3.3.2 Assessment

The October 2017 contract amendment streamlined the assessment processes and provided MyCare Ohio plans with more flexibility to develop individual care plans for members. The amendment allowed MMPs to use a shorter health risk assessment (HRA) for lower risk populations, modified the beneficiary risk stratification level framework, and reduced the minimum frequency monitoring requirements based on risk stratification levels (Ohio three-way contract, 2017, p. 40).

In 2019, ODM officials reported that they had updated assessment requirements so that MMPs could focus more on addressing the individual enrollee needs and less on meeting the original compliance deadlines, which many plans had found burdensome. In general, plans mentioned their appreciation for the increased flexibility with the assessment process. As of 2020, many MMPs continued to use the more comprehensive assessment for everyone, while waiting for the State to develop a standardized HRA tool before changing their processes. In early 2021, ODM reported that, in mid-2019, it had developed a shorter health risk assessment tool that captures information about the social determinants of health. The assessment tool can be used as a standalone or as part of a comprehensive assessment. ODM has asked MMPs to complete the assessment for all enrollees. One MMP supplements this assessment with a predictive tool that connects medical spending to the neighborhood conditions of where their enrollees live.

*Table 2* shows that the percentage of members who could not be reached within 90 days of enrollment increased overall through the demonstration to date (2014–2020), ranging from 4.4 percent in quarter 3 of 2014 to a high of 39.0 percent in quarter 2 of 2020. According to CMS, MMPs cited the challenges of reaching enrollees residing in nursing facilities during the PHE as contributing to the increases observed in 2020.

Table 2
Percentage of members that MyCare Ohio plans were unable to reach following three attempts, within 90 days of enrollment, 2014–2020

Quarter	Calendar year 2014	Calendar year 2015	Calendar year 2016	Calendar year 2017	Calendar year 2018	Calendar year 2019	Calendar year 2020
Q1	N/A	5.4	16.8	27.5	25.2	29.9	19.6
Q2	N/A	12.1	19.1	25.6	28.9	34.0	39.0
Q3	4.4	9.2	16.9	23.5	26.4	30.1	36.9
Q4	5.3	15.4	21.0	24.9	32.7	20.6	33.9

MMP= Medicare-Medicaid Plan; N/A= not applicable; Q = quarter.

NOTE: Because the Ohio demonstration began in May 2014, data are not applicable for quarter 1 and quarter 2 of 2014.

SOURCE: RTI analysis of MMP-reported data for Core Measure 2.1 as of October 2021. The technical specifications for this measure are in the <a href="Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements">Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements</a> document.

In early 2020, MMPs reported that the community-well population (i.e., enrollees who do not meet a nursing facility level of care) continued to be the hardest to reach population because of their overall lower needs and use of services. MMPs noted the importance of engaging this

population because they are likely to have chronic conditions that could be better addressed through care management. One MMP mentioned that in 2019, it shifted care management for its community-well population to the plan's care managers rather than through a vendor because it found that the plan's care managers were more effective in reaching this population after implementing several engagement strategies. Another MMP eliminated the use of telephonic care manager teams and used community health workers, particularly those with behavioral health backgrounds, to work in the field to engage community-well members.

In early 2021, one MMP reported that contact information for enrollees provided by the State was often inaccurate. The MMP described multiple strategies for locating the enrollee in the absence of up-to-date contact information, including contacting the enrollee's primary care provider, pharmacy, and home care agency. Once the individual is contacted, the care manager tries to identify another person, such as a family member or caregiver, who can be contacted when the enrollee cannot be reached. This person could also be a member of the enrollee's care team.

The October 2017 contract amendment relaxed the timeline requirements for assessment completion by MMP care managers. Initially, the timeline varied depending on the risk stratification. For example, care managers were required to conduct the assessments within 15 days of enrollment for enrollees in the intensive tier and within 75 days for enrollees assigned to the monitoring and low tiers (Ohio three-way contract, 2014, pp. 34–5). The 2017 contract amendment allowed plans to complete assessments for all enrollees within 75 days of the enrollment effective date. In 2020, several MMPs mentioned that they appreciated these relaxed timeline requirements.

As indicated in *Table 3*, the percentage of members with an assessment completed within 90 days of enrollment varied over the course of the demonstration, with a low of 50.4 percent and a high of 69.8 percent. The percentage of members willing to participate and who could be reached, with an assessment completed within 90 days of enrollment, had a noticeable increase from 2014 to 2020, increasing to results in the 90 percent range beginning in quarter 2 of 2018.

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<sup>&</sup>lt;sup>14</sup> Effective February 1, 2020, CMS and ODM amended the three-way contract to allow plans to complete assessments within 90 days for new enrollees who have enrollment effective dates of February 1, 2020, March 1, 2020, or April 1, 2020. CMS and ODM included this addendum to account for the backlog of new enrollees resulting from an error in the State's eligibility system (CMS and ODM, 2020). As noted in *Section 2.1*, *Changes in Demonstration Design*, CMS and ODM extended the 90-day requirement for completing assessments until further notice to account for the PHE.

Table 3 Members whose assessments were completed within 90 days of enrollment, 2014–2020

	Members whose 90th day of enrollment occurred within the	Percentage of assessments completed within 90 days of enrollment			
Quarter	reporting period and who were currently enrolled at the end of the reporting period	All members	All members willing to participate and who could be reached		
2014					
Q1	N/A	N/A	N/A		
Q2	N/A	N/A	N/A		
Q3	10,333	56.1	59.1		
Q4	1,899	63.6	67.7		
2015					
Q1	46,901	69.8	74.8		
Q2	5,390	63.5	73.4		
Q3	4,377	66.9	75.0		
Q4	4,905	64.0	77.9		
2016					
Q1	4,206	68.4	85.0		
Q2	5,442	66.2	84.5		
Q3	4,771	64.8	80.0		
Q4	4,765	62.9	82.8		
2017					
Q1	9,035	50.8	74.6		
Q2	7,492	60.2	86.0		
Q3	5,416	63.9	88.9		
Q4	8,482	58.0	83.5		
2018					
Q1	4,926	61.7	87.8		
Q2	8,048	59.8	92.1		
Q3	5,787	65.1	93.9		
Q4	9,162	59.5	94.4		
2019					
Q1	6,928	58.6	91.0		
Q2	8,297	55.6	92.5		
Q3	5,745	58.8	92.3		
Q4	3,384	68.7	92.8		

(continued)

Table 3 (continued)
Members whose assessments were completed within 90 days of enrollment, 2014- 2020

	Members whose 90th day of enrollment	Percentage of assessments completed within 90 days of enrollment			
Quarter	occurred within the reporting period and who were currently enrolled at the end of the reporting period	All members	All members willing to participate and who could be reached		
2020					
Q1	3,173	67.4	89.4		
Q2	11,080	50.4	91.9		
Q3	6,965	52.7	95.0		
Q4	5,903	52.4	93.2		

MMP = Medicare-Medicaid Plan; N/A = not applicable; Q = quarter.

NOTE: Because the Ohio demonstration began in May 2014, data are not applicable for quarter 1 and quarter 2 of 2014.

SOURCE: RTI analysis of MMP-reported data for Core Measure 2.1 as of October 2021. The technical specifications for this measure are in the <a href="Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements">Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements</a> document.

During the PHE, MMPs reported that the lack of face-to-face contact limited the value of the assessment process in general. Case managers were not able to see the home environment to fully assess an individual's needs or get to know the enrollee well enough to fully understand their needs. Although some enrollees were able to participate in the assessment by video, one MMP noted that care managers had to work harder to connect with the enrollees who could only participate by phone. Access to nursing facility residents was very limited, and MMPs accessed electronic medical records to complete assessments.

# 3.3.3 Care planning

MMPs continued to improve their care plan completion rates. *Table 4* includes care plan data for the State-specific measure (OH 1.1), which was active from 2014 through 2017 and was retired in quarter 1 of 2018. While the percentage of enrollees with care plans completed within 90 days of enrollment varied from 2014 to 2017, it increased from 19.6 percent in quarter 2 of 2014 to a range of 48.6 to 59.6 percent in 2015–2017. For all enrollees willing to participate and who could be reached, the percentage also increased overall, with a low of 22.3 percent in quarter 2 of 2014 and a high of 80.9 percent in quarter 3 of 2017.

Table 4
Members with care plans completed within 90 days of enrollment, 2014–2017

Quarter	Total number of members whose 90th day of	Percentage of care plans completed within 90 days of enrollment		
	enrollment occurred within the reporting period	All members	All members willing to complete a care plan and who could be reached	
2014				
Q1	N/A	N/A	N/A	
Q2	13,341	19.6	22.3	
Q3	10,643	39.1	43.3	
Q4	1,929	49.5	52.6	
2015				
Q1	46,014	57.7	62.5	
Q2	5,694	59.7	66.7	
Q3	4,537	55.7	63.0	
Q4	5,178	54.3	63.1	
2016				
Q1	4,541	59.1	74.3	
Q2	6,018	57.3	74.1	
Q3	5,306	59.6	73.9	
Q4	5,330	57.6	75.7	
2017				
Q1	9,500	48.6	71.3	
Q2	7,953	55.8	80.1	
Q3	5,816	57.0	80.9	
Q4	9,133	53.2	78.2	

MMP = Medicare-Medicaid Plan; N/A = not applicable; Q = quarter.

NOTES: Because the Ohio demonstration began in May 2014, data are not applicable for quarter 1. Quarter 2 of 2014 covers data for the period of May 2014 to June 2014. All subsequent quarters contain 3 months of data

SOURCE: RTI analysis of MMP-reported data for State-specific Measure OH 1.1 as of June 2021. The technical specifications for this measure are in the <a href="Medicare-Medicaid Capitated Financial Alignment Model Ohio-Specific Reporting Requirements">Medicare-Medicaid Capitated Financial Alignment Model Ohio-Specific Reporting Requirements</a> document.

**Table 5** reports care plan data for 2018 through 2020 using a core measure (Core Measure 3.2). For all enrollees with a care plan completed within 90 days of enrollment, the percentage ranged from 49.5 percent to 66.7 percent. For all enrollees willing to participate and who could be reached, the percentage increased from its low of 80.9 percent in quarter 1 of 2018 to its high of 92.0 percent in quarter 3 of 2020.

Table 5
Members with care plans completed within 90 days of enrollment, 2018–2020

	Total number of members whose 90th day	Percentage of care plans completed within 90 days of enrollment			
Quarter	of enrollment occurred within the reporting period and who were currently enrolled at the end of the reporting period	All members	All members willing to complete a care plan and who could be reached		
2018					
Q1	4,926	55.4	80.9		
Q2	8,048	54.9	85.9		
Q3	5,787	61.5	89.6		
Q4	9,162	56.6	91.4		
2019					
Q1	6,928	56.4	87.2		
Q2	8,297	53.5	89.3		
Q3	5,745	57.6	89.1		
Q4	3,384	66.7	90.0		
2020					
Q1	3,173	65.7	86.8		
Q2	11,080	49.5	89.0		
Q3	6,965	52.0	92.0		
Q4	5,903	53.0	90.3		

MMP = Medicare-Medicaid Plan; Q = quarter.

SOURCE: RTI analysis of MMP-reported data for Core Measure 3.2 as of October 2021. The technical specifications for this measure are in the <u>Medicare-Medicaid Capitated Financial Alignment Model Core</u> Reporting Requirements document.

As shown in *Table 6*, the percentage of members with at least one documented discussion of care goals in their care plan was consistently high throughout the demonstration, remaining in the 90 percent range for all but one quarter through 2014 through 2020. The highest percentages were reported in 2018 and 2019. Findings from the State's external quality review organization's (EQRO) care plan reviews for State fiscal year 2019<sup>15</sup> suggested that MMPs had improved their care plans and that they were more person-centered. The review indicated that 100 percent of all the care plans evaluated for all five plans included person-centered care plans with prioritized measurable goals, interventions, and anticipated outcomes with completion time frames.

<sup>&</sup>lt;sup>15</sup> July 1, 2018–June 30, 2019.

Table 6
Members with documented discussion of care goals, 2014–2020

Quarter	Total number of members with an initial care plan completed	Percentage of members with at least one documented discussion of care goals in the initial care plan		
2014				
Q1	N/A	N/A		
Q2	N/A	N/A		
Q3	3,667	92.3		
Q4	3,763	90.0		
2015				
Q1	15,372	94.9		
Q2	7,189	83.1		
Q3	9,328	91.8		
Q4	6,689	91.9		
2016				
Q1	4,702	90.1		
Q2	3,314	91.3		
Q3	3,088	92.9		
Q4	3,965	93.0		
2017				
Q1	4,680	91.0		
Q2	4,358	89.5		
Q3	5,067	92.2		
Q4	4,373	91.7		
2018				
Q1	5,366	96.3		
Q2	4,761	96.5		
Q3	5,351	97.8		
Q4	5,906	98.2		
2019				
Q1	5,528	98.4		
Q2	5,074	97.4		
Q3	3,611	96.2		
Q4	2,910	94.2		

(continued)

Table 6 (continued)
Members with documented discussion of care goals, 2014-2020

Quarter	Total number of members with an initial care plan completed	Percentage of members with at least one documented discussion of care goals in the initial care plan
2020		
Q1	4,312	96.5
Q2	4,921	97.3
Q3	4,246	98.3
Q4	3,203	98.6

MMP = Medicare-Medicaid Plan; N/A= not applicable; Q = quarter.

NOTE: Because the Ohio demonstration began in May 2014, data are not applicable for quarter 1 and quarter 2 of 2014.

SOURCE: RTI analysis of MMP-reported data for State-specific Measure OH 1.2 as of October 2021. The technical specifications for this measure are in the <a href="Medicare-Medicaid Capitated Financial Alignment Model Ohio-Specific Reporting Requirements">Medicare-Medicaid Capitated Financial Alignment Model Ohio-Specific Reporting Requirements</a> document.

During the reporting period, several stakeholders—including beneficiary advocates and ODM—continued to report challenges with MMP care manager turnover rates although MMP reporting indicates improvement in this area. As indicated in *Table 7*, the number of full-time care coordinators increased overall during the demonstration to date (2014–2020), and the turnover rate decreased. After 2014, the percentage of care coordinators assigned to care management activities remained very high, in the 90 percent range. After a notable low in 2014, average caseloads (member loads) varied between 62.1 and 74.6.

Table 7
Care coordination staffing, 2014–2020

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	867	82.7	22.4	17.6
2015	1,015	91.3	65.1	14.5
2016	934	99.5	74.6	16.1
2017	1,090	97.3	70.3	16.5
2018	1,165	93.6	70.9	8.7
2019	1,273	94.6	62.1	7.4
2020	1,246	91.2	73.0	7.9

FTE: full time equivalent; MMP = Medicare-Medicaid Plan.

SOURCE: RTI analysis of MMP-reported data for Core Measure 5.1 as of June 2021. The technical specifications for this measure are in the <a href="Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements">Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document.</a>

Several MMPs mentioned their increased focus on care manager training to address care manager turnover rates and improve overall care management services. In 2020, one MMP launched a care management best practice institute designed to give its care managers additional tools and best practices for care models, including such topics as advanced care planning, discussions on financial literacy, and the care manager's role in utilization management. The MMP also hired a pharmacist to provide consultations to the care managers and educate them on best practices for medication management. Another MMP mentioned that in 2019, it trained its care managers on how to better prepare and focus trans-disciplinary care team conferences to be more person-centered.

During the reporting period, MMPs said they continued to struggle to manage care for enrollees transitioning from the hospital and tried different strategies to address these challenges. In early 2020, one MMP mentioned specifically focusing on identifying individuals transitioning out of inpatient behavioral health. Another MMP included care managers onsite at several hospitals and used telephonic outreach after enrollees were discharged from the hospital. This MMP thought its efforts were helping because its all-cause readmission rate had improved over the previous year.

ODM and MMPs reported significant improvements with plans' efforts to transition members back into the community from nursing homes and balance their overall LTSS. ODM officials noted that the MyCare Ohio MMPs partnered with the Ohio's nursing facility transition program, HOME Choice, and in 2019, mentioned that the plans and HOME Choice program worked well together in their efforts to transition members back into the community. At the same time, a beneficiary advocate reported that MCOs—MMPs and plans outside of the demonstration—often complicated nursing facility transitions and failed to arrange for the timely delivery of needed services.

# 3.3.4 Information Exchange

In 2020 ODM and provider stakeholders mentioned that MMPs had improved their exchange of health information, specifically with the AAA coordinators. Some of these improvements were a result of a new requirement under the MyCare Ohio two-way contract, effective January 2019, that requires MyCare Ohio plans to share the following data elements with AAAs: (1) the enrollees' most recent comprehensive assessment and due date; (2) risk stratification and approved contact schedules (i.e., how often the care manager must be in contact with the enrollee based on risk stratification); (3) claims including inpatient hospitalization, ED and waiver services; and (4) any risk agreements as applicable (ODM, 2020). In 2021, one MMP reported that it had been "critically important", especially during the PHE, that AAAs' service coordinators and the MMP's care managers used the same care management system. The service coordinator and care manager had been able to message each other easily to address an enrollee's needs and had been able to coordinate outreach to enrollees to assess whether an enrollee was socially isolated, had limited access to food, and other critical needs.

In 2021, one MMP reported working with its nursing facilities to gain access to their enrollees' electronic medical records. This MMP said it was important to review enrollee records in advance of meeting with an enrollee to improve the quality of care management visits and

minimize the need for enrollees to retell their stories. Nursing facilities varied on whether they incorporated the MMP's care plan into the nursing facility medical record.

As noted in the <u>First Evaluation Report</u>, MyCare Ohio plans must participate in the statewide health information exchange (HIE), which focuses on information exchange between hospitals and health plans. In 2019, ODM noted that information exchange, which generally included admissions, discharge, and transfer information from the hospitals, was not occurring routinely across the delivery system. However, in early 2020, one MMP reported using unique strategies for using the data from the HIE to determining that a visit occurred. This MMP expected this information to provide a more accurate picture of the level of service provided to its members.

## 3.4 Stakeholder Engagement

After a two-year pause, in 2019 the State decided to restart its large stakeholder workgroup. The group focused on increasing communication with providers and streamlining the delivery system, a priority that became even more important during the PHE.

During the PHE, members of MMPs' beneficiary advisory committees participated in meetings virtually. The virtual meetings improved access for some members with transportation barriers or mobility limitations. Others found technology to be a barrier to accessing meetings.

In this section we describe stakeholder engagement activities during the period of this report, and the impact of those efforts on the demonstration.

# 3.4.1 State-Level Engagement Activities

From the beginning of the demonstration until 2017, the State held regular meetings of its stakeholder group, known as the MyCare Ohio Implementation Team, to provide updates and discuss any pertinent issues that the plans were facing. In 2017, the State discontinued these large stakeholder meetings due to decreasing attendance and started to conduct smaller meetings with individual stakeholders and plans. Although some of these smaller workgroups were not MyCare Ohio-specific, participants did discuss demonstration issues.

In 2019, ODM decided to reinstate the larger stakeholder meetings to gather a more holistic view of the issues facing the demonstration. The workgroup is now called the MyCare Stakeholder Workgroup. As of early 2020, ODM had held two meetings with the workgroup. ODM used the first meeting to determine the purpose of the workgroup, and stakeholders were given a survey to share their positive and negative demonstration experiences. In the second meeting, the workgroup reviewed the survey results and discussed a few select issues such as durable medical equipment claims and calculation of patient liability for nursing facility payments. An MMP noted in 2020 that they found ODM to be "a very active regulator" during the Stakeholder Workgroup meetings and appreciated their involvement and efforts. Regular stakeholder activities were postponed in the beginning of the pandemic. The State transitioned

these meetings to a virtual format and the focus of the meetings pivoted to how MMPs and providers were responding to the pandemic.

Through their stakeholder engagement processes, ODM staff have identified several issues that have remained consistent throughout the course of the demonstration. These include the need to increase and maintain communication with enrollees about the complexities of the demonstration and provide them with clarity about their trans-disciplinary care teams. The need to address challenges that providers had getting paid for services, as discussed in *Section 3.1*, *Integration of Medicare and Medicaid*, was another continuing issue. Provider and beneficiary stakeholders also noted turnover in MMP executive and care management staff as a challenge to building consistent relationships. In 2020, the State reported that aside from issues specific to the PHE, many of the issues discussed in the Stakeholder Workgroup were consistent with previous years. However, provider issues, and a focus on hospice providers, were a more prominent part of the 2020 discussions. The State started a hospice provider subgroup to streamline these providers' billing processes and eliminate any confusion from their perspective.

The MyCare Ohio Ombudsman supplemented ODM's stakeholder engagement efforts by continuing to conduct enrollee outreach through community education events. In 2018–2020, the Ombudsman reported conducting extensive outreach through its seven regional ombudsman programs. The Ombudsman office also met regularly with MyCare Ohio plan representatives and participated in MMP beneficiary advisory committees to identify and address enrollee challenges.

In particular, the Ombudsman reported conducting nursing facility staff training; presenting at nursing facility council meetings; meeting with nursing facility residents; and convening a series of meetings bringing together individual nursing facilities and MMPs. As part of this effort, the Ombudsman found that many nursing facility residents were not aware of the MyCare benefits available to them and did not know who their care manager was. These efforts build on outreach activities to senior housing communities, county fairs, houses of worship, and enrollee advisory groups, as described in the <u>First Evaluation Report</u>.

In 2019, one beneficiary advocate indicated that, because the Ombudsman had conducted an effective outreach campaign and provided effective services, fewer people reached out to his advocacy organization with complaints about MyCare Ohio. This advocate also mentioned that his organization did not receive complaints about the quality of the Ombudsman's services.

# 3.4.2 MMP-Level Engagement Activities

The three-way contract requires MyCare Ohio plans to obtain input from enrollees and community stakeholders on program management and beneficiary care issues. The beneficiary advisory committees serve as the MMPs' primary vehicle for soliciting enrollee feedback. Prior to the PHE, these committees met quarterly and provided input to their plan's governing boards.

MMPs mentioned high levels of attendance during their beneficiary advisory committee meetings and found the meetings helpful. During these meetings, MMPs identified a need for better and more efficient communication of new information to beneficiaries. Plans tried to address this deficiency through additional face-to-face meetings between plan staff and beneficiaries. One plan also used an online app to communicate with members and improve their

access to their health information. The Ombudsman often presented at the meetings to remind beneficiaries that its office is available as a resource and to identify common issues across plans.

Beneficiary advocates noted continued challenges with the beneficiary advisory committees. In 2020, as in prior years, the Ombudsman said that nursing facility residents were not engaged with the committees and many nursing facility residents had very little understanding of the MyCare Ohio demonstration and its benefits. Similarly, a beneficiary stakeholder mentioned that enrollees with disabilities did not feel adequately represented at the beneficiary advisory committee meetings. Programs and topics discussed during the beneficiary advisory meetings were geared toward older adults, and the MMPs rarely addressed feedback from members with disabilities.

# 3.5 Financing and Payment

Effective 2020, ODM began developing Medicaid capitation rates based on the actual cost experience of the demonstration, rather than projecting what the costs would be absent the demonstration and making adjustments based on assumptions about the savings the MMPs could achieve.

The State said that both Medicare and Medicaid expenditures decreased for MMPs as a result of the PHE, although the State and MMPs expressed concern that the impact of pent-up enrollee demand for services on future expenditures was uncertain.

In this section we outline changes in financing and payment since 2017 and discuss relevant findings.

# 3.5.1 Rate Methodology

The July 2019 contract amendment included updates to the Medicaid rate methodology. In 2020 (demonstration year 6), ODM began developing Medicaid rates based on the demonstration's actual costs, rather than projecting costs forward absent the demonstration and reducing that by the amount of savings the MMP was expected to achieve. Prior to this change, MMPs had questioned whether continued use of the assumed savings was reasonable for a mature program. As of 2020, ODM continues to use the original methodology as a benchmark for comparing rates developed under the new methodology to ensure that costs are not significantly different from projected costs, absent the demonstration.

In early 2020, ODM officials reported that after implementation of the updated Medicaid rate methodology, the Medicaid rates for the MMPs decreased slightly from 2019 to 2020 by 1.5 to 2 percent. However, ODM officials suggested that the reduction may not have been due to the change in methodology, but rather the result of the decreasing acuity of the community-well populations. MMPs were satisfied with the new rate methodology and the slight rate reductions. In 2020 and 2021, MMPs reported that Medicare and Medicaid rates were adequate. However, one plan noted that it preferred greater transparency about ODM communications with CMS, including the data ODM used when providing the Medicaid rate methodology updates to CMS.

## 3.5.2 Quality Withhold Percentages

For 2017 through 2022 (demonstration years 3 through 8), the quality withhold percentage for the Medicaid rate will continue to remain constant at 3 percent. Starting in 2020 (demonstration year 6), CMS applied an additional 1 percent quality withhold to the Medicare Parts A and B rate component only. Repayment of the additional withheld amount is based on each plan's performance on the Diabetes Care: Blood Sugar Controlled quality measure. As discussed in *Section 3.6, Quality of Care*, in 2020, MMPs expressed concern about this added withhold.

#### 3.5.3 Medical Loss Ratio

The target medical loss ratio (MLR) for the demonstration was initially set at 85 percent for MMPs, the same ratio used for Medicare Advantage plans (Ohio amended three-way contract, 2019). All of the MMPs had MLRs greater than 85 percent for the first 3 years of the demonstration. In demonstration year 1, the MMPs' MLRs ranged from 86.3 to 98.4 percent. In subsequent years, there was less variation: MLRs ranged from 90.3 to 95.5 percent in demonstration year 2 and from 87.4 to 93.8 percent in demonstration year 3.

Under the 2019 contract amendment, the MLR target was adjusted to 86 percent for demonstration year 6 (calendar year 2020), 87 percent for demonstration year 7, and 88 percent for demonstration year 8. As in prior years, for MLRs below 85 percent, MMPs will refund the percentage difference between their actual MLR and the 85 percent threshold, multiplied by the total capitation rate revenue. If an MMP's MLR is below the specified target MLR for a year, it will also remit 50 percent of the percentage difference between its MLR and the adjusted MLR target multiplied by the total capitation rate revenue (Ohio three-way contract, 2019, p. 192).

In early 2020, several MMPs expressed concern with the annual increase in the MLR targets. One MMP expected that the increasing MLR would become challenging to manage, and would perhaps impact the MMP's financial performance. Another MMP suggested that the MLR changes were another mechanism to try to squeeze additional savings out of the MyCare Ohio demonstration, and the plan was not sure that was the most appropriate method. The MMP noted that the MLR increase was more aggressive than any other requirements for its other managed care products, including Medicaid and the federal exchange plans in the Affordable Care Act (ACA) marketplace.

#### 3.5.4 Encounter Data

From 2017 through early 2020, MMPs and ODM reported overall improvements with Medicaid encounter data. In early 2020, ODM noted that approximately 2 percent of the encounters had outstanding issues, and these issues were often more system issues with ODM rather than the MMP submissions. While ODM had started to use demonstration encounter data for rate setting by 2020, the State still collected cost report information to use when the encounter data were lacking. For example, in 2019, ODM said some MMPs used multiple codes for how they accounted for nursing home services, and these codes were not consistently used across the plans. In 2020, ODM mentioned their goal of evaluating consistencies across the plans and whether there were standard code sets that ODM and the plans could agree to use. However,

ODM acknowledged that determining standard codes may be difficult when working with national plans and trying to make changes only in Ohio.

Several MMPs mentioned in 2020 that they would like to see more alignment between CMS and ODM requirements and guidelines for encounter data submissions. For example, one plan said that the requirement to submit Medicaid portions to CMS before submitting to ODM added at least 3 weeks of delay when submitting encounters to ODM and subsequently caused delays to sending adjustments.

Although ODM considered including language in the 2019 three-way contract amendment to increase requirements for encounter data submissions, the final amendment did not include any additional requirements. However, ODM included several requirements in the provider agreement between the State and the MMPs that are related to encounter data submissions, including measures the State relies on to monitor plan compliance.

In early 2021, one MMP reported that it was revising its payment practice and redoing its payment system to simplify its ability to report Medicare and Medicaid encounters. The MMP paid providers a blended rate without distinguishing which share was related to Medicare or Medicaid. However, because MMPs are required to report Medicare and Medicaid encounters separately, this MMP had to develop a method for apportioning Medicare and Medicaid encounters. The MMP has since decided to overhaul its payment system to simplify the process of apportioning claims.

MMPs continued to submit encounter data throughout the PHE. However, ODM chose not to take enforcement actions for noncompliant encounter data.

#### 3.5.5 Cost Experience

In 2019, ODM officials reported that one MMP experienced a loss in 2018. However, as of 2020, the MMPs had generally been profitable, with an average 7.9 percent profit margin. ODM attributed some of the MMPs' profits to their ability to transition members from nursing homes back to the community. Several MMPs also noted their efforts to rebalance their LTSS and transition members to community settings as improving their financial status.

MMPs reported that in effort to achieve savings, they continued to focus on specific high-cost member populations and services. In 2019 and 2020, several plans discussed their focus on inpatient and hospital readmissions. As noted earlier in this report, one MMP discussed its activities related to the transition of care process and supporting those members in an effort to decrease readmissions. The MMP reported declining readmissions, which resulted in cost savings.

For 2021, ODM worked with CMS to implement risk corridors, covering Medicaid and Medicare Parts A and B costs, to mitigate the financial uncertainty associated with the PHE. ODM also implemented targeted risk corridors for its mainstream Medicaid managed care program and for the opt-out portion of MyCare Ohio. ODM reported that, during the PHE, MMP revenue increased, reflecting a decrease in the use of waiver services, savings on nursing facility services due to decreased nursing facility use, and a reduction in elective services, including dental and vision. MMPs and ODM also expressed uncertainty about the impact the PHE would

have on future expenditures, given the likelihood of pent-up enrollee demand for services. One MMP expressed concerns about the assumptions ODM would use to develop rates going forward.

## 3.6 Quality of Care

From 2015 through, 2018 MMPs had mixed performance across Healthcare Effectiveness Data and Information Set (HEDIS) measures and across years.

Due to the PHE, CMS suspended data collection for HEDIS measures for the 2019 measurement year and the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey for the 2020 survey year. As a result, the State implemented other quality improvement projects.

In this section we provide information on the quality measures for the demonstration, updates on the quality management structure and activities for the demonstration, and HEDIS results. We discuss results of the demonstration's impact on quality measures, separately defined using Medicare claims, in *Section 5, Demonstration Impact on Service Utilization and Quality of Care*.

## 3.6.1 Quality Management Structures and Activities

adjustments to the underlying survey. (CMS, 2018.)

The quality management framework for MyCare Ohio includes quality measurement and reporting; monitoring and oversight; MMP quality and performance improvement initiatives; and independent quality management structures and activities.

MMPs submit data for a set of demonstration-wide core and State-specific measures; some of these data are presented in this report. As noted in the <u>First Evaluation Report</u>, implementation of some quality measures has been challenging. ODM reported that in 2019 all of the MMPs had HEDIS-related corrective actions. All five MMPs had compliance actions associated with the measure for breast cancer screening.

A subset of quality measures is used as quality withhold measures for the MMPs. CMS and ODM withhold a percentage of their share of a plan's capitation payment, some or all of which is paid to the plan when specified thresholds for the quality withhold measures are met. Effective the second demonstration year (2016), ODM suspended its two State-specific quality withhold measures, nursing facility diversion and long-term care overall balance, after concluding that success can only be measured at a system level, not the MMP level. As a result, effective the second demonstration year, only six core measures were used as quality withhold measures. <sup>16</sup> Starting in 2020, a new core measure—minimizing institutional length of stay—was

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<sup>&</sup>lt;sup>16</sup> For 2014, only three quality withhold measures were used: assessments, consumer governance boards and nursing facility diversion. For 2015, in addition to these measures, three more measures were added: customer service, encounter data, and getting appointments and care quickly. For 2016 and later, the quality withhold measures have included plan all-cause readmissions, annual flu vaccine, follow-up after hospitalization for mental illness, controlling blood pressure, medication adherence for diabetes medications, and encounter data. A seventh core measure, reducing the risk of falling, has been excluded from the quality withhold analysis pending needed

implemented as a State-specific quality withhold measure of rebalancing.<sup>17</sup> In addition, ODM selected the core HEDIS measure of medication reconciliation post-discharge as a State-specific quality withhold measure, also starting in 2020.

The percentage of capitation withheld each year increased according to schedule, from 1 percent in 2014 and 2015, to 2 percent in 2016 and 3 percent in 2017. As indicated in *Table 8*, the percentage of the withhold returned to the plans has also increased as plan performance has improved and the number of quality withhold measures applied has increased over the course of the demonstration. Due to the PHE, HEDIS measure collection was suspended for the 2019 measurement year. As a result, for purposes of the quality withhold analysis, all MMPs received an automatic "met" designation for the unreported measures in the calendar year 2019 quality withhold analysis. Due to suspension of HEDIS data collection, the State implemented other quality improvement projects for 2020, including working with nursing homes on infection control, getting technology to members so they could use telehealth, and expanding transportation.

Table 8
Percentage of withheld capitation received by MyCare Ohio MMPs, calendar years 2014–2019

MyCara Ohio MMD	Percentage of withhold received					
MyCare Ohio MMP	2014	2015	2016	2017	2018	2019
Aetna Better Health	25	75	100	100	100	100
Buckeye Community Health Plan	25	75	100	75	100	100
CareSource	75	75	75	100	100	100
Molina Healthcare of Ohio, Inc.	75	100	75	100	100	100
United Healthcare Community Plan of Ohio, Inc.	25	50	100	100	100	100

Sources: CMS n.d.-a; CMS n.d.-b; CMS n.d.-c; CMS n.d.-d.

In 2020, CMS began withholding an additional 1 percent of the Medicare Part A and Part B capitation to be paid to the MMP if it meets the specified threshold for the Diabetes Care: Blood Sugar Controlled measure. In early 2020, MMPs expressed concerns about this change. One MMP was concerned that the benchmark is tied to the MA population, which it sees as significantly different from the Medicare-Medicaid enrollee population. Another MMP hoped the plans would be able to earn back the withhold based on improvement over the previous year. And, indeed, this measure uses the gap closure target methodology, which does give credit to plans for improvement rather than having to meet the benchmark outright. Another plan saw the change as having "no upside" for the plans, comparing it unfavorably to CMS' star rating system that allows a D-SNP to earn a bonus over the capitation, rather than increasing the MMP's risk of losing more capitation.

<sup>&</sup>lt;sup>17</sup> CMS, with Mathematica Policy Research and NCQA, developed this national measure.

<sup>&</sup>lt;sup>18</sup> MMPs receive 25 percent of the withhold when 20 to 39 percent of the criteria are met; 50 percent for 40 to 59 percent of criteria; 75 percent for 60 to 79 percent of criteria; and 100 percent when a minimum of 80 percent of the criteria are met.

CMS and ODM jointly monitor the quality and performance of MMPs through their monthly meetings with each MMP. For example, the CMT regularly reviews the MMP's performance on quality measures, issues identified through grievances and appeals or the call center, and any marketing issues. The MMP is also invited to share a success story that illustrates how the demonstration has produced a positive outcome for a beneficiary. The CMT also regularly hears updates on the MMP's efforts to reduce the administrative burden for nursing facilities, and other quality improvement activities.

ODM also monitors the quality of the MyCare Ohio program as part of its Medicaid managed care quality strategy. In 2019, ODM reported that its quality strategy would prioritize health equity. ODM chooses quality improvement projects (QIPs) targeting areas where disparity in outcomes is highest and works with the MMPs as a group to help them design and implement the QIPs. In early 2020, ODM reported that a QIP focused on improving hypertension control positively impacted the Medicaid program's African American population as well as its non-African American population. One MMP reported that, based on preliminary analysis, nurse practitioners making home visits helped the plan address disparities and provide access to services for certain populations.

Beginning in 2020, MMPs began working on a diabetes management QIP. MMPs continued working with ODM to improve diabetes care by standardizing their processes from the point of view of providers and members. The MMPs were expected to attend clinical advisory committee meetings and meet with ODM twice monthly to work on standardization. They were using the Institute for Healthcare Improvement's plan-study-do-act model of quality improvement for this QIP. The CMT also began a Diabetes Prevention and Management project with MMPs that launched in late 2020. MMPs are required to provide quarterly updates on performance relative to objectives and outcome measures within several domains, including access to care, COVID-19 prevention, diabetes education, exercise, food and nutrition, medication and supplies, mental and behavioral health, and disparities across populations.

As part of the 2019 amendment to the three-way contract, MMPs were also required to conduct a QIP focused on reducing the administrative burden for nursing facilities. Although the contract does not require the MMPs to work together, they chose to do so to develop greater consistency in the requirements they impose on the nursing facilities in their networks. Nursing facilities have raised concerns about the administrative burden of complying with different requirements across multiple MMPs. Work on reducing administrative burden for nursing homes through a pre-authorization process was paused due to the PHE, but the new standardized and streamlined process was implemented in 2021.

The EQRO also plays several quality management roles for MMPs, including conducting quarterly onsite reviews of each MMP's care management approach. During the four quarterly reviews completed between July 1, 2018, through June 2019, ODM's EQRO identified opportunities for improvement related to the timeliness of assessments and care plans, discharge planning and post-discharge transition activities, and other required activities. In early 2021, CMS reported one MMP was on a performance improvement project (PIP) focused on improving discussion of care goals, and another MMP was doing an "informal PIP" focused on improving assessment and care plan completion rates. In 2020, the EQRO also focused on record keeping for enrollee grievances, including ensuring some sub-elements of interest were recorded

and spelling out policies to ensure that disputed services were provided no later than 72 hours after a State hearing decision.

#### 3.6.2 Results for Selected Quality Measures

HEDIS Quality Measures Reported for MyCare Ohio Demonstration Plans

MMPs are required to report HEDIS data to CMS and the States. HEDIS is a measure set developed and maintained by the National Committee for Quality Assurance. It is used by the vast majority of commercial, Medicare, and Medicaid health plans to measure performance on dimensions of care and service in order to maintain and/or improve quality. In the FAI, MMPs report data on a subset of HEDIS measures that are required of all MA plans.

Five of the 13 Medicare HEDIS measures for MMP enrollees that RTI analyzes are reported in *Figures 2–7*, with results on all 13 measures appearing in *Tables B-1a* and *B-1b* in *Appendix B*. RTI identified these measures in RTI's Aggregate Evaluation Plan based on their completeness, reasonability, and sample size. Calendar year data for 2015–2018 were available for all five MyCare Ohio MMPs. In response to the COVID-19 PHE, CMS did not require Medicare plans (including MMPs) to submit HEDIS 2020 data covering the 2019 measurement year. Medicare plans (including MMPs) resumed normal reporting for measurement year 2020, with those data becoming available later in 2021.

Detailed descriptions of selected HEDIS measures can be found in the <u>RTI Aggregate</u> Evaluation Plan. Results reported in *Figures 2*–7 show MyCare Ohio MMPs' HEDIS performance data for calendar years 2015 through 2018 on measures for blood pressure control, 30-day follow-up after hospitalization for mental illness, good control of Hemoglobin A1c (HbA1c) levels (<8.0 percent), medication review (one of the Care for Older Adults measures), and plan all-cause readmissions (ages 18–64 and ages 65+).

Although the primary focus of HEDIS analysis is to monitor trends over time in MMP performance, the figures and appendix table also compare MMP performance to national MA plan means for reference when available. We provide the national MA plan means with the understanding that MA enrollees and demonstration enrollees may have different health and sociographic characteristics which would affect the results. Previous studies on health plan performance reveal poorer quality ratings for plans serving a higher proportion of dually eligible beneficiaries and beneficiaries with disabilities. Additionally, HEDIS measure performance, in particular, is slightly worse among Medicare plans active in areas with lower income and populations with a higher proportion of minorities (ASPE, 2016). Comparisons to national MA plan means should be considered with these limitations in mind.

Though all five MMPs individually saw improved performance between 2015 and 2018 on at least one HEDIS measure, there was no measure where performance improved consistently over time across all MMPs. As shown in *Figure 2*, all MMPs improved performance on blood pressure control from 2015 to 2018, with variation over time within each plan.

Plan Percentage 67.6 Medicare Advantage 69.0 Plans Nationally 70.6 69.5 48.8 54.6 Aetna 60.3 69.6 60.6 Buckeye 52.3 70.6 48.7 39.7 Caresource 49.2 50.4 57.0 48.0 Molina 63.8 LEGEND 52.3 2015 52.2 United **2016** 59.6 2017 68.6 2018 0 10 20 30 40 50 60 70 80 90 100

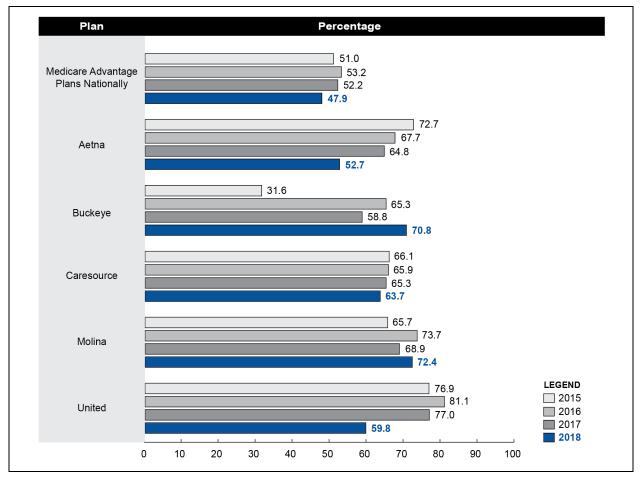
Figure 2
Blood pressure control<sup>1</sup>, 2015–2018:
Reported performance rates for MyCare Ohio MMPs

HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan.

<sup>&</sup>lt;sup>1</sup> The following criteria were used to determine adequate blood pressure control: less than 140/90 mm Hg for enrollees 18–59 years of age; diagnosis of diabetes and <140/90 mm Hg for enrollees 60–85 years of age; no diagnosis of diabetes and <150/90 mm Hg for enrollees 60–85 years of age.

*Figure 3* shows that two MMPs—Buckeye and Molina—improved performance on 30-day follow-up after hospitalization for mental illness from 2015 to 2018, whereas performance worsened for the remaining MMPs.

Figure 3
30-day Follow-up after hospitalization for mental illness<sup>1</sup>, 2015–2018:
Reported performance rates for MyCare Ohio MMPs

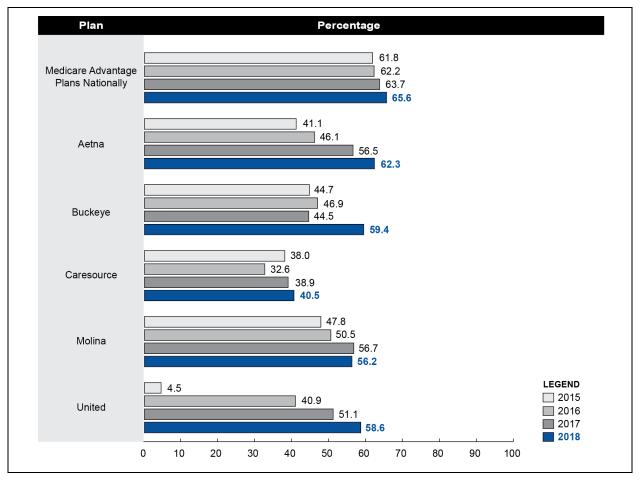


HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan.

<sup>&</sup>lt;sup>1</sup> NCQA implemented a significant specification change with HEDIS 2018 (calendar year 2017), disallowing same-day follow-up visits. National benchmarks fell from HEDIS 2018 to HEDIS 2019 (calendar 2017 to 2018).

As shown in *Figure 4*, all MMPs improved performance on controlling HbA1c levels (< 8.0%) from 2015 to 2018. Some MMPs reported steady increases year over year while others reported more year over year variation.

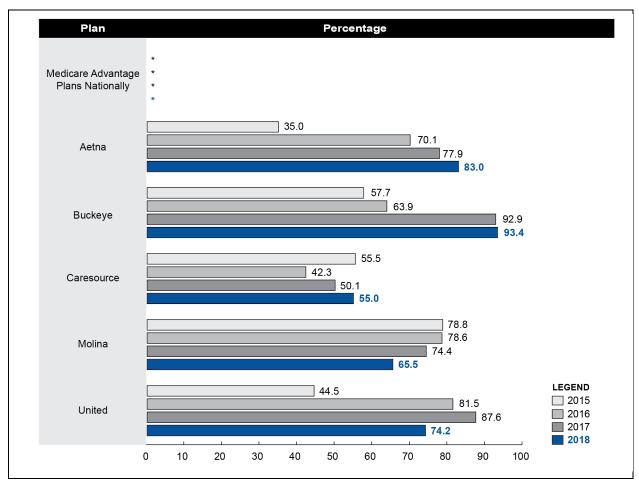
Figure 4
Good control of HbA1c level (<8.0%), 2015–2018:
Reported performance rates for MyCare Ohio MMPs



HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan.

*Figure 5* shows that for medication review (one of the Care for Older Adults measures), three MMPs improved performance from 2015 to 2018. The two remaining MMPs showed either stable or lower performance from 2015 to 2018. National MA plan mean data are not available for the Care for Older Adult measures.

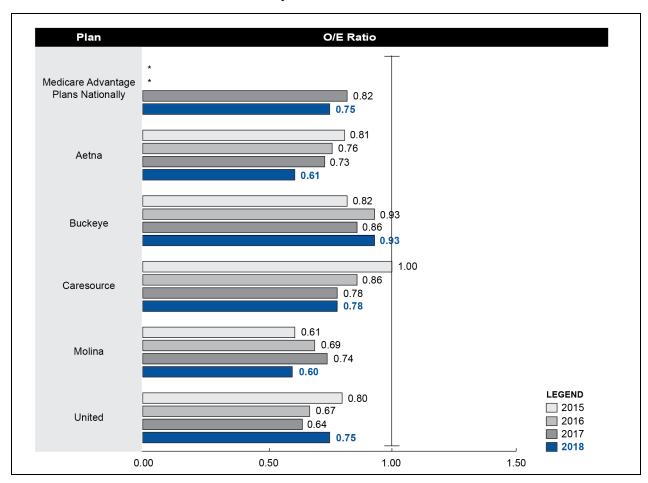
Figure 5
Medication review (one of the Care for Older Adults measures), 2015–2018:
Reported performance rates for MyCare Ohio MMPs



<sup>\* =</sup> not available, where MA plans nationally did not provide HEDIS data for this measure; HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan. SOURCE: RTI analysis of 2015 through 2018 HEDIS measures.

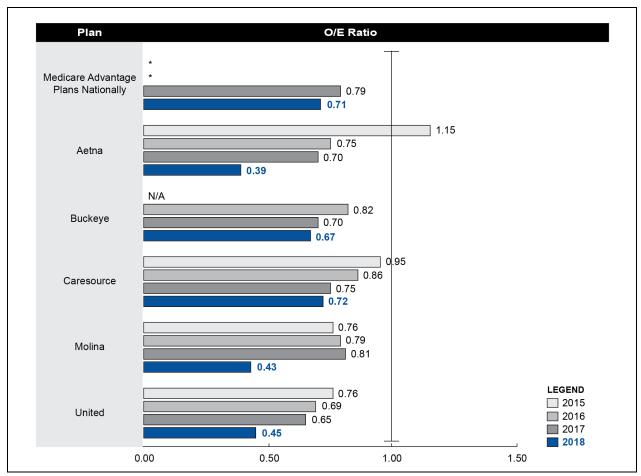
Plan all-cause readmissions for enrollees ages 18-64 and 65+ are reported in *Figure 6* and *Figure 7*, respectively, as an observed-to-expected ratio, whereby an MMP's observed readmission rate is compared to its expected readmission rate given its beneficiary case mix; a value below 1.0 (shown by the vertical line at x = 1 in the figure below) is favorable and indicates that MMPs had fewer readmissions than expected for their populations based on case mix. *Figure 6* shows that all MMPs reported lower than expected readmissions for enrollees ages 18-64 across nearly all years. *Figure 7* shows a similar trend for enrollees ages 65+.

Figure 6
Plan all-cause readmissions, Ages 18–64, 2015–2018: Reported observed-to-expected ratios for MyCare Ohio MMPs



<sup>\* =</sup> not available, where RTI did not have access to MA plan national HEDIS data for this measure; HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MMP = Medicare-Medicaid

Figure 7
Plan all-cause readmissions, Ages 65+, 2015–2018: Reported observed-to-expected ratios for MyCare Ohio MMPs



<sup>\* =</sup> not available, where RTI did not have access to MA plan national HEDIS data for this measure; HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan; N/A = not applicable, where MA plans do not report such data, or where the number of enrollees in the MMP's provided HEDIS data available for inclusion in the measure was less than 30, and therefore not reported per RTI's decision rule for addressing low sample size.

# SECTION 4 Beneficiary Experience



Many enrollees are satisfied with MyCare Ohio overall, and note that they benefit from care management. At the same time, some enrollees continue to experience challenges accessing needed services and are dissatisfied with the quality of some services.

The State, MMPs, and provider and beneficiary advocates all identified beneficiary access to direct care workers as a major and worsening challenge in Ohio, which was exacerbated by the PHE.

MMPs experienced a 76 percent drop in appeals in 2020, potentially because enrollees used fewer LTSS and other services during the PHE.

One of the main goals of the demonstration under the FAI is to improve the beneficiary experience accessing Medicare and Medicaid services. In this section, we highlight beneficiary experience with MyCare Ohio, and provide information on beneficiary protections and data related to complaints and appeals.

## 4.1 Impact of the Demonstration on Beneficiaries

For beneficiary experience, we draw on findings from several data sources:

- The CAHPS survey; 19
- Focus groups conducted by RTI in 2017 (hereafter, the "2017 focus groups") and focus groups conducted for CMS in 2018 by another contractor (hereafter, the "2018 focus groups"); and telephone interviews of enrollees with a primary or secondary diagnosis of diabetes, conducted for CMS by this same contractor in December 2020 and January 2021 (hereafter, the "2020 individual beneficiary interviews");
- Findings from two care management surveys conducted by ODM's EQRO, one in 2018 (hereafter the "2018 EQRO survey") and one in 2020 (hereafter the "2020 EQRO survey"); and
- Interviews conducted as part of the site visits.

See *Appendix A*, *Data Sources* for a full description of these data sources.

# 4.1.1 Beneficiary Overall Satisfaction

Beneficiary satisfaction with MyCare Ohio has improved since the initial launch of the demonstration. Participants in the 2017 focus groups believed that while enrolled in the demonstration, their health was better, they received better care, and they had more independence and freedom. Most said they received new services because of MyCare, and cited having no copays, increased home health aide hours, and access to dental and vision care as

<sup>&</sup>lt;sup>19</sup> For CAHPS data, we provide national benchmarks from MA plans, understanding that there are differences in the populations served by the MyCare Ohio 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.

some of the benefits of participating. Participants in the 2017 focus groups particularly valued home modifications, meal delivery services, and home health aide services.

The 2018 focus group participants cited a number of factors contributing to their satisfaction, including access to comprehensive coverage, the financial relief provided by coverage, the effectiveness of their care managers, and being connected to services and supports not previously available to them. These participants also valued having only one insurance and no copays. They also reported that their health was better because of their participation in MyCare Ohio.

Participants in the 2020 individual beneficiary interviews reported high satisfaction with their MMP, most frequently citing an overall sense of being well cared for, getting their needs met, and getting problems solved easily as their reason for their rating. Participants also valued access to no-cost, no-copay services, supplies, and medications; the quality of their health providers; their case manager; and access to in-home care, meal delivery, transportation, durable medical equipment (DME), over-the-counter medications and supplies, incentive programs, and vision and dental care programs.

In addition to these positive findings, beneficiaries also identified sources of dissatisfaction. For example, 2017 focus group participants had some complaints about the quality of home-delivered meals and an overload of information sent by their MyCare Ohio plan. The 2018 focus group participants cited limited coverage for some services (e.g., vision, dental, and alternative medical care), poor quality of care management, and lack of access to medical supplies or DME as sources of dissatisfaction. Some of these focus group participants were also dissatisfied with prior authorization requirements and the need to switch physicians because their preferred provider was out of network. The 2020 individual beneficiary interviews identified issues related to coverage for medications and inappropriate balance billing from providers as their predominant sources of dissatisfaction.

Consistent with the findings in the First Evaluation Report, the poor quality of transportation services has remained an issue throughout the period covered in this report. The 2017 focus group participants expressed frustration with the timeliness and reliability of rides, rude or unprofessional drivers, and the amount of time required in advance for scheduling a ride. Participants in the 2018 focus groups also cited extended pick-up and drop-off windows, varying levels of professionalism among vendors, and being required to share rides, which were inconvenient and increased travel time. These concerns about the quality of transportation were echoed by the participants in the 2020 individual beneficiary interviews, and by beneficiary advocates during site visits. In addition, beneficiary advocates reported that drivers were not provided with masks during the PHE.

I don't know how many times they strapped my wheelchair down wrong.... I've had countless times where I'm riding sideways down the highway because they can't secure my wheelchair properly.

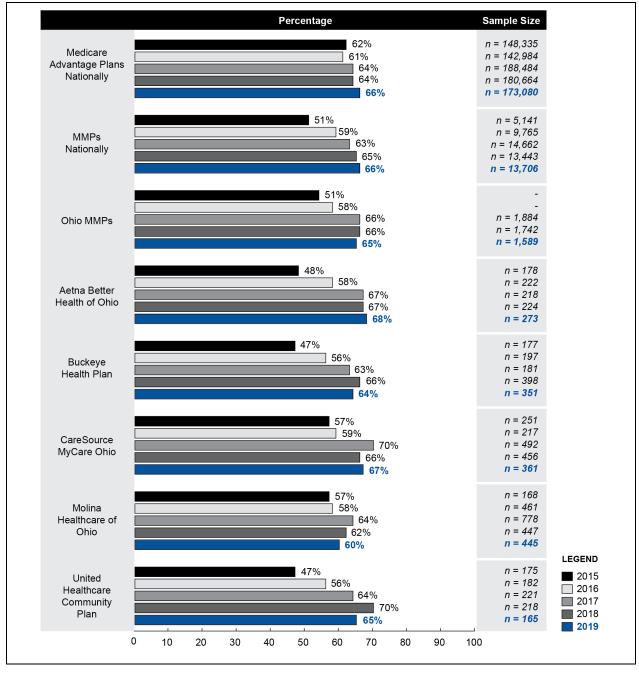
— Beneficiary Advocate, 2021

Beneficiary advocates in 2020 and 2021 indicated continued dissatisfaction with the MyCare Ohio program among some enrollees. One advocate described MyCare Ohio as having a "disastrous" impact on many enrollees. These beneficiary advocates expressed their concern that managed care imposed unnecessary barriers to hiring independent care providers (discussed further in *Section 4.1.3, Access to Care*); limited enrollees' ability to move from region to region (which can require a change from one MMP to another) without disrupting access to needed supplies; and limited access to needed specialists for people with rare diseases.

One advocate noted that she had more difficulty accessing DME as an enrollee in the demonstration than she would if she had opted out; she had opted in to access needed medications. Another advocate reported that her MMP did not provide communication methods compliant with the Americans with Disabilities Act. In early 2021, another beneficiary advocate noted that although the beneficiary experience seems to have stabilized since the initial launch, it is not clear whether beneficiaries had received any additional benefit from the program. In early 2020, this advocate shared feedback collected from enrollees who cited concerns about limited access to in-home care, poor customer service, and frustration with the processes for resolving grievances and appeals.

The CAHPS data for MyCare Ohio plans are consistent with these findings of overall improvement and some ongoing challenges. As shown in *Figure 8*, the percentage of MyCare Ohio CAHPS respondents who rated their health plan as a 9 or 10 increased overall for all five Ohio MMPs from 2015 through 2017. In 2018 and 2019, the percentage of respondents who rated their health plan as a 9 or 10 varied among the plans. As shown in *Figure 9*, the percentage of MyCare Ohio CAHPS respondents who rated their drug plan as a 9 or 10 increased overall for most Ohio MMPs from 2015–2019. However, there was variation over the course of the demonstration for most plans.

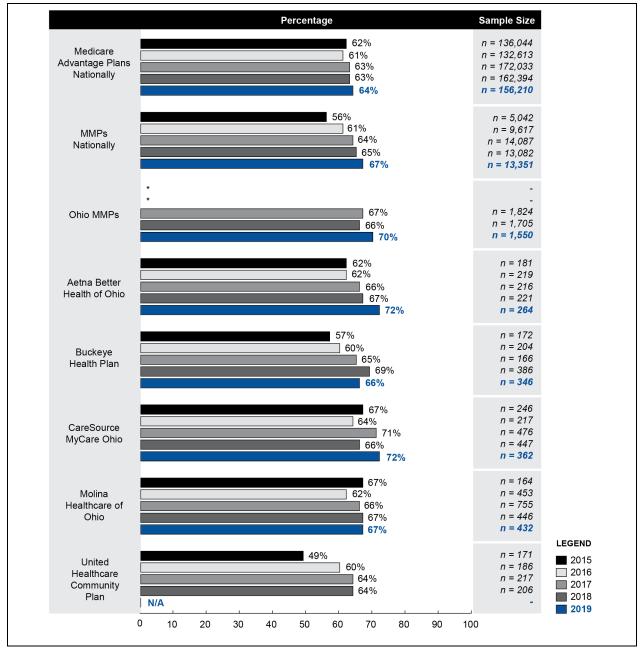
Figure 8
Beneficiary overall satisfaction, 2015–2019
Percentage of beneficiaries rating their health plan as a 9 or 10



<sup>- =</sup> sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan.

SOURCE: CAHPS data for 2015–2019. This item was case mix adjusted. The CAHPS question used for this item was: "Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?"

Figure 9
Beneficiary overall satisfaction, 2015–2019
Percentage of beneficiaries rating their prescription drug plan as a 9 or 10



<sup>\* =</sup> data not available; - = sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan; N/A = "Suppressed," i.e., when too few members provided responses (new as of 2019), or when the results have very low statistical reliability.

SOURCE: CAHPS data for 2015–2019. This item was case mix adjusted. The CAHPS question used for this item was: "Using any number from 0 to 10, where 0 is the worst prescription drug plan possible and 10 is the best prescription drug plan possible, what number would you use to rate your prescription drug plan?"

#### 4.1.2 Beneficiary Experience with Care Coordination

Beneficiary experience with care coordination also improved since the <u>First Evaluation</u> Report but continued to be mixed.

Many enrollees valued the role of their care manager and service coordinator. A majority of the 2017 focus group participants were in the HCBS waiver program, and recognized they had both a service coordinator for waiver services and a MyCare care manager. These beneficiaries had more face-to-face interactions with their service coordinator and were more likely to contact their service coordinator when they had an issue. Participants in the 2018 focus groups valued their care manager's attention to their personal health and needs; some participants described care managers as part of their support system, an important source of information, and someone who made sure the services were delivered as they should be.

ODM's 2018 EQRO survey also provided some positive program-level findings for care management.<sup>20</sup> For example, approximately 90 percent of survey respondents reported that their care managers explained things well; 96 percent said their care managers showed respect; and 93 percent said their care managers listened carefully to them.

Other enrollees reported less positive experiences with their care manager. Several participants in the 2018 focus group reported that their care manager was unresponsive or ineffective. The 2018 EQRO survey found that 30 percent of respondents were dissatisfied with their care manager; 33 percent reported that their care manager had changed at least once; 50 percent reported that their care manager did not seem to always know about their health care needs; and 29 percent reported they were not aware a care plan had been developed for them. These findings are consistent with the findings from the 2020 individual beneficiary interviews, in which some participants had only a vague or no awareness of their care manager. For those that were aware of their care manager, some expressed dissatisfaction related to turnover, personality match, and the level or type of support provided.

In the 2020 EQRO survey, 75 percent of respondents knew who their care manager was.<sup>21</sup> The EQRO survey also identified two areas of dissatisfaction with care managers that were highly correlated with overall satisfaction with care management services, including whether the care manager took beneficiary preferences into account when arranging for services (84 percent of respondents) and whether or not the care manager returned phone calls within 48 hours (85 percent).

Most enrollees participating in the focus groups and interviews were aware of their care plans and reported setting goals in a collaborative manner. Most participants in the 2018 focus groups who were accessing LTSS or behavioral health services reported having a care plan, while only some of those with more generalized needs had a care plan. Slightly more than one-half of the participants in the 2020 interviews said they had a care plan. Of those, approximately one-half followed their plans attentively, while the remainder did so intermittently, minimally, or

<sup>&</sup>lt;sup>20</sup> Respondents to this survey includes beneficiaries enrolled in the demonstration as well as those enrolled in MyCare Ohio who have opted out of the demonstration.

<sup>&</sup>lt;sup>21</sup> Respondents to this survey include beneficiaries enrolled in the demonstration as well as those enrolled in the MyCare Ohio program who have opted out of the demonstration.

not at all. Participants in the 2018 focus groups and the 2020 individual beneficiary interviews reported setting goals for themselves in a collaborative manner. In contrast, a beneficiary advocate reported in 2021 that she was not allowed to set her own goals and that her case manager set her a goal of cutting calories, contrary to a meal plan prescribed by her nutritionist.

Many enrollees participating in the focus groups and interviews valued the help provided by care managers and service coordinators. The 2017 focus group participants valued care management as a means of facilitating in-home services, such as housekeeping or food preparation; obtaining medical supplies, DME, or home modifications; and accessing community services and resources. They also valued their care managers' ability to help with administrative problems (e.g., erroneous bills or prior authorizations).

Participants in the 2017 and 2018 focus groups reported that their case managers were coordinating primary care and most specialty care, including LTSS and HCBS services. Additionally, about one-half of the 2020 individual beneficiary interview participants indicated their care manager was at least somewhat involved in supporting their diabetes care by monitoring supply and equipment needs, encouraging diabetes-related care, encouraging healthy habits and other activities. About one-fifth of this group reported that their care manager asked them about their access to food and their mental health during the PHE.

Although the findings from the focus groups and interviews indicate that many were pleased with care management services, the Ombudsman characterized the majority of complaints it received as either directly or indirectly tied to care management. This point is illustrated in *Section 4.1.3*, *Access to Care*, where the Ombudsman cites the lack of effective care management as a principal cause for delays in accessing DME. In early 2021, a beneficiary advocate shared the experiences of two enrollees who were ill and without family members to advocate on their behalf. In both cases, neither their care managers nor primary care providers stepped in to take on that role. Another beneficiary advocate reported that MyCare Ohio has made transitions from nursing facilities more difficult because multiple people have been added to the process, requiring the care coordinator to coordinate with multiple departments within the MMP. As a result, in some cases, needed services are not in place upon transition.

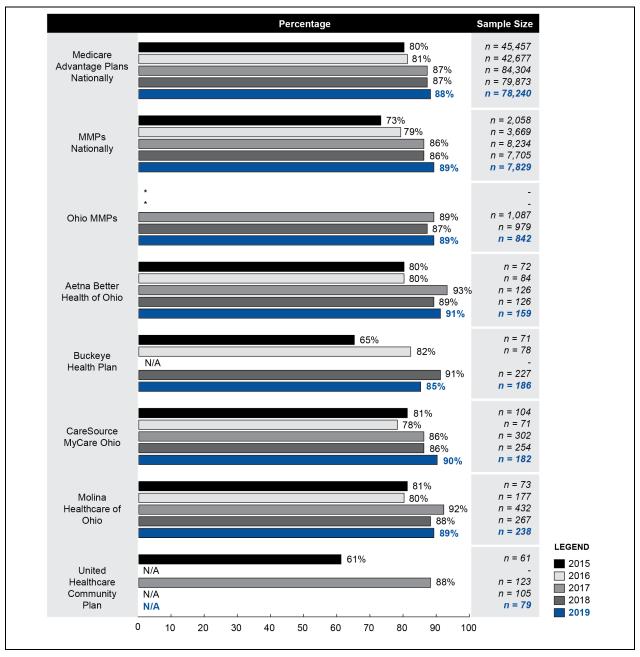
In early 2021, a provider advocate questioned the value of the MMPs' care management role, noting that nursing facility residents tended to be much more familiar with nursing facility staff they see on a regular basis rather than MMP staff with whom they have less frequent contact. Noting that MMP care managers had an important role of advocating for their enrollees residing in nursing facilities, the Ombudsman expressed its concern that many care managers were not looking at the quality of care provided in nursing facilities and were often taken by surprise when enforcement actions forced the closure of facilities and required new nursing facility placements for their enrollees. One MMP reported that its care managers were assigned by facility, to better develop and maintain a relationship with the facility and their enrollees residing in that facility.

The PHE had a significant impact on the role of care managers and service coordinators. MMPs reported that most enrollees were amenable to telephonic interaction with care managers during the PHE, although many preferred meeting face-to-face. The 2020 individual beneficiary participants, and ODM, MMPs and others we interviewed in early 2021 said that the PHE also

had a major impact on enrollees' access to community activities and social interaction. MMPs reported that they responded by making "friendly calls" to assess whether enrollees were experiencing social isolation or needed food, transportation or other necessities. In early 2021, MMPs said they focused on educating enrollees about the vaccine and helping them to make a plan for getting a vaccine. Another MMP reported partnering with Ohio's Centers for Independent Living and AAAs to get personal protective equipment, food, and other forms of assistance to enrollees and their caregivers.

Both the overall favorable opinion of care management reflected in the focus groups and interviews, as well as the mixed opinions of beneficiary advocates, are reflected in the CAHPS measures of satisfaction with care coordination. As shown in *Figure 10*, the percentage of MyCare Ohio CAHPS respondents reporting that their health plan "usually" or "always" gave them information they needed varied from 2015 through 2019, with some noticeably higher percentages in the later years for some plans that reported data. *Figure 11* shows that, for the three MMPs with available data for this item, the percentage of beneficiaries reporting that their personal doctors were "usually" or "always" informed about care received from specialists was similar in 2016 through 2019. All percentages were consistently greater than or equal to 84%.

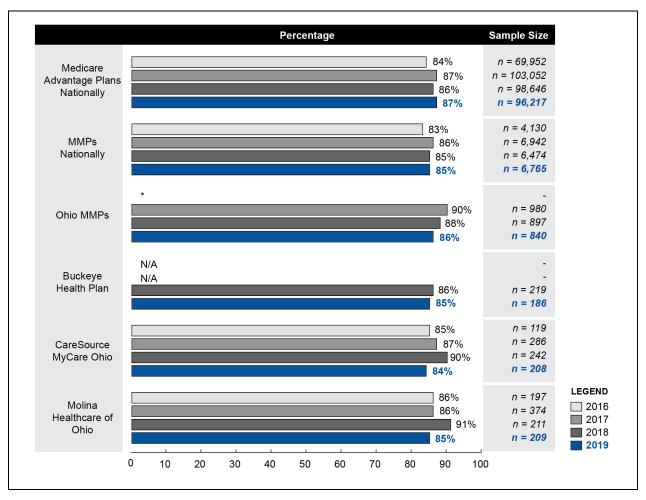
Figure 10
Beneficiary experience with care coordination, 2015–2019
Percentage of beneficiaries reporting that their health plan usually or always gave them information they needed



<sup>\* =</sup> data not available; - = sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan; N/A = "Suppressed," i.e., when too few members provided responses (new as of 2019), or when the results have very low statistical reliability.

SOURCE: CAHPS data for 2015–2019. The CAHPS question used for this item was: "In the last 6 months, how often did your health plan's customer service give you the information or help you needed?"

Figure 11
Beneficiary experience with care coordination, 2016–2019
Percentage of beneficiaries reporting that in the past 6 months their personal doctors were usually or always informed about care from specialists



<sup>\* =</sup>data not available; - = sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan; N/A = "Suppressed," i.e., when too few members provided responses (new as of 2019), or when the results have very low statistical reliability.

NOTES: Aetna and United Healthcare do not appear in the chart because either too few beneficiaries answered the question to permit reporting or the score had very low reliability. Data are not available for any of the five MyCare Ohio plans on this measure for calendar year 2015 because either too few beneficiaries answered the question to permit reporting or the score had very low reliability.

SOURCE: CAHPS data for 2016–2019. The CAHPS question used for this item was: "In the last 6 months, how often did your personal doctor seem informed and up-to-date about the care you got from specialists?"

#### 4.1.3 Access to Care

In early 2021, ODM, beneficiary advocates, and provider advocates described a significant shortage of workers to provide personal care in Ohio, that has been exacerbated by the pandemic. A provider advocate described the shortage as an "out-of-control" problem, noting one case in which 44 different agencies were contacted to get a direct care worker into

someone's home. Based on an informal survey, this advocate estimated at that time, a thousand people were waiting for waiver services across both the MyCare Ohio and fee-for-service waivers.

My best friend and her family...have done more work over the last 3 months or 4 months, than my paid caregivers, for free. They have disrupted their whole lives. They've essentially stopped their whole lives, just so that I don't have to go to a nursing home.

— Beneficiary Advocate, 2021

As reported by beneficiary advocates and MMPs, enrollee use of self-directed options continued to be low. To avoid the administrative responsibilities associated with hiring, training and supervising their own attendants, enrollees often opted for an independent provider, which offered many of the same flexibilities but fewer administrative requirements. However, one MMP reported that the certification requirements for independent providers can take anywhere from 3 to 6 months, with a two-step process requiring both ODM's and the MMP's approval. In addition, beneficiary advocates reported that independent care providers often found it challenging to submit claims, saying the claims submission process was different for each MMP and was designed for businesses rather than individuals without technical experience.

Access to transportation services continues to be an issue among enrollees; however, some MMPs have added transportation through Lyft, a ridesharing service, as a value-added benefit. This benefit was added in early 2018, and many members responded positively to having Lyft as an option for medical-related trips. During the PHE, access to transportation was complicated by the potential for infection. MMPs reported having to find alternative strategies for making sure enrollees had access to needed COVID tests and treatment, when exhibiting symptoms.

The 2020 individual beneficiary interview participants reported continuous access to needed health care and services throughout the PHE, including in-person medical visits and inhome care. With few exceptions, access to prescriptions continued uninterrupted throughout the pandemic whether through pharmacy pick-up or mail-order. In fact, because ODM and CMS granted the MMPs certain flexibilities during the PHE, the Ombudsman reported that enrollees had quicker access to some services than they would have otherwise, citing home-delivered meals as one example. However, the PHE did disrupt some care. For example, the Ombudsman noted that some home agencies needed to close to quarantine when their staff got sick.

The PHE also increased the use of telehealth among enrollees. Approximately two-thirds of the 2020 individual beneficiary interview participants used telehealth (conducted by phone or video call), with most reporting that their visit was successful. The majority of those that did not access telehealth had access to in-person visits. Approximately one-third of this group did not have an internet-enabled device or lacked the confidence to use it. One MMP reported that telehealth had significantly increased enrollee compliance with appointments and providers' ability to serve enrollees during the PHE.

One MMP described its home modification team focused on addressing housing quality and home modification needs for waiver participants. The team had access to timely environmental and physical therapy assessments for developing recommendations for needed home modifications. The team also included a home modification specialist responsible for identifying the lowest cost options for meeting an enrollee's needs and a licensed practical nurse responsible for reviewing medical and functional necessity for the home modifications. During the PHE, this MMP requested that the home modifications team be given permission to continue face-to-face meetings to address health and safety issues.

#### 4.2 Beneficiary Protections

Enrollees have certain protections under the demonstration. There are several options for enrollees to report grievances, complaints, and appeals. Beneficiaries also are able to use ombudsman services provided under the MyCare Ohio demonstration to file and resolve complaints.

#### 4.2.1 Grievances and Appeals

Enrollees have the right to file a grievance with their MMP at any time. A grievance is a complaint or a dispute expressing dissatisfaction with the MMP or a provider, regardless of whether the enrollee is requesting a remedial action. Grievances are resolved at the MMP level. *Table 9* reports the number of grievances or complaints lodged with the MMPs according to two data sources: MMP-reported grievances, and those reported to the Complaint Tracking Module (CTM) by the State or through 1-800 Medicare. The average number of MMP-reported grievances per 1,000 enrollees decreased from a high of 150 in 2014 to a low of 48 in 2017. From 2018 through 2020, the average number of MMP reported grievances per 10,000 enrollee months remained stable. The majority of CTM complaints focused on enrollment and disenrollment<sup>22</sup> in some years, and in benefits, access and quality of care<sup>23</sup> in others.

<sup>&</sup>lt;sup>22</sup> This category is defined as "Beneficiary is experiencing an enrollment issue that may require reinstatement or enrollment change."

<sup>&</sup>lt;sup>23</sup> This category is defined as "Beneficiary has difficulty securing Part D prescriptions, beneficiary has difficulty finding a network provider/pharmacy, beneficiary has concerns about the quality of care they have received, or beneficiary has concerns about a denied claim."

Table 9
Grievances or complaints measures and results, 2014–2020

Measure	Reporting period	Results
Average <sup>1</sup> number of MMP reported grievances or	2014	150
complaints per 1,000 enrollees per quarter	2015	57
	2016	51
	2017	48
Average <sup>1</sup> number of MMP reported grievances or	2018	153
complaints per 10,000 enrollee months per quarter <sup>2</sup>	2019	138
quarter	2020	156
Number of complaints per year received by ODM	2014	73
or 1-800-Medicare and recorded in the CMS Complaint Tracking Module (CTM) <sup>3</sup>	2015	85
Complaint Tracking Module (CTM)	2016	80
	2017	81
	2018	90
	2019	93
	2020	94

<sup>&</sup>lt;sup>1</sup>The yearly average represents the sum of the rate of complaints reported in each quarter divided by the number of quarters with available data.

The Ombudsman reported to the RTI evaluation team that the top five complaint categories for the entire MyCare Ohio program, including the demonstration and those opting out of the demonstration, were consistent over 2019 and 2020, and related to care coordination, benefits and access, DME, transportation, and enrollment and disenrollment-related issues. The Ombudsman observed anecdotally that, because MyCare Ohio enrollees who have opted out of the demonstration have much less access to care management services, they experience greater challenges with coordination of benefits and access to services than those enrolled in the demonstration. Citing access to DME as an example, those who have opted out of the demonstration must navigate the Medicare process for requesting DME alone. The Ombudsman believes many MyCare Ohio beneficiaries do not fully understand the implications of opting in or out of the demonstration.

Enrollees also have the right to appeal an MMP's decision to deny, terminate, suspend, or reduce services. Appeals are resolved at the MMP level, or they may proceed to a state fair hearing or review by the Independent Review Entity (IRE). As shown in *Table 10*, MMP-reported appeals remained low throughout the demonstration to date and decreased during 2020, perhaps due to a decrease in the use of services during the PHE. Of the appeals reported to the IRE, 65 percent of the MMP decisions were upheld, 14 percent were overturned or partially overturned, 20 percent were dismissed, and the remainder (1 percent) were withdrawn or

<sup>&</sup>lt;sup>2</sup> The way that NORC grievance data were analyzed changed in 2018. In 2014 through 2017, data were analyzed per 1,000 enrollees per quarter. Beginning in 2018, data were analyzed per 10,000 enrollee months per quarter.

<sup>&</sup>lt;sup>3</sup> Data obtained from the Complaints Tracking Module (CTM) within CMS's health plan management system by RTI.

pending. The most common category of appeals referred to the IRE was for practitioner services.<sup>24</sup>

Table 10 Appeals measures and results, 2014–2020

Measure	Reporting period	Results
Average <sup>1</sup> number of MMP reported appeals per	2014	5
1,000 enrollees per quarter	2015	3
	2016	3
	2017	6
Average <sup>1</sup> number of MMP reported appeals per	2018	269
10,000 enrollee months per quarter <sup>2</sup>	2019	392
	2020	98
Total number of MMP reported appeals to the	2014	27
Independent Review Entity (IRE), a second-level review of Medicare appeals <sup>3</sup>	2015	243
Teview of intedicate appeals	2016	442
	2017	427
	2018	783
	2019	1,230
	2020	792

<sup>&</sup>lt;sup>1</sup> The yearly average represents the sum of the rate of appeals reported in each quarter divided by the number of quarters with available data.

<sup>&</sup>lt;sup>2</sup> The way that NORC appeals data were analyzed changed in 2018. In 2014 through 2017, data were analyzed per 1,000 enrollees per quarter. Beginning in 2018, data were analyzed per 10,000 enrollee months per quarter.

<sup>&</sup>lt;sup>3</sup> Data provided to RTI by CMS.

<sup>&</sup>lt;sup>24</sup> Examples of practitioner services include physician, chiropractic, dental, prosthetics/orthotics, and vision care.

## SECTION 5 Demonstration Impact on Service Utilization and Quality of Care



#### 5.1 Methods Overview

The demonstrations under the FAI are intended to shift utilization from inpatient to ambulatory care, from nursing facility (NF) care to HCBS, and to improve quality of care through care coordination activities and the demonstrations' financial incentives. The analyses in this section evaluate the effects of the MyCare Ohio demonstration in demonstration years 1–4 (May 1, 2014–December 31, 2018) on service utilization and quality of care outcomes among MyCare Ohio demonstration eligible beneficiaries.

Several modifications were made to the analyses covered in this report that resulted in differences from the <u>First Evaluation Report</u>. First, in addition to MMP enrollees, the service utilization analyses in this section include fee-for-service (FFS) Medicare-Medicaid demonstration eligible beneficiaries only due to concerns about MA encounter data completion prior to 2016, whereas the previous analyses included eligible beneficiaries in both FFS and MA. Second, corrections were made to impact estimates from the <u>First Evaluation Report</u> that resulted in differences in our current impact estimates for demonstration year 1 (see *Appendix D* for additional details).

For this analysis, we used an intent-to-treat (ITT) approach that included all beneficiaries eligible for the demonstration, not just those who actually enrolled in the MMPs, to alleviate concerns of selection bias and to support generalizability of the results across the demonstration eligible population. Enrolled beneficiaries account for approximately 79 percent of all eligible beneficiaries (including FFS beneficiaries and MMP enrollees) in demonstration year 4. An ITT analysis mimics the real-world implementation of the demonstration.

We used a quasi-experimental difference-in-differences (DinD) regression analysis with inverse propensity weighting to estimate the impact of the demonstration on the change in the probability or frequency of service utilization outcomes, relative to the comparison group. Our analyses were conducted using Medicare enrollment and FFS claims data, MMP encounter data, Area Health and Resource Files, and the American Community Survey. See *Appendix D* for more detail on our analytic methodology.

To help interpret the DinD estimate, we present the DinD estimate as both the absolute change in the probability (for a dichotomous outcome) or frequency (for a count outcome) of the outcome, relative to the comparison group, and a relative percent change of the average outcome value in the comparison group during the demonstration period. Thus, a positive DinD value may correspond to a greater increase or a smaller decrease in the outcome in the demonstration group relative to the comparison group, depending on the estimated trend in the outcome. For example, if the DinD estimate is positive and the trend is a decline in both the demonstration and comparison groups, then the interpretation of the DinD estimate is that the demonstration had a slower decline in the outcome, relative to the comparison group. Similarly, a negative value on the DinD estimate can result from either a greater decrease or a smaller increase in the outcome depending on the estimated trend in the demonstration group relative to the comparison group.

The forest plots present a point estimate of the demonstration effect by demonstration year for each outcome, along with 95 percent confidence intervals of each point estimate. A

point estimate indicates a statistically significant demonstration effect if neither the upper nor lower bound of its confidence interval crosses zero.

In addition, we discuss the effects of the demonstration on two special populations of interest: beneficiaries who use LTSS and beneficiaries with serious and persistent mental illness (SPMI). The interest is in understanding whether the demonstration might have had specific impacts upon these two special populations. We present the demonstration effects separately for LTSS users and for non-LTSS users, as well as for those with and without SPMI. We also discuss any interaction effect (the difference between the two effects). This chapter only describes demonstration DinD impact estimates that are statistically significant with 95 percent confidence intervals. Estimates that are not statistically significant are not discussed. For a complete list of DinD estimates with 95 and 90 percent confidence intervals, see *Appendix E*.

### 5.2 Demonstration Impact on Service Utilization Among Eligible Beneficiaries

Through demonstration years 1–4, the demonstration was associated with a 5.7 percent decrease in the monthly probability of any inpatient admission, and a 6.5 percent greater decrease in the annual probability any long-stay NF use, relative to the comparison group. The demonstration also resulted in an increase in the monthly probability of any ED visit and the monthly count of physician visits by 16.4 and 28.6 percent, respectively, relative to comparison group. There were no statistically significant demonstration impacts on the probability of skilled nursing facility (SNF) admissions.

#### 5.2.1 Cumulative Impact Over Demonstration Years 1–4

As described above, the key goals of the Ohio demonstration include improvements to beneficiaries' access to care and the development of an integrated system of care coordination to improve transitions between care settings. Through better care coordination, flexible benefits, outpatient management of chronic conditions, and the integration of medical care, behavioral health services and LTSS, the demonstration is intended to improve quality of care, increase use of outpatient care and HCBS, while decreasing inpatient care, ED visits, and long-stay NF use.

Table 11 shows the cumulative impacts of the demonstration on service utilization. The demonstration resulted in favorable decreases in monthly inpatient use and annual long-stay nursing home use, and an increase in monthly physician evaluation and management (E&M), relative to the comparison group. However, there was also an unfavorable increase in the monthly probability of any ED visit, relative to the comparison group. There was no demonstration effect on the probability of SNF admissions.

• There was a 0.24 percentage point greater decline in the monthly probability of inpatient admissions among demonstration eligible beneficiaries in Ohio, relative to the comparison group. This absolute difference equates to a relative difference of -5.7 percent of the average predicted monthly probability (0.0427) of inpatient use in the comparison group during the demonstration period.

- The demonstration effect on the number of physician visits was an increase of 0.3019 visits per month per beneficiary, relative to the comparison group.<sup>25</sup> This monthly increase represents a relative difference of 28.6 percent of the average predicted monthly count of physician visits in the comparison group during the demonstration period. The annualized increase in the number of physician visits was 3.62 visits (not shown) per year (derived by 0.3019\*12) relative to the comparison group.
  - The decrease in inpatient admissions and increase in physician visits are consistent with the goals of the demonstration. The increase in physician visits may have addressed problems before they became severe enough to warrant hospitalization, and may reflect better coordination of ambulatory services, leading to a decrease in inpatient admissions. As described in the <u>First Evaluation Report</u>, MMPs struggled to integrate LTSS and behavioral health services, and primary care providers reported a lack of engagement in demonstration activities. However, care plan completion rates for enrollees improved over the demonstration period (see *Section 3, Care Management*). These findings indicate that care management and coordination may have improved during the demonstration, contributing to a decline in inpatient admissions.
- The demonstration's cumulative effect on the monthly probability of any ED visit was a 1.2 percentage point increase, relative to the comparison group. This monthly increase represents a relative difference of 16.4 percent.
  - These results reflect an increase in the average predicted monthly probability of ED use in the demonstration group from 6.5 to 7.5 percent from the predemonstration through the demonstration period. By contrast, the average predicted monthly probability of any ED use in the comparison group was mostly unchanged during that period.
  - Although these results were unexpected, there may be a corresponding relationship with a decline in inpatient admissions. As described in the <u>First Evaluation Report</u>, stakeholders reported that hospital teams notify the MMP when a plan member can be discharged safely from the ED to the community. Therefore, treat-and-release ED visits may increase as a result of better coordination and planning, forestalling an inpatient admission, whereas ED visits leading to an inpatient admission are not captured in the data.
- The probability of any long-stay NF admissions decreased over the course of the demonstration for both the demonstration and comparison groups, but the decrease in the demonstration group was greater, suggesting that the demonstration had the anticipated impact on reducing NF use. The relative difference is a 6.5 percent relative decrease (*Table 11*).

<sup>&</sup>lt;sup>25</sup> There was a notable increase in monthly physician E&M visits from demonstration year 3 to demonstration year 4 among enrollees in MMPs. Out of concern that the increase might be the result of encounter data reporting and processing changes, we conducted a sensitivity analysis by removing two MMPs that showed the greatest increase from demonstration year 3 to demonstration year 4. The DinD estimates from the sensitivity analysis were largely consistent with the results reported here (the magnitude of the point estimate decreased but the direction and statistical significance were similar).

The decrease in NF use in both the demonstration and comparison groups is consistent with broader national trends of moving toward community-based LTSS (Degenholtz et al., 2016; Toth et al., 2021). The favorable progress among the demonstration group relative to the comparison group on reducing long-stay NF use could have resulted from several factors. As described in *Section 3.3.3*, *Care Planning*, State officials and MMPs reported significant improvements were made over the demonstration period to transition beneficiaries from nursing homes back into the community setting and to rebalance their LTSS overall.

Table 11 Cumulative demonstration impact on select service utilization measures for eligible beneficiaries in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Group	Adjusted mean for pre- demonstration period	Adjusted mean for demonstration period	Relative difference (%)	Regression- adjusted DinD estimate (95% confidence interval)	p-value
Probability of	Demonstration	0.0485	0.0417		-0.0024**	0.0095
inpatient admission	Comparison	0.0470	0.0427	<b>-</b> 5.7	(-0.0043, -0.0006)	
Probability of ED	Demonstration	0.0645	0.0748	16.4	0.0120*** (0.0094, 0.0146)	<0.0001
visit	Comparison	0.0740	0.0732	10.4		
Count of physician	Demonstration	1.3762	1.7912	28.6	0.3019*** (0.1617, 0.4422)	<0.0001
E&M visits	Comparison	1.0216	1.0573	20.0		
Probability of SNF	Demonstration	0.0180	0.0160	NC	-0.0000	0.9133
admission	Comparison	0.0127	0.0114	NS	(-0.0009, 0.0008)	
Probability of any long-stay NF use	Demonstration	0.2454	0.2141	6.5	-6.5	0.0004
	Comparison	0.1888	0.1720	-0.5		0.0004

<sup>\*</sup> p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001

DinD = difference-in-differences; ED = emergency department; E&M = evaluation and management; NF = nursing facility; NS = not statistically significant; SNF = skilled nursing facility.

NOTES: The adjusted mean is the regression-adjusted predicted probability or number of events for the predemonstration and demonstration periods for the demonstration and comparison groups. The *relative difference* is calculated by dividing the DinD estimate (column heading *Regression-adjusted DinD estimate*) by the predicted average for the comparison group in the demonstration period (column heading *Adjusted mean for demonstration period*). The magnitude of a relative difference could be large when the underlying denominator is small. In such cases, the relative difference should be interpreted with caution.

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data, and Minimum Data Set data.

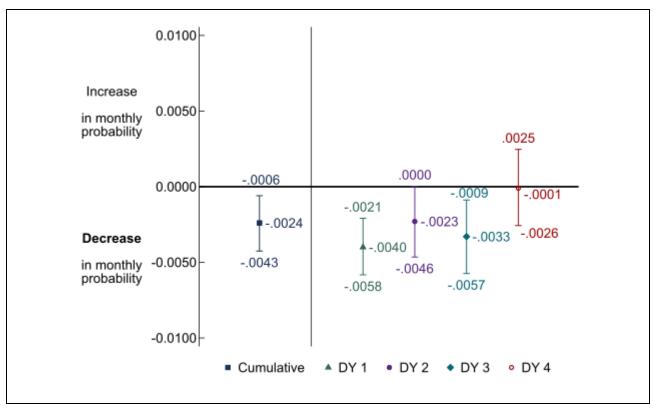
#### 5.2.2 Demonstration Impact in Each Demonstration Year

Figures 12–16 show annual effects of the demonstration on all-cause inpatient admissions, ED visits, physician visits, SNF admissions, and long-stay NF use, respectively, with the cumulative effects also included as points of comparison. These annual impact estimates indicate that the Ohio demonstration decreased the probability of inpatient admissions in demonstration years 1 and 3 only, increased the number of physician visits in demonstration years 1 through 4, and decreased the probability of any long-stay NF use in demonstration years

2 through 4, relative to the comparison group. However, the demonstration also increased the probability of monthly ED visits in all 4 of the demonstration years.

- The demonstration decreased the probability of inpatient admissions in demonstration years 1 and 3 by 0.40 and 0.33 percentage points per month per beneficiary respectively, relative to the comparison group (*Figure 12*).
- The demonstration increased the number of physician E&M visits in demonstration years 1 through 4 by 0.0663, 0.2872, 0.2873, and 0.6117 visits per month per beneficiary, respectively, relative to the comparison group (*Figure 14*). These favorable annual findings are consistent with the cumulative findings.
  - The decrease in inpatient admissions and increase in E&M visits are consistent with the goals of the demonstration, and both the cumulative results and the annual findings indicate progress in achieving the desired effect over time. However, in demonstration year 4, despite the larger increase in physician visits than previous years, there was not a corresponding decrease in inpatient admissions, relative to the comparison group, as could be expected with greater access to primary care.
- The probability of any ED use increased in each of the 4 demonstration years by 0.55, 1.29, 1.56, and 1.64 percentage points per month per beneficiary, respectively, relative to the comparison group (*Figure 13*). These unfavorable annual findings are consistent with the cumulative findings.
  - Table E-4 in Appendix E shows the weighted mean monthly percent of ED use in the comparison group declined each demonstration year, while the monthly percent of ED use in the demonstration group increased through demonstration year 3.
- The demonstration decreased the annual probability of any long-stay NF use in demonstration years 2 through 4, relative to the comparison group, by 1.22, 1.56, and 1.94 percentage points, respectively (*Figure 16*). These favorable annual findings are consistent with the cumulative findings.
  - The <u>First Evaluation Report</u> describes the early challenges with delivering and coordinating LTSS services for MyCare Ohio enrollees. These findings suggest that in later years, demonstration stakeholders potentially improved their abilities to help enrollees access needed HCBS services and transition out of institutional LTSS.

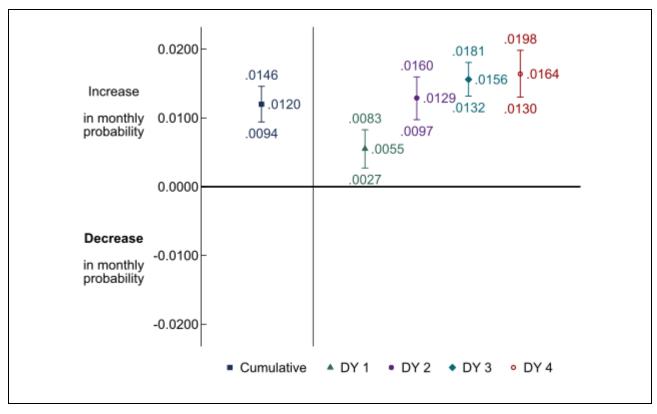
Figure 12 Cumulative and annual demonstration effects on inpatient admissions, demonstration years 1–4, May 1, 2014–December 31, 2018



DY = demonstration year.

NOTES: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

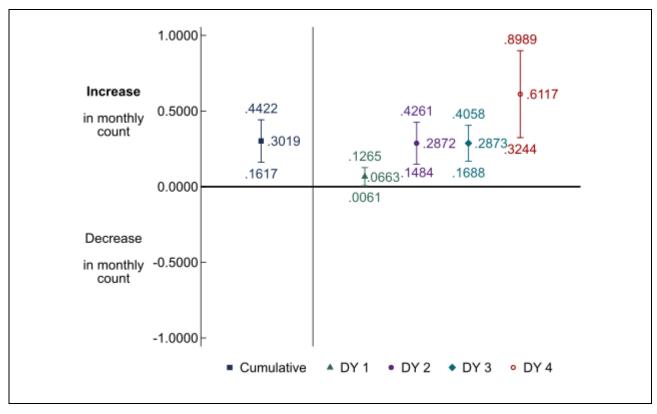
Figure 13 Cumulative and annual demonstration effects on ED visits, demonstration years 1–4, May 1, 2014–December 31, 2018



DY = demonstration year; ED = emergency department.

NOTES: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

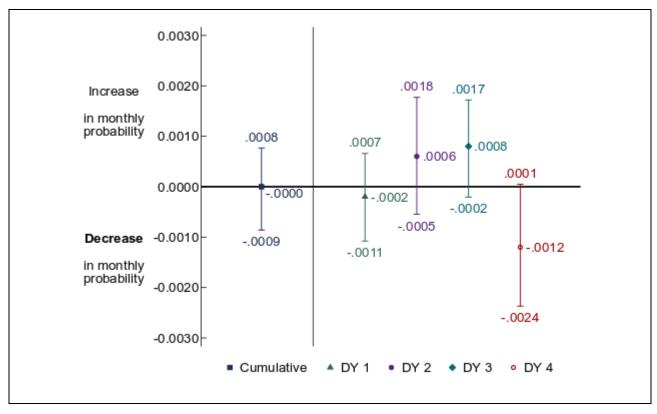
Figure 14
Cumulative and annual demonstration effects on physician E&M visits, demonstration years 1–4, May 1, 2014–December 31, 2018



DY = demonstration year; E&M = evaluation and management.

NOTES: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

Figure 15 Cumulative and annual demonstration effects on SNF use, demonstration years 1–4, May 1, 2014–December 31, 2018



DY = demonstration year; NF = nursing facility.

NOTES: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

SOURCE: RTI International analysis of Minimum Data Set data.

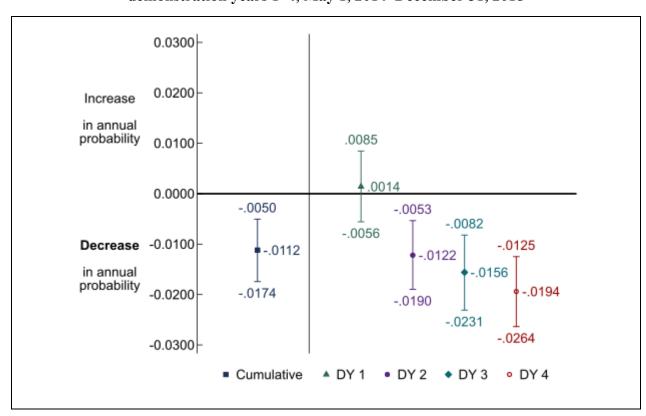


Figure 16
Cumulative and annual demonstration effects on long-stay NF use, demonstration years 1–4, May 1, 2014–December 31, 2018

DY = demonstration year; NF = nursing facility.

NOTES: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold**. SOURCE: RTI International analysis of Minimum Data Set data.

#### **5.3** Demonstration Impact on Quality of Care Among Eligible Beneficiaries

During demonstrations years 1 through 4, the demonstration favorably increased the probability of any 30-day mental health follow-up after a mental health discharge by 14.1 percent, relative to the comparison group. However, the demonstration also increased the number of preventable ED visits by 26.4 percent, and the probability of ambulatory care sensitive condition (ACSC) admissions (overall and chronic) by 8.8 and 19.1 percent, respectively, relative to the comparison group. There were no demonstration impacts on the probability of 30-day readmissions.

#### 5.3.1 Cumulative Impact Over Demonstration Years 1–4

Table 12 illustrates the cumulative impact and adjusted means for the quality of care measures. The demonstration resulted in a favorable increase in the probability of having any 30-day follow-up after a mental health discharge, relative to the comparison group. However, the demonstration also resulted in unfavorable increases in preventable ED visits and ACSC

admissions (both overall and chronic). This is inconsistent with the increased probability of physician visits, which we would have expected to address ACSCs.

- The Ohio demonstration had a 0.0120 greater increase in the monthly number of preventable ED visits, relative to the comparison group. This estimate corresponds to a relative increase of 26.4 percent of the average predicted monthly number of preventable ED visits in the comparison group during the demonstration period.
  - These findings suggest that despite improvements in care coordination resulting in decreases in inpatient admissions and increases in physician visits, described above, challenges remained in forestalling ED visits.
- The demonstration effect on the monthly probability of any ACSC admissions was a 0.07 and 0.10 percentage point greater increase in monthly use (Overall and Chronic, respectively), relative to the comparison group. This represents a relative increase of 8.8 percent and 19.1 percent, respectively.
  - Caution should be used when interpreting these findings. As can be seen in *Appendix E, Table E-1*, the cumulative impact for the ACSC measures is driven by the demonstration year 4 DinD estimates. *Appendix E, Table E-7* shows that the average monthly percent of ACSC admissions among enrollees increased from 0.83 to 2.02 percent from demonstration year 3 to year 4 (overall), and 0.65 to 1.8 percent for ACSC—chronic composite. Further investigation indicated that these increases were driven in particular by encounters as reported by one MMP in demonstration year 4. Therefore, these outcomes may be the result of changes in how MMPs reported encounters for inpatient admissions.
- The demonstration effect on the probability of a 30-day follow-up after a mental health discharge was a nearly 6 percentage point greater increase in any follow-up visits, relative to the comparison group. This effect represents a 14.1 percent increase relative to the average predicted probability of 30-day follow-up after a mental health discharge in the comparison group.
  - These findings are largely driven by two factors: a decrease in follow-up rates from 48.4 to 42.3 percent in the comparison group from the predemonstration to the demonstration period (*Table 12*), and an increase in follow-up visits after a mental health discharge during demonstration year 4 (2018) (see *Appendix E*, *Table E-2*). Indeed, during the first 3 demonstration years, the demonstration did not have an impact on 30-day follow-up after a mental health discharge, but in demonstration year 4, there was an increase in follow-up, relative to the comparison group. The increase observed in demonstration year 4 appears largely driven by increases in follow-up rates observed among MMP enrollees from demonstration year 3 to demonstration year 4 (see *Table E -8* in *Appendix E*). These findings are in contrast with MMP HEDIS results on this outcome, where three out of the five MMPs showed a decline in follow-up rates from 2015 through 2018 (see *Figure 3* in *Section 3.6.2*, *Quality of Care*).
  - This finding may provide an early indication of the success of Ohio's behavioral health redesign, which was first implemented in 2018. One impact of the redesign was related to changes in how behavioral health providers delivered and billed for

their services and this may have expanded the number of providers participating in Medicare.

Table 12 Cumulative demonstration impact on select quality of care measures for eligible beneficiaries in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Group	Adjusted mean for pre- demonstration period	Adjusted mean for demonstration period	Relative difference (%)	Regression- adjusted DinD estimate (95% confidence interval)	p-value
Count of	Demonstration	0.0375	0.0489	00.4	0.0120***	0.0004
preventable ED visits	Comparison	0.0449	0.0456	26.4	(0.0097, 0.0143)	<0.0001
Probability of	Demonstration	0.0092	0.0092		0.0007#	
ACSC admission, overall	Comparison	0.0085	0.0079	8.8	0.0007* (0.0000, 0.0014)	0.0472
Probability of	Demonstration	0.0054	0.0062		0.0010** (0.0003, 0.0017)	0.0068
ACSC admission, chronic	Comparison	0.0052	0.0052	19.1		
Probability of	Demonstration	0.4270	0.4282			
30-day follow- up after mental health discharge	Comparison	0.4844	0.4230	14.1	0.0596* (0.0092, 0.1100)	0.0205
Count of all-	Demonstration	0.2679	0.2463	NO	-0.0136	0.0504
cause 30-day readmissions	Comparison	0.2769	0.2679	NS	(-0.0275, 0.0004)	0.0561

<sup>\*</sup> *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

ACSC = ambulatory care sensitive condition; DinD = difference-in-differences; ED = emergency department; NS = not statistically significant.

NOTES: The adjusted mean is the regression-adjusted predicted probability or number of events for the predemonstration and demonstration periods for the demonstration and comparison groups. The *relative difference* is calculated by dividing the DinD estimate (column heading *Regression-adjusted DinD estimate*) by the predicted average for the comparison group in the demonstration period (column heading *Adjusted mean for demonstration period*). The magnitude of a relative difference could be large when the underlying denominator is small. In such cases, the relative difference should be interpreted with caution.

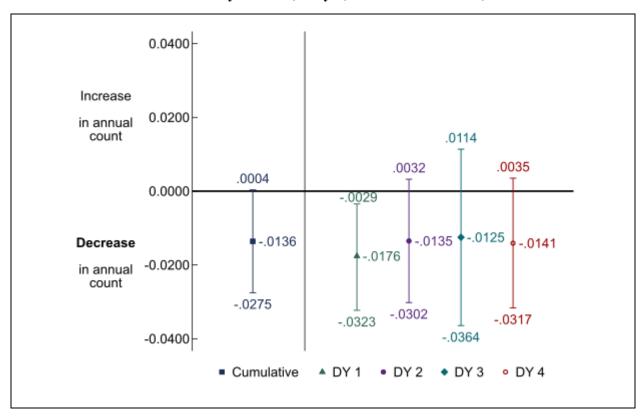
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

#### 5.3.2 Demonstration Impact in Each Demonstration Year

Figures 17–21 show the demonstration's annual effects on 30-day readmission, preventable ED visits, ACSC admissions (overall and chronic), and 30-day follow-up post mental health discharge, with the cumulative impact also shown as points of comparison. As mentioned above, these annual impact estimates indicate that the cumulative results for several quality of care measures were driven by demonstration year 4 estimates. The Ohio demonstration increased the probability of overall and chronic ACSC admissions and the probability of a 30-day follow-up after mental health discharge in demonstration year 4 only. The demonstration also increased the number of preventable ED visits in all 4 demonstration years.

- The probability of overall and chronic ACSC admissions increased in demonstration year 4 by 0.37 and 0.42 percentage points per month respectively, relative to the comparison group (*Figure 18* and *Figure 19*).<sup>26</sup>
- The monthly average number of preventable ED visits increased in each of the 4 demonstration years by 0.69, 1.40, 1.42, and 1.45 percentage points, respectively, relative to the comparison group (*Figure 20*).
- The demonstration increased probability of a 30-day follow-up after mental health discharge by 14.34 percentage points in demonstration year 4, relative to the comparison group (*Figure 21*). These findings are consistent with the cumulative findings described above.

Figure 17 Cumulative and annual demonstration effects on 30-day readmissions, demonstration years 1–4, May 1, 2014–December 31, 2018

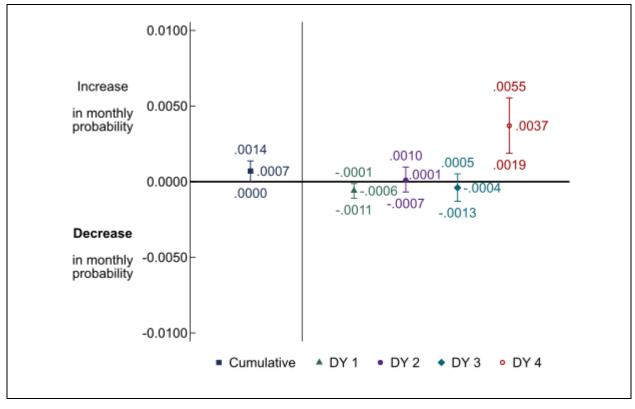


DY = demonstration year.

NOTE: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

<sup>&</sup>lt;sup>26</sup> As noted *in Section 5.3.1, Cumulative Impact Over Demonstration Years 1–4*, these findings are likely driving by changes in MMP encounter data reporting.

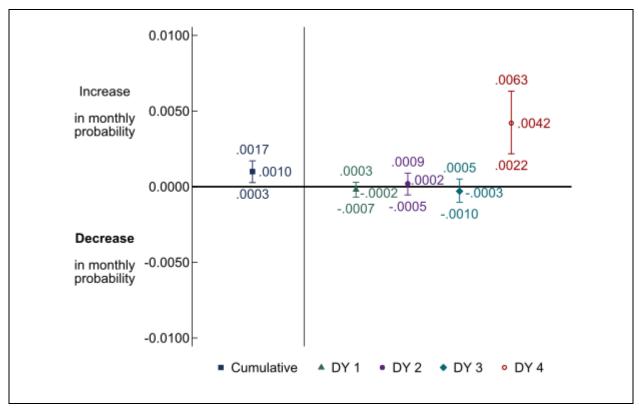
Figure 18 Cumulative and annual demonstration effects on ACSC admissions (overall), demonstration years 1–4, May 1, 2014–December 31, 2018



ACSC = ambulatory care sensitive condition; DY = demonstration year.

NOTE: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold**.

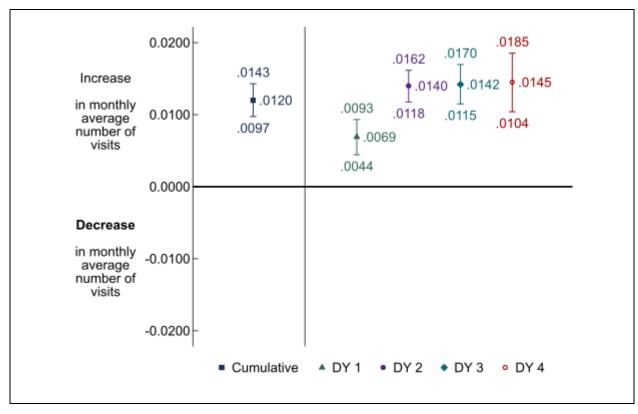
Figure 19 Cumulative and annual demonstration effects on ACSC admissions (chronic), demonstration years 1–4, May 1, 2014–December 31, 2018



ACSC = ambulatory care sensitive condition; DY = demonstration year.

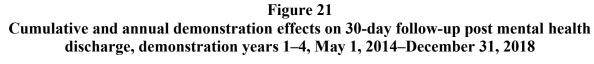
NOTE: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

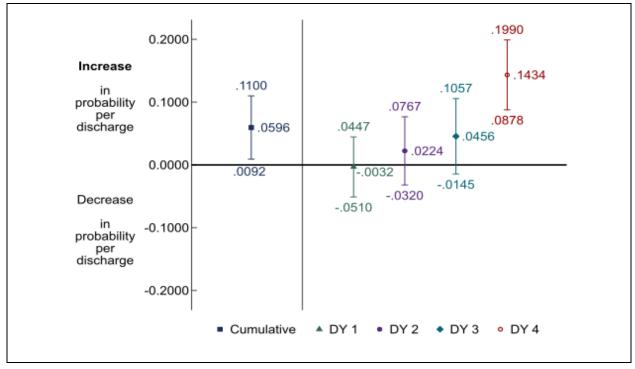
Figure 20 Cumulative and annual demonstration effects on preventable ED visits, demonstration years 1–4, May 1, 2014–December 31, 2018



DY = demonstration year; ED = emergency department.

NOTE: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 





DY = demonstration year.

NOTE: 95 percent confidence intervals are shown. The expected direction of effect (Increase or Decrease) is in **bold.** 

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

See *Appendix E*, *Tables E-4* through *E-8*, for unadjusted descriptive statistics for all service use and quality of care measures for the demonstration eligible population and for demonstration enrollees (i.e., beneficiaries who enrolled in MMPs).

#### 5.4 Demonstration Impact on Special Populations

During demonstration years 1 through 4, the demonstration impacted the LTSS population differently than the non-LTSS population. The demonstration effect for LTSS users was an increase in the probability of inpatient admissions, the probability of SNF admissions, and the probability of ACSC admissions (overall and chronic), relative to the demonstration effect for non-LTSS users. The demonstration effect for LTSS users was also a greater increase in the number of physician visits, relative to the demonstration effect among non-LTSS users.

The demonstration effect for beneficiaries with SPMI was a decrease in the probability of any inpatient admission, and an increase in the monthly number of physician visits, relative to the demonstration effect for those without SPMI. However, the demonstration resulted in an increase in the number of preventable ED visits among those with SPMI, relative to the demonstration effect for those without SPMI.

Improving quality of care and decreasing spending for those with LTSS use and those with SPMI are among the key goals of the MyCare Ohio demonstration. Interdisciplinary teams, led by care managers, serve to coordinate medical care, behavioral health, and LTSS. The demonstration is expected to particularly impact service utilization and quality of care among eligible beneficiaries who have LTSS needs or who have an SPMI, compared to those not in these special populations (see group definitions in *Appendix D*). The special population analyses indicate that the demonstration impacts were less favorable for beneficiaries with LTSS use, relative to the demonstration impact among those without LTSS use. However, the analyses indicate that the demonstration impacts were more mixed for beneficiaries with SPMI, relative to the demonstration impact among those without SPMI (see *Tables E-2* and *E-3* in *Appendix E*).

See *Tables E-7* and *E-8* in *Appendix E* for unadjusted descriptive statistics for demonstration enrollees and non-enrollees.

Additionally, we conducted further analyses to examine unadjusted service utilization results by racial and ethnic groups among the eligible population for select utilization measures: inpatient admissions, ED (non-admit), physician E&M visits, outpatient therapy (physical therapy, occupational therapy, and speech therapy), and hospice use (see *Figures E-1, E-2*, and *E-3* in *Appendix E*).

#### 5.4.1 Beneficiaries Receiving Long-Term Services and Supports

As indicated in *Table D-1* in *Appendix D*, about 18.0 percent of the demonstration eligible population in demonstration year 4 had any LTSS use. The demonstration impacted service utilization measures for those with LTSS use differently than for those with no LTSS use (see *Table 13* below).

The difference in the cumulative demonstration effect on the probability of any monthly inpatient admission for beneficiaries with LTSS use was an unfavorable 0.96 percentage point increase, relative to the demonstration effect for beneficiaries without LTSS use. The differential effect on inpatient admissions were driven by an increase in monthly inpatient use among those with LTSS use, relative to the comparison group, coupled with a decrease in inpatient use among beneficiaries without LTSS.

Similarly, the demonstration effect for beneficiaries with LTSS use was a 0.67 percentage point increase in the probability of SNF admissions, which would be associated with the increase in inpatient admissions among LTSS users, and resulting in an increase in SNF use among the demonstration group, relative to the comparison group. The demonstration effect on physician visits among those with LTSS use was a 0.1935 greater increase in monthly physician visits, relative to the demonstration effect for the non-LTSS population.

Table 13
Cumulative demonstration effect on service utilization and quality of care measures, beneficiaries with LTSS use versus those without LTSS use in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	Difference in demonstration effect (LTSS versus non- LTSS)
Service Utilization I	Service Utilization Measures					
Probability of	LTSS	0.0049	10.2	0.0008	0.0020, 0.0078	0.0000444
inpatient admission	Non-LTSS	-0.0047	-15.5	<0.0001	-0.0062, -0.0033	0.0096***
Probability of	LTSS	0.0104	16.2	<0.0001	0.0069, 0.0138	0.0023
ED visit	Non-LTSS	0.0080	10.5	<0.0001	0.0046, 0.0114	0.0023
Count of	LTSS	0.4475	32.9	<0.0001	0.3073, 0.5877	0.4005***
physician E&M visits	Non-LTSS	0.2540	35.2	<0.0001	0.1336, 0.3744	0.1935***
Probability of	LTSS	0.0063	36.0	<0.0001	0.0045, 0.0080	0.0067***
SNF admission	Non-LTSS	-0.0004	NS	0.2017	-0.0011, 0.0002	0.0007
Quality of Care Mea	asures					
Count of	LTSS	0.0102	27.7	<0.0001	0.0078, 0.0125	0.0012
preventable ED visits	Non-LTSS	0.0090	18.1	<0.0001	0.0053, 0.0126	
Probability of ACSC	LTSS	0.0021	22.2	<0.0001	0.0011, 0.0031	
admission, overall	Non-LTSS	-0.0003	NS	0.2600	-0.0009, 0.0002	0.0024***
Probability of	LTSS	0.0022	42.5	<0.0001	0.0013, 0.0031	
ACSC admission, chronic	Non-LTSS	-0.0001	NS	0.6970	-0.0007, 0.0005	0.0023***
Probability of	LTSS	0.0590	17.0	0.0289	0.0061, 0.1119	
30-day follow- up after mental health discharge	Non-LTSS	0.0545	NS	0.0526	-0.0006, 0.1095	0.0045
Count of all-	LTSS	-0.0031	NS	0.7304	-0.0205, 0.0143	0.00==
cause 30-day readmissions	Non-LTSS	-0.0106	NS	0.0780	-0.0223, 0.0012	0.0075

<sup>\*</sup> *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

ACSC = ambulatory care sensitive condition; ED = emergency department; E&M = evaluation and management; LTSS = long-term services and supports; NS = not statistically significant; SNF = skilled nursing facility. SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

In addition, the demonstration effects on the probability of ACSC admissions (overall and chronic, respectively), were a 0.24 and 0.23 percentage point increase in relative to the demonstration effect among beneficiaries with no LTSS use. As shown in *Appendix E, Table E-2*, the cumulative differential effect is largely driven by 22.2 and 42.5 percent differences in ACSC admissions (overall and chronic, respectively) in the demonstration group relative to the comparison group.

Despite an increase in physician E&M visits relative to the beneficiaries without LTSS use, these findings highlight the early challenges MyCare Ohio may have had with LTSS providers and integrating these services. As discussed in the First Evaluation Report, early in the demonstration, LTSS providers were not experienced with managed care and the MMPs were not experienced working with LTSS and behavioral health providers.

We also present estimates of the demonstration effect for LTSS users and non-LTSS users in each demonstration year, in *Table E-2* in *Appendix E*.

#### 5.4.2 Beneficiaries with Serious and Persistent Mental Illness

As indicated in *Table D-1* in *Appendix D*, about 59.4 percent of the demonstration eligible population in demonstration year 4 had an SPMI. MyCare Ohio had both favorable and unfavorable differential effects for those with SPMI compared to those without SPMI (see *Table 14* below). The demonstration effect for those with SPMI was a favorable 0.47 percentage point greater decrease in the monthly probability of any inpatient admission, relative to the demonstration effect for those without SPMI. The demonstration effect was also a greater increase in the number of physician E&M visits, relative to the demonstration effect for those without SPMI.

However, the demonstration effect for those with SPMI was an unfavorable 0.0032 greater increase in the number of preventable ED visits, relative to the demonstration effect for those without SPMI. These findings are largely driven by a 0.0042 greater increase in the number of preventable ED visits among beneficiaries with SPMI, relative to the demonstration effect among those without SPMI in demonstration year 4 (see *Table E-3* in *Appendix E*).

We also present estimates of the demonstration effect for beneficiaries with SPMI and those without SPMI in each demonstration year, in *Table E-3* in *Appendix E*.

Table 14
Cumulative demonstration effect on service utilization and quality of care measures, beneficiaries with SPMI versus those without SPMI in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Special population	Demonstration effect relative to comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Service Utilization	Measures					
Probability of	SPMI	-0.0063	-11.0	<0.0001	-0.0088, -0.0039	-0.0047***
inpatient admission	Non-SPMI	-0.0016	-5.6	0.0394	-0.0032, -0.0001	
Probability of	SPMI	0.0102	10.9	<0.0001	0.0068, 0.0135	0.0004
ED visit	Non-SPMI	0.0097	17.8	<0.0001	0.0075, 0.0120	0.0004
Count of	SPMI	0.3586	26.0	<0.0001	0.1872, 0.5301	
physician E&M visits	Non-SPMI	0.1731	22.5	0.0005	0.0751, 0.2711	0.1855***

(continued)

#### Table 14 (continued)

### Cumulative demonstration effect on service utilization and quality of care measures, beneficiaries with SPMI versus those without SPMI in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Special population	Demonstration effect relative to comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Probability of	SPMI	-0.0013	NS	0.0685	-0.0027, 0.0001	0.0044
SNF admission	Non-SPMI	-0.0002	NS	0.5490	-0.0009, 0.0005	-0.0011
Quality of Care Me	asures					
Count of	SPMI	0.0127	22.1	<0.0001	0.0097, 0.0157	0.0000##
preventable ED visits	Non-SPMI	0.0095	28.0	<0.0001	0.0071, 0.0119	0.0032**
Probability of	SPMI	0.0012	12.0	0.0257	0.0001, 0.0023	
ACSC admission, overall	Non-SPMI	0.0003	NS	0.3350	-0.0003, 0.0009	0.0009
Probability of	SPMI	0.0015	22.7	0.0043	0.0005, 0.0025	
ACSC admission, chronic	Non-SPMI	0.0006	15.1	0.0393	0.0000, 0.0012	0.0009
Count of all- cause 30-day readmissions	SPMI	-0.0118	NS	0.1400	-0.0274, 0.0039	
	Non-SPMI	-0.0155	NS	0.0656	-0.0319, 0.0010	0.0037

<sup>\*</sup> *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

ACSC = ambulatory care sensitive condition; ED = emergency department; E&M = evaluation and management; NS = not statistically significant; SNF = skilled nursing facility; SPMI = serious and persistent mental illness.

NOTES: Probability of 30-day follow-up after mental health discharge is estimated on only those with a hospitalization for serious and persistent mental illness; the DinD estimate is reported in *Table 12*.

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

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# SECTION 6 Demonstration Impact on Cost Savings



RTI evaluated the Ohio demonstration's impact on Medicare Parts A and B costs using a DinD analysis of beneficiaries eligible for the demonstration, relative to the comparison group. Our results show a statistically significant increase in Medicare Parts A and B costs during the overall demonstration period (\$97.55, PMPM).

#### **6.1** Methods Overview

As part of the capitated financial alignment model, Ohio, CMS, and MMPs entered into a three-way contract to provide services to Medicare-Medicaid enrollees (Ohio three-way contract, 2017). MMPs receive a blended, risk-adjusted prospective capitation payment to provide enrollees with Medicare Parts A, B, and D, and Medicaid services. CMS and Ohio developed the capitation payment that accounts for the services provided and adjusts the Medicare component for each enrollee using CMS's hierarchical risk adjustment model to account for differences in the characteristics of enrollees. For further information on the rate development and risk adjustment process, see the Memorandum of Understanding and the three-way contract.<sup>27</sup>

This section presents the Medicare Parts A and B cost savings analysis for demonstration years 1 to 4 (May 1, 2014–December 31, 2018). Additionally, corrections were made to impact estimates from earlier reports that resulted in differences in our current cost savings impact estimates (see *Appendix F* for additional details).

We used an ITT analytic framework that includes beneficiaries eligible for the demonstration rather than only those who enrolled. The ITT framework alleviates concerns of selection bias, supports generalizability of the results across the demonstration eligible population, and mimics the real-world implementation of the demonstration. For this analysis, enrolled beneficiaries account for approximately 72 percent of all eligible beneficiaries (including FFS beneficiaries, MMP enrollees, and MA enrollees) in demonstration year 4. Results from a separate analysis, using a more restricted group of MMP enrollees only and their comparison group counterparts, are included in *Appendix F* (see *Table F-11*).

To evaluate the cost implications of the demonstration, RTI performed a DinD analysis of Medicare Parts A and B expenditures that compares demonstration eligible beneficiaries who live in an area where a participating health plan operates—the demonstration group—to those who meet the same eligibility criteria but live outside those operating areas—the comparison group.

To identify the demonstration group, RTI used quarterly files on demonstration eligible beneficiaries submitted by the State of Ohio. Comparison group beneficiaries were identified through a two-step process. First, we identified comparison areas based on market characteristics. Second, we applied all available eligibility criteria to beneficiaries in the identified comparison areas. This process is further described in *Appendix C*. Once the two

<sup>&</sup>lt;sup>27</sup> Available at: <a href="https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Ohio">https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-and-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Ohio</a>

groups were finalized, we applied propensity score (PS) weighting in DinD analysis to balance key characteristics between the two groups.

RTI gathered predemonstration and demonstration monthly Medicare expenditure data for both the demonstration and comparison groups from two data sources, as summarized in *Table 15*. We obtained capitation payments paid to participating plans during the demonstration period, and payments to MA plans in the predemonstration and demonstration periods from the CMS Medicare Advantage and Part D Inquiry System (MARx). Part D payments were not included in this analysis. 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 2021). We also used Medicare FFS claims to calculate expenditures for beneficiaries who were not enrolled in an MMP or MA plan. These FFS claims included all Medicare Parts A and B services.

Table 15
Data sources for monthly Medicare expenditures

Group	Predemonstration period May 1, 2012–April 30, 2014	Demonstration period May 1, 2014–December 31, 2018
Demonstration	Medicare FFS MA capitation	Capitation rate for enrollees MA capitation for non-enrollees Medicare FFS for non-enrollees
Comparison	Medicare FFS MA capitation	Medicare FFS MA capitation

FFS = fee-for-service; MA = Medicare Advantage.

We made several adjustments to the monthly Medicare expenditures to ensure that observed expenditure variations are not due to differences in Medicare payment policies in different areas of the country or the construction of the capitation rates (see *Appendix F*). *Table F-1* in *Appendix F* summarizes each adjustment and the application of the adjustments to FFS expenditures or to the capitation rate.

To estimate the effect of the demonstration on Medicare expenditures, we utilized a generalized linear model with gamma distribution and log link. This is a commonly used approach in analysis of health care expenditure data. The model controlled for individual demographic and area-level characteristics (see *Appendix F*), employed PS weighting, and adjusted for clustering of observations at the county level. The key policy variable of interest in the model was an interaction term measuring the effect of being part of the demonstration eligible group during the demonstration period, which estimates the demonstrations effect on Medicare expenditures.

#### **6.2** Demonstration Impact on Medicare Parts A and B Costs

Table 16 shows the magnitude of the DinD estimate of the cumulative demonstration impact on Medicare Parts A and B cost, both in absolute dollar amount and relative to the adjusted mean expenditure level in the comparison group during the demonstration periods. The adjusted mean for monthly expenditure increased from the predemonstration period to the

demonstration period in both the demonstration and comparison groups but increased more for the demonstration group. The cumulative DinD estimate of \$97.55, which amounts to a relative difference of 6.36 percent of the adjusted mean expenditure for the comparison group during the demonstration period, is statistically significant (p = <0.001). This suggests that overall, the Ohio demonstration was associated with statistically significant increases in Medicare Parts A and B costs relative to the comparison group.

Table 16 Cumulative demonstration effect on monthly Medicare Parts A and B costs for eligible beneficiaries in Ohio, demonstration years 1-4, May 1, 2014—December 31, 2018

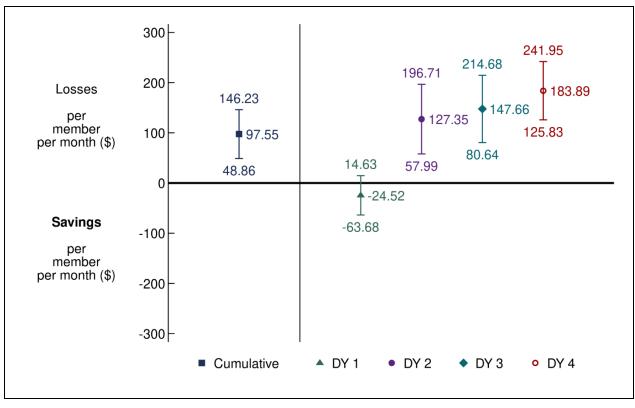
Group	Adjusted mean for predemonstration period (\$)	domonetration		Adjusted coefficient DinD (\$)	p-value
Demonstration	1,539.81	1,674.50	6.36	97.55	<0.001
Comparison	1,500.26	1,534.41	0.30	97.55	<0.001

DinD = difference-in-differences.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1490\_Percents.log)

In addition, we estimated the effect of the demonstration in each demonstration year. As shown in *Figure 22*, the demonstration had no statistically significant effect in demonstration year 1 (as shown by the confidence interval crossing the \$0). However, the coefficient for demonstration years 2–4 and cumulative demonstration were statistically significant, indicating increased costs to Medicare as result of the demonstration, relative to the comparison group, in those years and for the entire demonstration. Note that these estimates rely on the ITT analytic framework, only account for Medicare Parts A and B cost, and use the capitation rate for the MMP rather than the actual amount the plan paid for services.

Figure 22
Cumulative and annual demonstration effects on monthly Medicare Parts A and B costs, demonstration years 1–4, May 1, 2014–December 31, 2018 <sup>28</sup>



DY = demonstration year.

NOTE: 95 percent confidence intervals are shown. "Losses"/"Savings" indicate increased/decreased costs for eligible beneficiaries in the demonstration group, relative to the comparison group. The expected direction of the effect (Losses or Savings) is in **bold**.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1480\_GLM.log)

 $<sup>^{28}</sup>$  The demonstration year 1 and 2 effects differ from the results shown in the <u>First Evaluation Report</u>. See *Appendix* F for more details.

## SECTION 7 Conclusions



#### 7.1 Implementation Successes, Challenges, and Lessons Learned

MyCare Ohio has emerged as a stable demonstration. ODM and CMS have successfully addressed many of the system-level challenges encountered during the early phases of implementation, including reducing discrepancies between Medicare and Medicaid enrollment data and streamlining assessment requirements. Although enrollment as a percent of those eligible declined from 2016 to 2020, it continued to stay above 60 percent. MMPs have been satisfied with the capitation rates. Levels of beneficiary satisfaction with the demonstration were solid, with some areas noted for improvement. The CMT maintained an active role in improving MMP performance.

During this reporting period, ODM also continued to work on system-level improvements aimed at improving outcomes and reducing provider burden. For example, in 2017 ODM required MMPs to incorporate a population health approach into its care management services. ODM coordinated this effort across the managed care plans participating in MyCare Ohio as well as those participating in its mainstream Medicaid program. Embedded in this initiative is ODM's goal of reducing disparities in access to services and health outcomes. ODM also convened a "Health, Safety and Welfare" meeting of all its Medicaid managed care plans, including MyCare Ohio MMPs, to discuss complex cases or complex topics as a forum for brainstorming solutions or learning from others. In addition, ODM responded to provider complaints about the administrative burden of working with multiple plans by developing a single credentialing process to serve the needs of all Medicaid managed care plans, and to be consistent with NCQA credentialing requirements. The new centralized credentialing process is scheduled to be rolled out in 2021.

MyCare Ohio weathered more than a year of the PHE with increased levels of collaboration among ODM, CMS, and MMPs. For example, CMS and ODM responded quickly by announcing flexibilities in the way MMPs could conduct business during the PHE. ODM maintained an emergency case management protocol as a "living document" to give provider service coordinators consistent and timely information about the flexibilities allowed and how ODM was operationalizing them. After quality reporting requirements were suspended, ODM used creative strategies to work with MMPs on efforts to improve quality during the pandemic. MMPs reported collaborating as a group to develop ways to address social isolation and other enrollee needs during the PHE. ODM also used its stakeholder process to maintain communication with and among providers.

Information collected for this evaluation, as well as interviews and focus groups conducted for CMS and ODM's EQRO surveys, affirmed that MyCare Ohio has benefited many enrollees and that many enrollees value the role their care manager plays in helping them to access services and manage their health. At the same time, some enrollees and their advocates identified ongoing challenges and questioned the added value of MyCare Ohio. Their most common concerns were related to the quality of care management services, the quality of other services (particularly transportation), access to needed services, and a growing challenge with LTSS workforce shortages that impact MyCare Ohio and other LTSS programs in Ohio.

#### 7.2 Demonstration Impact on Service Utilization, Quality of Care and Costs

Aspects of the MyCare Ohio demonstration such as care management activities, attention to population health management, and care transitions appear to have had some favorable impacts on health care utilization and measures of health care quality. The demonstration also appears to have had some unfavorable results on these measures. The demonstration resulted in favorable decreases in monthly inpatient use and annual long-stay nursing home use, and an increase in monthly physician E&M, and the monthly probability of 30-day mental health follow-up post-hospitalization, relative to the comparison group. However, there was also an unfavorable increase in the monthly probability of any ED visit, including preventable ED visits, as well as increases in ACSC admissions (overall and chronic), relative to the comparison group.

The decrease in inpatient admissions and increase in physician visits are consistent with the goals of the demonstration. These findings indicate that care management and coordination may have improved during the demonstration, contributing to a decline in inpatient admissions. However, increases in overall ED use, preventable ED visits, and ACSC admission<sup>29</sup> suggest that improvements in coordination of ambulatory services and coordination across the medical, LTSS, and behavioral health systems had limited impacts on these types of quality measures relative to the comparison group.

Despite early challenges MyCare Ohio had with LTSS providers and integrating these services, the MyCare Ohio demonstration resulted in a decrease in long-stay NF use. As described in *Section 3.3.3, Care Planning*, State officials and MMPs reported significant improvements were made over the demonstration period in efforts to transition beneficiaries from nursing homes back into the community setting and rebalancing their LTSS overall. That said, management of ambulatory services for those with LTSS use appears to have been more challenging, as evidenced by differential increases in monthly probabilities of inpatient admissions, SNF admissions, and ACSC admissions (overall and chronic) relative to the demonstration effect for those without LTSS use. These increases occurred for those with LTSS use despite overall increases in physician visits compared to the demonstration effect for those without LTSS use.

The demonstration had some uniquely favorable impacts among beneficiaries with SPMI, who represent a substantial portion of the beneficiaries. These impacts included a greater decrease in inpatient admissions and corresponding increase in physician E&M visits, relative to the demonstration effect for those without SPMI. This was paired with an improvement in outpatient follow-up after a psychiatric hospitalization. However, increases in preventable ED visits highlight the early challenges the MyCare Ohio demonstration experienced in integrating behavioral health services and ensuring access to services that may have forestalled an ED visits.

The cumulative cost analysis found a statistically significant cost increase to the Medicare program over the 4 demonstration years. The analysis of individual demonstration years also found increased costs (statistically significant) to the Medicare program for all demonstration years with the exception of demonstration year 1. The cost analyses consider the

<sup>&</sup>lt;sup>29</sup>As described in *Section 5.3.1, Cumulative Impact Over Demonstration Years 1–4*, caution is warranted in interpreting this result due to a potential encounter data error with one MMP.

costs of Medicare Parts A and B through FFS expenditures, and capitation rates paid to MMP plans and MA plans. Capitation rates do not provide information on how much the plan paid for services and are based on characteristics of the beneficiary. Thus, capitation rates are not necessarily linked to actual service utilization. Further, the cost analyses do not consider Part D costs.

#### 7.3 Next Steps

As previously noted, the MyCare Ohio demonstration has been extended through 2022, which will provide further opportunities to evaluate the demonstration's performance. The RTI evaluation team will continue to collect information such as enrollment statistics and updates on key aspects of implementation on a quarterly basis from Ohio officials through the online State Data Reporting System. We will continue to conduct annual virtual site visit calls with the State and demonstration stakeholders, and quarterly calls with MyCare Ohio State and CMS staff. RTI will review the results of any evaluation activities conducted by CMS or its contractors. 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 quantitative analyses of the demonstration's impact on service utilization, quality, and costs.

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#### References

ANR Market Research Consultants: MyCare Ohio Demonstration Beneficiary Experience Qualitative Research: Summary Report. March 11, 2021

Alan Newman Research: <u>Medicare-Medicaid Financial Alignment Initiative State</u>
<u>Demonstrations: MyCare Ohio Consumer Focus Groups Summary Report</u>. Contract No. HHSM-500-2010-00013I. August 22, 2018.

Centers for Medicare & Medicaid Services (CMS): Ohio Medicare-Medicaid Plan Quality Withhold Analysis Results Demonstration Year 1 (Calendar Years 2014 – 2015). https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/QualityWithholdResultsReport\_OH\_DY1\_0619 2018.pdf. n.d.-a. As obtained on March 4, 2020.

Centers for Medicare & Medicaid Services (CMS): <u>Ohio Medicare-Medicaid Plan Quality</u> Withhold Analysis Results Demonstration Year 2 (Calendar Year 2016).

https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-

Coordination/Medicare-Medicaid-Coordination-

Office/FinancialAlignmentInitiative/Downloads/QualityWithholdResultsReport\_OH\_DY2\_0619 2018.pdf n.d.-b. As obtained on March 4, 2020.

Centers for Medicare & Medicaid Services (CMS): <u>Ohio Medicare-Medicaid Plan Quality Withhold Analysis Results Demonstration Year 3 (Calendar Year 2017)</u>.

https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-

Office/FinancialAlignmentInitiative/Downloads/QualityWithholdResultsReportOHDY3.pdf. n.d.-c. As obtained on March 4, 2020.

Centers for Medicare & Medicaid Services (CMS): Ohio Medicare-Medicaid Plan Quality Withhold Analysis Results Demonstration Year 4 (Calendar Year 2018). <a href="https://www.cms.gov/files/document/qualitywithholdresultsreportohdy4.pdf">https://www.cms.gov/files/document/qualitywithholdresultsreportohdy4.pdf</a> n.d.-d. As obtained on June 6, 2021.

Centers for Medicare & Medicaid Services (CMS): <u>Medicare-Medicaid Capitated Financial</u> Alignment Model Quality Withhold Technical Notes (DY 2-5).

https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-

Office/FinancialAlignmentInitiative/MMPInformationandGuidance/Downloads/QualityWithhold GuidanceDY2-503142018.pdf. 2018. As obtained on March 5, 2020.

Centers for Medicare & Medicaid Services (CMS): Ohio (0446, 0337, 1035, 0198) Appendix K Amendment 1-15-2021: Emergency Preparedness and Response, Assisted Living, Ohio Home Care Waiver, My Care Ohio, PASSPORT Waivers. <a href="https://www.medicaid.gov/state-resource-center/downloads/oh-0446-0337-1035-0198-combined-2-appendix-k-appvl.pdf">https://www.medicaid.gov/state-resource-center/downloads/oh-0446-0337-1035-0198-combined-2-appendix-k-appvl.pdf</a>. January 15, 2021. As obtained on June 28, 2021.

Centers for Medicare & Medicaid Services (CMS) and The State of Ohio: Memorandum of Understanding (MOU) Between the Centers for Medicare & Medicaid Services (CMS) and The State of Ohio Regarding a Federal-State Partnership to Test a Capitated Financial Alignment Model for Medicare-Medicaid Enrollees. Demonstration to Develop an Integrated Care Delivery System. <a href="https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/OHMOU.pdf.">https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/OHMOU.pdf.</a> 2012. As obtained on March 4, 2020.

Centers for Medicare & Medicaid Services (CMS) and The State of Ohio: <u>Contract between United States Department of Health and Human Services Centers for Medicare & Medicaid Services in Partnership with The State of Ohio Department of Medicaid.</u>
<a href="https://www.cms.gov/files/document/ohcontractamendment.pdf">https://www.cms.gov/files/document/ohcontractamendment.pdf</a>. 2020. As obtained on March 21, 2020.

Centers for Medicare & Medicaid Services (CMS) and The State of Ohio: Contract between United States Department of Health and Human Services Centers for Medicare & Medicaid Services in Partnership with The State of Ohio Department of Medicaid.

https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/OHContract.pdf. 2019. As obtained on March 4, 2020.

Centers for Medicare & Medicaid Services (CMS) and The State of Ohio: <u>Contract between United States Department of Health and Human Services Centers for Medicare & Medicaid Services in Partnership with The State of Ohio Department of Medicaid.</u> 2017.

Degenholtz, H. B., Park, M., Kang, Y., & Nadash, P.: Variations among Medicare Beneficiaries Living in Different Settings: Demographics, Health Status, and Service Use. <u>Research on Aging</u>, 38(5):602–616, 2016.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, Period 1 CY 2018/Review 3 SFY 2018, Aetna Better Health of Ohio. April 2018. 2018a.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, Period 1 CY 2018/Review 3 SFY 2018, Buckeye Health Plan. June 2019. 2018b.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, <u>Period 1 CY 2018/Review 3 SFY 2018</u>, <u>Caresource</u>. June 2019. 2018c.

Health Services Advisory Group (HSAG): MyCare Ohio Care Management Targeted Review, Period 1 CY 2018/Review 3 SFY 2018, Molina Healthcare of Ohio, Inc. June 2019. 2018d.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, <u>Period 1 CY 2018/Review 3 SFY 2018</u>, <u>United Healthcare Community Plan of Ohio, Inc.</u> (June 2019). 2018e.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, Review 4 SFY 2019, Aetna Better Health of Ohio. (June 2019). 2019a.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, <u>Review 4 SFY 2019</u>, <u>Buckeye Health Plan</u>. (June 2019). 2019b.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, <u>Review 4 SFY 2019</u>, <u>Caresource</u>. (June 2019). 2019c.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, <u>Review 4 SFY 2019</u>, <u>Molina Healthcare of Ohio, Inc</u>. (June 2019). 2019d.

Health Services Advisory Group (HSAG): <u>MyCare Ohio Care Management Targeted Review</u>, Review 4 SFY 2019, United Healthcare Community Plan of Ohio, Inc. (June 2019). 2019e.

Health Services Advisory Group (HSAG): <u>Ohio Medicaid MyCare Ohio Program CY2018 Care Management Survey Report</u>. (June 2019). 2019f.

IPRO: MyCare Ohio Care Management Survey Results. August 2020.

Ohio Department of Job and Family Services: State Demonstration to Integrate Care for Medicare-Medicaid Enrollees. Proposal to the Center for Medicare and Medicaid Innovation. <a href="https://jfs.ohio.gov/RFP/R1213078038/ICDS-RFA-Attachment-1---Ohios-Medicare-Medicaid-Enrollee-Pro.pdf">https://jfs.ohio.gov/RFP/R1213078038/ICDS-RFA-Attachment-1---Ohios-Medicare-Medicaid-Enrollee-Pro.pdf</a>. 2012. As obtained March 31, 2020.

Ohio Department of Medicaid (ODM). <u>MyCare Ohio Evaluation 2018</u>. <u>https://medicaid.ohio.gov/Portals/0/Resources/Reports/MyCare\_Ohio\_Evaluation.pdf</u>. June 29, 2018. As obtained on February 17, 2020.

Ohio Department of Medicaid (ODM). <u>The Department of Medicaid Managed Care Quality Strategy</u>. <u>https://medicaid.ohio.gov/Portals/0/Medicaid%20101/QualityStrategy/Measures/MCQ-Strategy2018.pdf</u>. 2018. As obtained on March 11, 2020.

Ohio Department of Medicaid (ODM). <u>MyCare Ohio Provider Agreement</u>. <u>https://medicaid.ohio.gov/Portals/0/Providers/ProviderTypes/Managed%20Care/ICDS/01\_2020\_MCOP\_Final\_Rates.pdf</u>. Effective January 1, 2020. As obtained on March 11, 2020.

Ohio Department of Medicaid (ODM) and Ohio Department of Mental Health and Addiction Services (OhioMHAS). <u>Behavioral Health Redesign - Medicaid Behavioral Health.</u> <u>https://bh.medicaid.ohio.gov/manuals</u>. As obtained on March 4, 2020.

Toth, M., Palmer, L., Bercaw, L., Voltmer, H., & Karon, S. L. (2021). Trends in the Use of Residential Settings among Older Adults. <u>The Journals of Gerontology: Series B.</u>

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### Appendix A Data Sources

We used the following data sources to prepare this report.

**Key informant interviews.** The RTI International evaluation team conducted virtual site visits in June through August 2018; March 2019; January and February of 2020; and February 2021. Over the course of these four site visits, the team interviewed the following individuals: State officials, CMS officials, the MyCare Ohio Ombudsman, representatives from the MyCare Ohio plans, providers and provider advocates; and beneficiaries and beneficiary advocates.

Focus groups and individual beneficiary interviews. The RTI evaluation team conducted eight focus groups in northeast Ohio in April 2017, including two focus groups with African-Americans held in Akron, two with African-Americans in Cleveland, and four with persons with behavioral health or long-term services and supports (LTSS) needs in Cleveland. A total of 39 demonstration enrollees and six proxies participated in the focus groups.

This report includes findings from focus groups conducted in 2018 by Alan Newman Research (ANR) under contract with the Centers for Medicare & Medicaid Services (CMS). ANR conducted two focus groups with demonstration enrollees in Columbus and six in Cleveland. The two focus groups in Columbus and two in Cleveland included demonstration enrollees with a mixture of characteristics (referred to as "general" beneficiaries). Of the remaining four focus groups conducted in Cleveland, two were held with participants who used LTSS, and two were held with participants who used behavioral health services. A total of 57 individuals participated in these focus groups, including three proxies.

This report also includes findings from a series of telephone interviews of 50 MyCare Ohio enrollees with a primary or secondary diagnosis of diabetes, conducted by ANR. The interviews were conducted between December 2020 and January 2021 and included 10 interviews for each participating Medicare-Medicaid Plan (MMP). There were 35 participants under age 65 and 15 participants age 65 and up. Most were between the ages of 50 and 64.

**Surveys.** Medicare requires all Medicare Advantage (MA) plans, including MyCare Ohio plans, to conduct an annual assessment of beneficiary experiences using the Medicare Advantage and Prescription Drug Plan Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey instrument. This report includes survey results for a subset of survey questions for 2015 through 2019. Findings are available at the MMP level. Some CAHPS items are case mix-adjusted. Case mix refers to the respondent's health status and sociodemographic characteristics, such as age or educational level, that may affect the ratings that the respondent provides. Without an adjustment, differences between entities could be due to case-mix differences rather than true differences in quality. The frequency count for some survey questions is suppressed because too few enrollees responded to the question. Comparisons with findings from all MA plans are available for core CAHPS survey questions.

In 2018, ODM's External Quality Review Organization (EQRO), Health Services Advisory Group (HSAG), conducted a survey of MyCare Ohio beneficiaries (both demonstration enrollees and those opting out of the demonstration) (HSAG, 2019f). This survey was conducted by mail and then by telephone for those who had not responded by mail. These two phases were completed between July and October 2018. A sample of 8,250 Ohio beneficiaries (distributed evenly across the five MyCare Ohio plans) resulted in a response rate of 49.16 percent, with

3,698 MyCare Ohio beneficiaries responding. The survey consisted of 30 questions focused on beneficiaries' satisfaction with their care managers and care plans.

In 2020, ODM's new EQRO, IPRO, conducted another survey of demonstration enrollees focused on satisfaction with care management (IPRO, 2020). The survey was conducted by mail and telephone from January through May 2020. From a sample of 10,254 enrollees, 3,525 responded to the survey, yielding a response rate of 34.38 percent. The survey consisted of 43 questions focused on assessing enrollees' satisfaction with their care manager (including both the care manager and the waiver service coordinator) and the services provided by the care management program.

**Demonstration data.** The RTI evaluation team reviewed data provided quarterly by Ohio through the State Data Reporting System (SDRS). These reports include eligibility, enrollment, opt-out, and disenrollment data; information reported by Ohio on its integrated delivery system, care coordination, benefits and services, quality management, stakeholder engagement, financing, and payment; and a summary of successes and challenges. This report also uses data for quality measures reported by MyCare Ohio plans and submitted to CMS' implementation contractor, NORC.<sup>30,31</sup> Data reported to NORC include core quality measures that all MMPs are required to report, as well as State-specific measures that MyCare Ohio plans are required to report. Due to reporting inconsistencies, plans occasionally resubmit data for prior demonstration years; therefore, the data included in this report are considered preliminary.

**Demonstration policies, contracts, and other materials.** The RTI evaluation team reviewed a wide range of demonstration documents, including demonstration and State-specific information on the CMS website<sup>32</sup> and other publicly available materials on the Ohio MyCare website.<sup>33</sup> The RTI evaluation team also reviewed resources prepared for providers regarding Ohio's Behavioral Health Redesign<sup>34</sup> and reports and resources publicly accessible through ODM's website.<sup>35</sup>

Conversations with CMS and ODM officials. To monitor demonstration progress, the RTI evaluation team engages in periodic phone conversations with ODM and CMS. These conversations might include discussions about new policy clarifications designed to improve plan performance, quality improvement work group activities, and contract management team actions.

**Complaints and appeals data.** Complaint (also referred to as grievance) data are from two sources: (1) complaints from beneficiaries reported by MyCare Ohio plans to ODM and

<sup>&</sup>lt;sup>30</sup> Data are reported for 2014 through 2020.

<sup>&</sup>lt;sup>31</sup> The technical specifications for reporting requirements are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at <a href="https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements">https://www.cms.gov/Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements</a>

<sup>32 &</sup>lt;a href="https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Med

 $<sup>\</sup>underline{Office/FinancialAlignmentInitiative/FinancialModelstoSupportStatesEffortsinCareCoordination.html}\\$ 

<sup>33</sup> https://medicaid.ohio.gov/mycareohio

<sup>34</sup> https://bh.medicaid.ohio.gov/manuals.

<sup>35</sup> https://medicaid.ohio.gov/

separately to CMS' implementation contractor, NORC,<sup>36</sup> through Core Measure 4.2 and (2) complaints received by ODM or 1-800-Medicare and entered into the CMS electronic Complaint Tracking Module (CTM). The RTI evaluation team also obtained qualitative data on complaints during site visit interviews. Appeals data are generated by MMPs and reported to ODM and NORC, for Core Measure 4.2, and the Medicare Independent Review Entity.

**HEDIS measures.** We report on a 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 MA plans.

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 (MDS). Our report also includes analyses of MMP encounter data on Medicaid-type services such as personal care and nonemergency transportation. Medicaid encounter data for beneficiaries enrolled in MMPs are also used to assess select service use, such as personal care and non-emergency medical transportation.

Cost savings data. Two primary data sources were used to support the savings analyses, capitation payments and Medicare claims. Medicare capitation payments paid to MyCare Ohio plans during the demonstration period were obtained for all demonstration enrollees from CMS Medicare Advantage and Part D Inquiry 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 2021). Quality withholds were applied to the capitation payments (quality withholds are not reflected in the MARx data), as well as quality withhold repayments based on data provided by CMS. Fee-for-service (FFS) Medicare claims were used to calculate expenditures for all comparison group beneficiaries, demonstration beneficiaries in the baseline period, and demonstration eligible beneficiaries who were not enrolled during the demonstration period. FFS claims included all Medicare Parts A and B services.

<sup>&</sup>lt;sup>36</sup> The technical specifications for reporting requirements are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document, which is available at: <a href="https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements</a>

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# Appendix B MyCare Ohio MMPs Performance on Select HEDIS Quality Measures, 2015–2018

Tables B-1a and B-1b provide 2015 through 2018 HEDIS performance data for MyCare Ohio MMPs. Using correlation coefficients that were 0.9 and above, or -0.9 and below, we have applied green and red shading to indicate where MMP performance over time for a given measure was steadily improving or worsening; green indicates a favorable trend, and red indicates an unfavorable one. We did not perform any testing for statistical significance for differences across years because of the limited data available. For measures without green or red shading, year-over-year MMP performance remained relatively stable between 2015 and 2018.

Aetna improved over time on measures for adult BMI assessment, blood pressure control (standalone measure), medication review and pain assessment (both within Care for Older Adults submeasures), colorectal cancer screening, maintaining good control of hemoglobin A1c (HbA1c) level (< 8.0%), controlling poor HbA1c level (> 9.0%), and blood pressure control (all within Comprehensive Diabetes Care submeasures), engagement of AOD treatment (within initiation and engagement of alcohol and other drug [AOD] dependence treatment), and plan all-cause readmissions (age 18–64 and 65+), but worsened performance over time on measures for effective continuation phase treatment (within antidepressant medication management), and follow-up after hospitalization for mental illness (30 days).

Buckeye improved over time on measures for adult BMI assessment, advance care planning, medication review, functional status assessment (all within Care for Older Adults submeasures), blood pressure control (within Comprehensive Diabetes Care submeasures), disease modifying anti-rheumatic drug therapy in rheumatoid arthritis, outpatient visits per 1,000 members, and plan all-cause readmissions (age 65+). The Buckeye plan did not see a substantial decline over time in any measures.

Caresource improved over time on measures for breast cancer screening, colorectal cancer screening, receiving eye exam (within Comprehensive Diabetes Care submeasures), and plan all-cause readmissions (age 18–64 and 65+), but worsened performance over time on the measure for follow-up after hospitalization for mental illness.

Molina improved over time on measures for breast cancer screening, disease modifying anti-rheumatic drug therapy in rheumatoid arthritis, controlling poor HbA1c level (> 9.0%) (within Comprehensive Diabetes Care submeasures) and emergency department visits (per 1,000 members), but worsened performance over time on medication review (within Care for Older Adults submeasures).

United improved over time on measures for adult BMI assessment, receiving HbA1c testing, maintaining good HbA1c level (< 8.0%), controlling poor HbA1c level (> 9.0%), and blood pressure control (all within Comprehensive Diabetes Care submeasures), and plan all-cause readmissions (age 65+). There were no measures for which the United plan saw a substantial decline in performance over time.

Table B-1a
MyCare Ohio MMP performance on select HEDIS quality measures for 2015–2018 by MMP

Measure	National MA Plan Mean		Ae	tna			Bud	:keye			Cares	ource	
	(2018)	(2015)	(2016)	(2017)	(2018)	(2015)	(2016)	(2017)	(2018)	(2015)	(2016)	(2017)	(2018)
Adults' access to preventive/ambulatory health services	95.0	94.2	95.3	95.2	95.3	93.0	94.2	93.6	93.8	95.4	96.1	95.0	94.9
Adult BMI assessment	96.0	N/A	81.5 <sup>G</sup>	87.8 <sup>G</sup>	93.4 <sup>G</sup>	N/A	88.4 <sup>G</sup>	91.7 <sup>G</sup>	93.4 <sup>G</sup>	N/A	77.4	76.4	82.7
Blood pressure control <sup>1</sup>	69.5	48.8 <sup>G</sup>	54.6 <sup>G</sup>	60.3 <sup>G</sup>	69.6 <sup>G</sup>	47.7	60.6	52.3	70.6	48.7	39.7	49.2	50.4
Breast cancer screening	72.7	N/A	58.7	50.1	53.9	N/A	62.9	62.9	63.9	N/A	55.4 <sup>G</sup>	56.0 <sup>G</sup>	58.9 <sup>G</sup>
Colorectal cancer screening	70.5	N/A	42.1 <sup>G</sup>	50.4 <sup>G</sup>	52.1 <sup>G</sup>	N/A	50.8	56.2	52.3	N/A	40.2 <sup>G</sup>	47.5 <sup>G</sup>	59.6 <sup>G</sup>
Disease modifying anti- rheumatic drug therapy in rheumatoid arthritis	77.8	62.1	66.5	66.3	78.1	60.9 <sup>G</sup>	71.3 <sup>G</sup>	76.4 <sup>G</sup>	76.9 <sup>G</sup>	77.4	77.4	77.9	76.8
Follow-up after hospitalization for mental illness (30 days) <sup>2</sup>	47.9	72.7 R	67.7 R	64.8 R	52.7 R	31.6	65.3	58.8	70.8	66.1 R	65.9 R	65.3 R	63.7 R
<b>Antidepressant medication</b>	managem	ent											
Effective acute phase treatment <sup>3</sup>	72.1	93.3	90.7	61.5	62.9	82.5	62.9	67.0	62.4	91.8	60.3	61.7	64.2
Effective continuation phase treatment <sup>4</sup>	56.1	91.7 R	81.0 R	52.2 R	50.2 R	77.6	51.8	54.6	52.4	87.4	48.3	49.9	51.6
Care for older adults													
Advance care planning	N/A	6.9	54.4	63.5	67.6	28.4 <sup>G</sup>	33.7 <sup>G</sup>	38.2 <sup>G</sup>	43.8 <sup>G</sup>	19.7	11.0	47.9	38.7
Medication review	N/A	35.0 <sup>G</sup>	70.1 <sup>G</sup>	77.9 <sup>G</sup>	83.0 <sup>G</sup>	57.7 <sup>G</sup>	63.9 <sup>G</sup>	92.9 <sup>G</sup>	93.4 <sup>G</sup>	55.5	42.3	50.1	55.0
Functional status assessment	N/A	31.9	90.4	88.3	89.3	45.4 <sup>G</sup>	63.7 <sup>G</sup>	73.5 <sup>G</sup>	82.2 <sup>G</sup>	38.4	33.6	73.7	75.2
Pain assessment	N/A	31.7 <sup>G</sup>	69.2 <sup>G</sup>	81.5 <sup>G</sup>	84.4 <sup>G</sup>	67.8	77.4	82.7	74.5	64.0	45.5	79.1	85.9
Comprehensive diabetes of	are												
Received Hemoglobin A1c (HbA1c) testing	94.3	88.3	91.6	92.2	91.0	87.5	91.3	90.8	90.0	87.8	86.3	88.3	91.6
Poor control of HbA1c level (> 9.0%) (higher is worse)	23.1	53.6 <sup>G</sup>	47.0 <sup>G</sup>	33.3 <sup>G</sup>	27.0 <sup>G</sup>	45.1	44.1	47.9	32.6	59.9	65.0	58.4	53.3
Good control of HbA1c level (< 8.0%)	65.6	41.1 <sup>G</sup>	46.1 <sup>G</sup>	56.5 <sup>G</sup>	62.3 <sup>G</sup>	44.7	46.9	44.5	59.4	38.0	32.6	38.9	40.5
Received eye exam (retinal)	73.7	48.1	61.6	61.6	63.5	58.6	69.3	63.3	66.4	61.1 <sup>G</sup>	65.7 <sup>G</sup>	68.4 <sup>G</sup>	70.4 <sup>G</sup>

Measure	MA Plan Mean		Aetna				Buckeye			Caresource			
	(2018)	(2015)	(2016)	(2017)	(2018)	(2015)	(2016)	(2017)	(2018)	(2015)	(2016)	(2017)	(2018)
Received medical attention for nephropathy	95.5	95.4	94.5	95.1	94.2	92.4	95.0	95.6	93.7	93.4	92.0	90.2	93.8
Blood pressure control (< 140/90 mm Hg)	69.1	45.9 <sup>G</sup>	47.7 <sup>G</sup>	60.1 <sup>G</sup>	68.9 <sup>G</sup>	53.5 <sup>G</sup>	61.6 <sup>G</sup>	61.8 <sup>G</sup>	70.3 <sup>G</sup>	55.1	42.6	55.8	56.4
Initiation and engagement of alcohol and other drug (AOD) dependence treatment													
Initiation of AOD treatment <sup>5</sup>	33.6	23.4	35.1	36.2	38.3	67.1	41.5	45.0	47.4	43.7	45.6	48.7	44.0
Engagement of AOD treatment <sup>6</sup>	4.5	2.8 <sup>G</sup>	6.0 <sup>G</sup>	9.2 <sup>G</sup>	9.3 <sup>G</sup>	12.8	5.9	7.7	10.7	6.7	6.5	9.0	10.4
Plan all-cause readmission	ns (Observe	ed-to-exp	ected ratio	o <sup>7</sup> )									
Age 18-64	0.75	0.81 <sup>G</sup>	0.76 <sup>G</sup>	0.73 <sup>G</sup>	0.61 <sup>G</sup>	0.82	0.93	0.86	0.93	1.00 <sup>G</sup>	0.86 <sup>G</sup>	0.78 <sup>G</sup>	0.78 <sup>G</sup>
Age 65+	0.71	1.15 <sup>G</sup>	0.75 <sup>G</sup>	0.70 <sup>G</sup>	0.39 <sup>G</sup>	N/A	0.82 <sup>G</sup>	0.70 <sup>G</sup>	0.67 <sup>G</sup>	0.95 <sup>G</sup>	0.86 <sup>G</sup>	0.75 <sup>G</sup>	0.72 <sup>G</sup>
Ambulatory care (per 1,000	0 members	)											
Outpatient visits	9,606.0	11,784.9	12,622.8	12,476.9	12,778.7	10,845.7 <sup>G</sup>	11,661.1 <sup>G</sup>	11,871.3 <sup>G</sup>	12,571.0 <sup>G</sup>	13,607.8	14,120.9	13,700.9	12,410.2
Emergency department visits (higher is worse)	600.8	1,349.6	1,354.5	1,440.1	1,261.0	1,546.1	1,597.6	1,594.4	1,438.9	1,274.6	1,319.6	1,330.4	1,272.0

BMI = body mass index; HEDIS = Health Effectiveness Information and Data Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan; N/A = not applicable, where MA plans do not report such data, or where the number of enrollees in the MMP's HEDIS data available for inclusion in the measure was less than 30, and therefore not reported per RTI's decision rule for addressing low sample size.

<sup>1</sup> The following criteria were used to determine adequate blood pressure control: < 140/90 mm Hg for members age 18–59; diagnosis of diabetes and < 140/90 mm Hg for members age 60–85; no diagnosis of diabetes and < 150/90 mm Hg for members age 60–85.

<sup>2</sup>NCQA implemented a significant specification change with HEDIS 2018 (calendar year 2017), disallowing same-day follow up visits. National benchmarks fell from HEDIS 2018 to HEDIS 2019 (calendar 2017 to 2018).

<sup>3</sup> Represents the percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).

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<sup>4</sup> Represents the percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> Plan all-cause readmissions are reported as an observed-to-expected ratio. A value below 1.0 is favorable and indicates that MMPs had fewer readmissions than expected for their populations based on case mix.

NOTES: Green and red color-coded shading indicates where performance over time for a given measure was steadily improving or worsening; green indicates a favorable trend, where red indicates an unfavorable one. To ensure accessibility for text readers and individuals with sight disabilities, cells shaded green or red receive, respectively, a superscript "G" or "R." Detailed descriptions of HEDIS measures presented can be found in the <a href="RTI Aggregate Evaluation Plan">RTI Aggregate Evaluation Plan</a>.

SOURCE: RTI analysis of 2015 through 2018 HEDIS measures.

Table B-1b MyCare Ohio MMP performance on select HEDIS quality measures for 2015–2018 by MMP

Measure	National MA Plan Mean	MA Plan Molina					United			
	(2018)	(2015)	(2016)	(2017)	(2018)	(2015)	(2016)	(2017)	(2018)	
Adults' access to preventive/ambulatory health services	95.0	93.3	95.5	94.3	94.5	94.8	95.8	94.5	93.9	
Adult BMI assessment	96.0	93.0	84.9	91.3	94.7	N/A	87.0 <sup>G</sup>	90.0 <sup>G</sup>	94.7 <sup>G</sup>	
Blood pressure control <sup>1</sup>	69.5	57.0	48.0	60.3	63.8	52.3	52.2	59.6	68.6	
Breast cancer screening	72.7	45.2 <sup>G</sup>	48.4 <sup>G</sup>	54.7 <sup>G</sup>	55.3 <sup>G</sup>	N/A	54.5	58.8	57.7	
Colorectal cancer screening	70.5	55.7	45.9	49.2	48.9	N/A	48.7	55.7	54.7	
Disease modifying anti-rheumatic drug therapy in rheumatoid arthritis	77.8	58.5 <sup>G</sup>	60.9 <sup>G</sup>	66.9 <sup>G</sup>	71.8 <sup>G</sup>	64.5	46.3	63.9	79.8	
Follow-up after hospitalization for mental illness (30 days) <sup>2</sup>	47.9	65.7	73.7	68.9	72.4	76.9	81.1	77.0	59.8	
Antidepressant medication management										
Effective acute phase treatment <sup>3</sup>	72.1	73.5	66.5	68.0	69.1	84.9	67.5	62.1	66.9	
Effective continuation phase treatment <sup>4</sup>	56.1	64.8	56.7	57.1	56.9	76.8	55.6	51.2	54.0	
Care for older adults										
Advance care planning	N/A	51.7	59.5	58.5	60.8	14.1	55.2	53.5	62.5	
Medication review	N/A	78.8 R	78.6 R	74.4 R	65.5 R	44.5	81.5	87.6	74.2	
Functional status assessment	N/A	63.1	71.1	69.1	60.6	32.6	65.9	74.0	64.2	
Pain assessment	N/A	78.6	84.4	80.4	72.5	49.4	84.7	90.5	83.9	
Comprehensive diabetes care						·		,		
Received Hemoglobin A1c (HbA1c) testing	94.3	90.5	89.6	90.8	93.7	83.9 <sup>G</sup>	85.6 <sup>G</sup>	86.9 <sup>G</sup>	89.8 <sup>G</sup>	
Poor control of HbA1c level (> 9.0%) (higher is worse)	23.1	45.8 <sup>G</sup>	41.4 <sup>G</sup>	36.5 <sup>G</sup>	32.6 <sup>G</sup>	94.6 <sup>G</sup>	53.8 <sup>G</sup>	39.7 <sup>G</sup>	31.9 <sup>G</sup>	
Good control of HbA1c level (< 8.0%)	65.6	47.8	50.5	56.7	56.2	4.5 <sup>G</sup>	40.9 <sup>G</sup>	51.1 <sup>G</sup>	58.6 <sup>G</sup>	
Received eye exam (retinal)	73.7	55.1	68.0	66.7	63.3	51.8	63.0	58.9	54.7	
Received medical attention for nephropathy	95.5	94.0	93.2	93.4	94.7	92.5	95.9	92.9	92.2	
Blood pressure control (< 140/90 mm Hg)	69.1	61.1	55.9	62.0	68.1	0.9 <sup>G</sup>	42.8 <sup>G</sup>	61.1 <sup>G</sup>	68.4 <sup>G</sup>	
Initiation and engagement of alcohol and other drug	(AOD) deper	ndence trea	tment							
Initiation of AOD treatment 5	33.6	55.1	37.2	32.8	46.0	0.80	0.67	0.64	0.75	
Engagement of AOD treatment <sup>6</sup>	4.5	8.6	6.9	7.8	22.7	0.76	0.69	0.65	0.45	

Measure	National MA Plan Mean	Molina				United			
	(2018)	(2015)	(2016)	(2017)	(2018)	(2015)	(2016)	(2017)	(2018)
Plan all-cause readmissions (Observed-to-expected ratio <sup>7</sup> )									
Age 18-64	0.75	0.61	0.69	0.74	0.60	0.80	0.67	0.64	0.75
Age 65+	0.71	0.76	0.79	0.81	0.43	0.76 <sup>G</sup>	0.69 <sup>G</sup>	0.65 <sup>G</sup>	0.45 <sup>G</sup>
Ambulatory care (per 1,000 members)									'
Outpatient visits	9,606.0	12,007.6	12,589.4	12,536.8	12,006.0	12,738.2	13,107.4	13,110.8	13,037.9
Emergency department visits (higher is worse)	600.8	1,400.7 <sup>G</sup>	1,352.4 <sup>G</sup>	1,316.7 <sup>G</sup>	1,180.1 <sup>G</sup>	1,176.4	1,396.8	1,274.6	1,096.5

BMI = body mass index; HEDIS = Health Effectiveness Information and Data Set; MA = Medicare Advantage; MMP = Medicare-Medicaid Plan; N/A = not applicable, where MA plans do not report such data, or where the number of enrollees in the MMP's HEDIS data available for inclusion in the measure was less than 30, and therefore not reported per RTI's decision rule for addressing low sample size.

<sup>1</sup>The following criteria were used to determine adequate blood pressure control: < 140/90 mm Hg for members age 18–59; diagnosis of diabetes and < 140/90 mm Hg for members age 60–85; no diagnosis of diabetes and < 150/90 mm Hg for members age 60–85.

<sup>2</sup> NCQA implemented a significant specification change with HEDIS 2018 (calendar year 2017), disallowing same-day follow up visits. National benchmarks fell from HEDIS 2018 to HEDIS 2019 (calendar 2017 to 2018).

<sup>3</sup> Represents the percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).

<sup>4</sup> Represents the percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> Plan all-cause readmissions are reported as an observed-to-expected ratio. A value below 1.0 is favorable and indicates that MMPs had fewer readmissions than expected for their populations based on case mix.

NOTES: Green and red color-coded shading indicates where performance over time for a given measure was steadily improving or worsening; green indicates a favorable trend, where red indicates an unfavorable one. To ensure accessibility for text readers and individuals with sight disabilities, cells shaded green or red receive, respectively, a superscript "G" or "R." Detailed descriptions of HEDIS measures presented can be found in the <a href="RTI Aggregate Evaluation Plan">RTI Aggregate Evaluation Plan</a>. SOURCE: RTI analysis of 2015 through 2018 HEDIS measures.

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## Appendix C Comparison Group Methodology for Ohio, Demonstration Years 2–4

This appendix presents the comparison group selection and assessment results for the FAI demonstration in the State of Ohio.

Results for comparison group selection and assessment analyses are prepared for each demonstration year. The evaluation report for the first demonstration year and two prior predemonstration years for the Ohio demonstration was publicly released in May 2019. This appendix describes the comparison group identification methodology in detail and provides the comparison group results for the fourth performance year (January 1, 2018–December 31, 2018) for the MyCare Ohio capitated model demonstration and notes any major changes in the results since the first performance year.

### C.1 Demonstration and Comparison Group Characteristics

The Ohio demonstration area consists of 29 counties in nine Metropolitan Statistical Areas (MSAs; Columbus; Toledo; Canton-Massillon; Youngstown-Warren-Boardman; Dayton; Akron; Cleveland-Elyria; Springfield; and Cincinnati-Middletown) plus four non-metropolitan counties. The comparison area comprises 39 counties in 14 MSAs across six States plus 46 non-metropolitan counties in Ohio. These geographic areas have not changed since the <a href="First Evaluation Report">First</a> Evaluation Report.

Beneficiaries who are ineligible for the demonstration include those who are under age 18, have Medicare as a secondary payor, are not enrolled in Medicare Part A and Part B, reside in an intermediate care facility, are enrolled in PACE, or are enrolled in the CMS Independence at Home demonstration. We assess these exclusion criteria on a quarterly basis for the demonstration and comparison group in the predemonstration period and for the comparison group in the demonstration period. We use finder files provided by the State to identify the eligible population for the demonstration group during the demonstration period, applying the exclusion criteria to the State finder file in the demonstration period to ensure comparability with the comparison group and the demonstration group during the predemonstration period. Data were not available to make exclusions for beneficiaries in 1915c waiver programs for beneficiaries with intellectual and developmental disabilities, nor for those on delayed Medicaid spenddown.

Further analytic exclusions were performed, such as (1) removing beneficiaries with missing geographic information, (2) removing beneficiaries with zero months of eligibility during each analytic period, (3) removing beneficiaries who moved between the demonstration area and the comparison area any time during the entire study period, (4) removing beneficiaries with missing Hierarchical Condition Category (HCC) risk scores, and (5) removing beneficiaries who died before the beginning of each analytic period. After applying these exclusions, the number of demonstration group beneficiaries varied somewhat over the full six-year study period, ranging from 110,595 to 172,477 per year, but was consistent within the baseline (171,730 and 172,477) and relatively stable across demonstration years (110,595 to 133,787), respectively. In the comparison group, the number of beneficiaries was relatively consistent across all 6 years (from 154,826 to 179,920 per year).

MA enrollees are eligible and may opt-in to the Ohio demonstration. This report includes the MA population in the cost savings analysis, described in *Appendix F*. However, due to

concerns of the completeness and accuracy of MA encounter data for years prior to 2016, RTI excluded the MA population from the service utilization analysis, described in *Appendix E*. The population analyzed for the service utilization outcomes includes only demonstration eligible full-benefit Medicare and Medicaid beneficiaries enrolled in Medicare FFS or in MMPs. *Table C-1* displays the number and percentage of beneficiaries who were in MA during the study period and included in the cost savings analysis but excluded from the service use analysis. The prevalence of beneficiaries enrolled in MA per year ranges from 19 to 29 percent in the demonstration group, with a notable spike in demonstration year 1 (29 percent). Among the comparison group, the percentage increased from 16 to 23 across the predemonstration period and the first four demonstration years and increased considerably to 28 percent in demonstration year 4.

Table C-1
Number and percentage of beneficiaries in the demonstration and comparison groups who were enrolled in Medicare Advantage at any point during each period

Group	Pre- demonstration year 1	Pre- demonstration year 2	DY 1	DY 2	DY 3	DY4
Demonstration						
Initial count of beneficiaries	179,905	180,494	119,100	112,109	123,568	135,586
Count of beneficiaries with Medicare Advantage	38,518	40,803	34,926	20,801	23,301	30,566
Percentage of beneficiaries with Medicare Advantage (denominator is final count of beneficiaries per period)	21%	23%	29%	19%	19%	23%
Comparison						
Initial count of beneficiaries	159,266	160,609	185,374	171,566	179,923	177,127
Count of beneficiaries with Medicare Advantage	24,772	27,448	38,328	35,152	41,272	48,988
Percentage of beneficiaries with Medicare Advantage (denominator is final count of beneficiaries per period)	16%	17%	21%	20%	23%	28%

DY = demonstration year.

### **C.2** Propensity Score Estimates

RTI's methodology uses propensity scores (PSs) to examine initial differences between the demonstration and comparison groups in each analysis period. Weights are calculated based on these scores and applied to the data to improve comparability between the two groups, which is evaluated in terms of individual beneficiary characteristics and the overall distributions of PSs.

A 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. Compared to the analysis for the previous evaluation report, an additional explanatory variable was added to the propensity score model that measures the share of months during the year for which a beneficiary was enrolled in a MA plan.

The logistic regression coefficients and z-values for the covariates included in the propensity model for the MyCare Ohio capitated model demonstration year 4 are shown in *Table C-2*. The largest relative differences were that demonstration participants were more likely to be African American, were less likely to participate in other Medicare demonstrations, and were more likely to reside in an MSA in demonstration year 4 relative to beneficiaries in the comparison group. In addition, ZIP code-level group differences were observed between the two groups, the largest of which were in distances to the nearest hospital and the nearest nursing facility. The magnitude of the group differences for all variables prior to PS weighting is shown in *Table C-3*.

### **C.3** Propensity Score Overlap

The distributions of PSs by group for demonstration year 4 are shown in *Figure C-1* before and after PS weighting. Estimated scores for both the demonstration group and comparison group topped out at around 0.99. The unweighted comparison group (dashed blue/green line) is characterized by a spike in predicted probabilities in the range from 0 to 0.15. Inverse probability of treatment weighting pulls the distribution of weighted comparison group PSs (dashed red line) very close to that of the demonstration group (solid line).

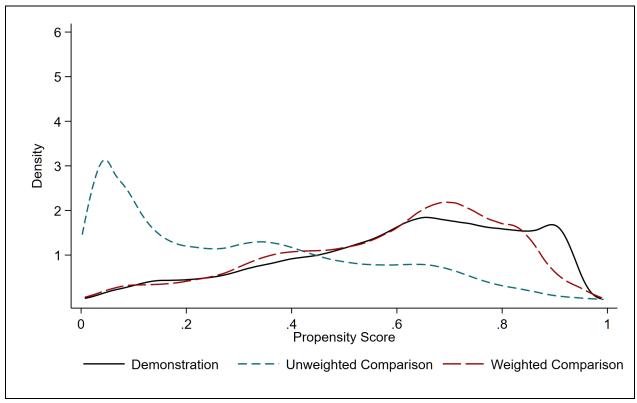
Any beneficiaries who have estimated PSs below the smallest estimated value in the demonstration group are removed from the comparison group. We removed 299 beneficiaries from the comparison group in demonstration year 4.

Table C-2 Logistic regression estimates for Ohio propensity score models in demonstration year 4, January 1, 2018–December 31, 2018

Chavastavistis	[	Demonstration Year	4
Characteristic	Coef.	Standard error	z-score
Age (years)	0.007	0.000	19.04
Died during year (0/1)	-0.334	0.018	-18.60
Female (0/1)	0.188	0.010	19.76
Black (0/1)	0.785	0.012	64.86
Disability as original reason for entitlement (0/1)	0.079	0.013	6.18
ESRD (0/1)	0.003	0.028	0.10
Share of mos. eligible during the year	-0.266	0.015	-17.16
Share mos. Medicare Advantage plan enrolled during year	-1.317	0.012	-107.95
HCC risk score	0.142	0.005	28.45
Other MDM participation (0/1)	-1.247	0.013	-98.91
MSA (0/1)	1.478	0.018	79.90
% of pop. living in married household	-0.029	0.000	-60.19
% of households w/member ≥ 60 yrs.	0.021	0.001	27.12
% of households w/member < 18 yrs.	-0.028	0.001	-40.08
% of adults with college education	0.022	0.000	45.42
% of adults with self-care limitation	-0.006	0.003	-2.31
Distance to nearest hospital (mi.)	-0.071	0.002	-46.11
Distance to nearest nursing facility (mi.)	-0.051	0.002	-21.37
Intercept	0.377	0.055	6.82

ESRD = end-stage renal disease; HCC = Hierarchical Condition Category; MDM = Master Data Management; MSA = metropolitan statistical area.

Figure C-1
Distribution of beneficiary-level propensity scores in the Ohio demonstration and comparison groups, weighted and unweighted, demonstration year 4 (January 1, 2018–December 31, 2018)



### C.4 Group Comparability

Covariate balance refers to the extent to which the characteristics used in the PS are similar (or "balanced") between 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). An informal standard has been developed such that groups are considered comparable if the standardized covariate difference is less than 0.10 standard deviations.

Table C-3
Ohio dually eligible beneficiary covariate means by group before and after weighting by propensity score—demonstration year 4: January 1, 2018–December 31, 2018

Characteristic	Demonstration group mean	Comparison group mean	PS-weighted comparison group mean	Unweighted standardized difference	Weighted standardized difference
Age	64.625	63.738	64.454	0.051	0.010
Died	0.076	0.082	0.079	-0.020	-0.009
Female	0.636	0.603	0.630	0.068	0.012
Black	0.341	0.098	0.272	0.614	0.151
Disability as original reason for entitlement	0.530	0.536	0.532	-0.012	-0.005
ESRD	0.032	0.023	0.030	0.053	0.013
Share mos. eligible during year	0.812	0.813	0.796	-0.001	0.054
Share mos. Medicare Advantage plan enrolled during year	0.158	0.235	0.173	-0.207	-0.044
HCC score	1.278	1.168	1.273	0.119	0.005
Other MDM	0.102	0.262	0.112	-0.424	-0.033
MSA	0.966	0.679	0.963	0.811	0.014
% of pop. living in married household	60.405	69.884	62.731	-0.614	-0.134
% of households w/member $\geq 60$	37.933	39.59	38.072	-0.229	-0.018
% of households w/member < 18	28.739	30.727	28.333	-0.291	0.054
% of adults under 65 with college education	23.469	20.83	24.303	0.208	-0.062
% of adults under 65 with self-care limitation	3.860	3.581	3.698	0.141	0.069
Distance to nearest hospital	4.463	8.658	4.524	-0.883	-0.017
Distance to nearest nursing facility	3.171	6.000	3.279	-0.865	-0.047

ESRD = end-stage renal disease; HCC = Hierarchical Condition Category; MDM = Master Data Management; MSA = metropolitan statistical area; PS = propensity score.

The group means and standardized differences for all beneficiary characteristics are shown for demonstration year 4 in *Table C-3*. The column of unweighted standardized differences indicates that several of these variables were not balanced prior to weighting. Twelve variables (percentage Black, share of months enrolled in a non-MMP MA plan during the year, HCC score, percentage participating in other Medicare shared savings programs [other MDM], residency in an MSA, percentage of population living in a married household, percentage of households with an adult 60 or older, percentage of households with a child 18 or younger, percentage of adults with a college education, percentage of adults with self-care limitation, and the distances [in miles] to the nearest hospital and nursing facility) had unweighted standardized differences exceeding 0.10 in absolute value.

The results of PS weighting for Ohio demonstration year 4 are illustrated in the far-right column (weighted standardized differences) in *Table C-3*. Propensity weighting reduced the standardized differences below the threshold level of 0.10 in absolute value for all but two covariates (percentage Black and percentage of population living in a married household) in our model.

#### C.5 Enrollee Results

We also applied our weighting methodology to the demonstration enrollee population (approximately 44% of the eligible demonstration population). We define the enrollee group, along with its comparison group, as follows: (1) the demonstration enrollees are those with at least 3 months of enrollment during the 4-year demonstration period as well as 3 months of eligibility during the 2-year predemonstration period, and (2) the corresponding comparison group beneficiaries are those with at least 3 months of eligibility in both the 4-year demonstration period and the 2-year predemonstration period.

As was the case for all eligible beneficiaries, the unweighted values of several covariates differed substantially between the demonstration and comparison group for enrollees in each baseline and demonstration year. After weighting, the standardized differences of all covariates but two (percentage Black and percentage of population living in a married household) were reduced to less than 0.10 in absolute value.

### **C.6** Weights for Service Utilization Analyses

A third set of weights was produced specifically for the analyses of service utilization with one adaptation to the methodology used to produce weights for all eligible beneficiaries. Due to concerns of the completeness and accuracy of MA encounter data for years prior to 2016, RTI excluded the MA population from the service utilization analysis.

This exclusion reduced the number of beneficiaries by between 40,000 and 70,000 in both the demonstration group and the comparison group. The resulting demonstration group sample ranged between 63,782 and 106,408 beneficiaries each year; the comparison group sample ranged between 108,946 and 121,287 beneficiaries each year.

Despite difference in sample sizes, the results of the weighting analysis were similar to those for demonstration eligible beneficiaries and for demonstration enrollees. Although the unweighted values of several covariates differed substantially between the demonstration and comparison group in each baseline and demonstration year, the standardized differences of all covariates but three (percentage Black, percentage of population living in a married household, and percentage of adults with a self-care limitation) were reduced to less than 0.10 in absolute value after weighting.

### C.7 Summary

The Ohio demonstration and comparison groups were initially distinguished by differences in five individual-level covariates and seven area-level variables. However, PS weighting successfully reduced all but two of these covariate discrepancies below the generally accepted threshold for standardized differences. As a result, the weighted Ohio groups are

adequately balanced with respect to 16 of the 18 variables that we consider for comparability. Further analysis of the enrollee group and the service utilization group yielded similar results to the main analysis on the all-eligible population presented in this appendix.

### Appendix D Service Utilization Methodology



### **D.1** Methodology

This appendix briefly describes the overall quantitative evaluation design, the data used, and the populations and measures analyzed.

#### D.1.1 Evaluation Design

RTI is using an intent-to-treat (ITT) approach for the quantitative analyses conducted for the evaluation, comparing the eligible population under each State demonstration with a similar population that is not affected by the demonstration (i.e., a comparison group). We use a quasi-experimental difference-in-difference (DinD) regression analysis with inverse PS weighting to estimate the impact of the demonstration on the change in the probability or frequency of service utilization outcomes, relative to the 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. This approach alleviates concerns of selection bias and supports generalizability of the results among the demonstration eligible population. Without mandatory participation, some eligible beneficiaries enroll in the demonstration to receive the interventions, whereas others do not, even though they are eligible and have the opportunity to do so. The relative proportion of the enrolled versus the eligible but not enrolled beneficiaries varies across the demonstration States. An ITT analysis—which includes the entire eligible population in the demonstration group and its comparison group counterpart—is most appropriate by yielding impact estimates that would best mimic the real-world implementation of the demonstration, accounting for the variability in voluntary enrollment across different States.

### D.1.2 Sample Selection

The study population includes all full-benefit Medicare-Medicaid eligible beneficiaries residing in the demonstration and comparison areas who meet the demonstration eligibility criteria. For details on applying the demonstration eligibility criteria and the comparison group identification strategy, see *Appendix B*.

MA enrollees are eligible and may opt-in to the Ohio demonstration. This report includes the MA population in the cost savings analysis, described in *Appendix F*. However, because of concerns about the completeness and accuracy of MA encounter data for years prior to 2016, RTI excluded demonstration eligible beneficiaries with any MA enrollment from the service utilization analysis. Therefore, the service utilization analysis includes only beneficiaries enrolled in Medicare FFS or in an MMP throughout the study period. The prevalence of beneficiaries enrolled in MA per year, prior to exclusions, ranges from 19 to 29 percent in the demonstration group, and 16 to 28 percent among those in the comparison group across the predemonstration and demonstration period.

The prevalence of beneficiaries with any month of MA during a year, prior to exclusion, ranges from 21 to 23 percent in the demonstration group, and 16 to 28 percent in the comparison group during the predemonstration and demonstration periods (see *Appendix C, Table C-1*).

#### D.1.3 Data

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

### D.1.4 Populations and Services Analyzed

The populations analyzed in the report include all demonstration eligible beneficiaries, as well as the following special populations: those receiving any LTSS; those with any behavioral health service use in the last 2 years for a serious and persistent mental illness (SPMI); demonstration enrollees; and race/ethnicity.

- *Demonstration eligible beneficiaries*. A full-benefit Medicare-Medicaid eligible beneficiary in a quarter who met any other specific demonstration eligibility criteria.
  - Beneficiaries in the demonstration period are identified from quarterly State finder files.
  - Beneficiaries in the 2-year predemonstration period are identified by applying the eligibility criteria in each separate predemonstration quarter.
- Long-term services and supports (LTSS). A demonstration eligible beneficiary with any use of institutional or home and community-based services (HCBS) during the observation year.
- Serious and persistent mental illness (SPMI). A demonstration eligible beneficiary with at least one inpatient or outpatient mental health visit for schizophrenia or episodic mood disorder within the previous 2 years of the observation year.
- *Enrollees.* A demonstration eligible beneficiary with any month of enrollment in the demonstration during the demonstration year.

The analyses were conducted for each year in the 2-year predemonstration period (May 1, 2012, to April 1, 2014) and for the 4 demonstration years (May 1, 2014, to December 31, 2018) for both the demonstration and comparison groups in each of the six analytic periods. Additionally, corrections were made to impact estimates from earlier reports that resulted in differences in our current impact estimates for demonstration year 1. Specifically, we made the following corrections: (1) confirmed dual status for State-identified FAI eligible beneficiaries against Integrated Data Repositor (IDR) data, removing erroneous zeros in the dependent variable, and (2) applied IDR-based exclusion criteria for all monthly observations in the comparison group during the predemonstration period and demonstration period, and to the demonstration group during the predemonstration period. These updates, coupled with restricting the service utilization analysis sample to only FFS demonstration eligible beneficiaries and MMP enrollees, result in differences between our current estimates for demonstration year 1 and the estimates reported in the First Evaluation Report.

Table D-1 presents descriptive statistics on the independent variables used in multivariate DinD 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, all MMP enrollees, all beneficiaries who are eligible but not enrolled (non–enrollees), demonstration eligible beneficiaries with any LTSS use, and demonstration eligible beneficiaries with an SPMI.

The most prevalent age group among the demonstration eligible beneficiaries in demonstration group and the comparison group were ages 65 to 74 (51.7 and 52.4 percent, respectively). There were slightly more White beneficiaries in the comparison group (65.2 percent) than in the demonstration group (60.7 percent). Among both the LTSS users and those with SPMI in the demonstration population, most were White (65.3 and 66.8 percent respectively).

Across all groups, most beneficiaries were female (60.4 to 70.3 percent), did not have end-stage renal disease, and were more likely to be reside in a metropolitan area. Most LTSS users have a disability as the primary reason for Medicare entitlement (63.0 percent) as well as just over half of the demonstration eligible but non-enrolled population (51.7 percent). Otherwise, most beneficiaries did not have disability as the primary reason for Medicare entitlement.

The HCC score is a measure of the predicted relative annual cost of a Medicare beneficiary based on the diagnosis codes present in recent Medicare claims. Beneficiaries with a score of 1 are predicted to have average cost in terms of annual Medicare expenditures. Beneficiaries with HCC scores less than 1 are predicted to have below average costs, whereas beneficiaries with scores of 2 are predicted to have twice the average annual cost. HCC scores ranged between 1.2 and 1.5 among all groups except LTSS users in the demonstration group, for which the average HCC score was 2.0.

Table D-1 Characteristics of eligible beneficiaries in demonstration year 4 by group

	V V 8 1					
Characteristics	Demonstration group	Comparison group	Demonstration group, enrollees	Demonstration group, non- enrollees	Demonstration group, LTSS users	Demonstration group, SPMI diagnosis
Weighted number of eligible beneficiaries	80,016	112,066	63,408	16,608	14,389	47,511
Demographic characteristics						
Age						
65 to 74	51.7	52.4	54.7	40.4	22.6	56.6
75 to 84	25.1	22.8	25.2	24.7	26.6	21.6
85 and older	23.2	24.8	20.2	34.9	50.9	21.8
Female						
No	38.4	39.2	39.6	33.7	29.7	34.1
Yes	61.6	60.8	60.4	66.3	70.3	65.9
Race/ethnicity						
White	60.7	65.2	59.1	67.2	65.3	66.8
African American	32.4	25.1	33.9	26.9	30.4	28.6
Hispanic	1.5	3.1	1.6	0.9	0.7	1.3
Asian	2.1	2.5	2.1	1.9	1.4	0.8
Other						
Disability as reason for original Medicare entitlement						
No	43.4	43.2	41.2	51.7	63.0	37.4
Yes	56.6	56.8	58.8	48.3	37.0	62.6
ESRD status						
No	96.1	96.3	96.1	96.1	95.9	96.4
Yes	3.9	3.7	3.9	3.9	4.1	3.6
MSA						
No	3.8	4.1	3.9	3.5	3.9	4.3
Yes	96.2	95.9	96.1	96.5	96.1	95.7

Table D-1 (continued)
Characteristics of eligible beneficiaries in demonstration year 4 by group

Characteristics	Demonstration group	Comparison group	Demonstration group, enrollees	Demonstration group, non- enrollees	Demonstration group, LTSS users	Demonstration group, SPMI diagnosis
Participating in Shared Savings Program						
No	86.6	84.7	94.8	54.9	79.9	86.1
Yes	13.4	15.3	5.2	45.1	20.1	13.9
HCC score	1.2	1.2	1.2	1.5	2.0	1.3
Market characteristics						
Medicare spending per dual, age 19+ (\$)	9,745.2	9,494.3	9,745.8	9,743.0	9,752.5	9,743.7
MA penetration rate	0.4	0.3	0.4	0.4	0.4	0.4
Medicaid-to-Medicare fee index (FFS)	0.6	0.6	0.6	0.6	0.6	0.6
Medicaid spending per dual, age 19+ (\$)	32,438.7	24,202.0	32,445.5	32,412.8	32,425.6	32,429.9
Fraction of dually eligible beneficiaries using NF, age 65+	0.4	0.4	0.4	0.4	0.4	0.4
Fraction of dually eligible beneficiaries using HCBS, age 65+	0.3	0.2	0.3	0.3	0.3	0.3
Fraction of dual eligible beneficiaries using personal care, age 19+	0.0	0.0	0.0	0.0	0.0	0.0
Fraction of dual eligible beneficiaries with Medicaid managed care, age 19+	0.0	0.2	0.0	0.0	0.0	0.0
Population per square mile, all ages	767.6	307.2	764.2	780.6	771.7	761.5
Patient care physicians per 1,000 population	0.8	0.7	0.8	0.8	0.8	0.8

Table D-1 (continued)
Characteristics of eligible beneficiaries in demonstration year 4 by group

Characteristics	Demonstration group	Comparison group	Demonstration group, enrollees	Demonstration group, non- enrollees	Demonstration group, LTSS users	Demonstration group, SPMI diagnosis
Area characteristics						
% of pop. living in married households	60.8	63.5	60.1	63.6	63.6	62.0
% of adults with college education	23.6	24.6	23.0	26.0	26.3	24.0
% of adults with self-care limitations	3.8	3.5	3.8	3.7	3.7	3.8
% of adults unemployed	8.2	7.5	8.4	7.5	7.3	7.8
% of household with individuals younger than 18	28.9	28.6	28.9	28.7	28.5	28.8
% of household with individuals older than 60	37.9	37.9	37.7	38.5	38.7	38.0
Distance to nearest hospital	4.6	4.6	4.6	4.6	4.7	4.7
Distance to nearest nursing facility	3.3	3.4	3.2	3.3	3.3	3.3

ESRD = end-stage renal disease; FFS = fee-for-service; HCBS = home and community-based services; HCC = Hierarchical Condition Category; LTSS = long-term services and supports; NF = nursing facility; MA = Medicare Advantage; MSA = metropolitan statistical area; SPMI = serious and persistent mental illness. NOTE: Analysis conducted on demonstration eligible FFS population and Medicare-Medicaid Plan enrollees.

There were limited differences in area- and market-level characteristics. Those who were in the comparison group resided in counties with lower Medicaid spending per dually eligible beneficiary (\$24,202 versus \$32,439 in the demonstration group) and lower population density (307 people per sq. mi. vs. 768 people per sq. mi. in the demonstration group). Other area- and market-level characteristics were comparable.

### D.1.5 Descriptive and Regression Outcomes

This report presents several measures on various aspects of service utilization, access to care, cost, quality of care and care coordination. There are 12 settings analyzed using Medicare claims data, which include both institutional and community settings: inpatient admission, including psychiatric and non-psychiatric, emergency department (ED) visits and ED psychiatric visits, observational stays, skilled nursing facility stays, hospice use, physician E&M visits, outpatient therapy (PT, OT, ST), independent therapy, and other hospital outpatient services.

We also calculate descriptive statistics for the following quality of care measures: 30-day all-cause risk-standardized readmission rate, preventable ED visits, 30-day follow-up after hospitalization for mental illness, ACSC admissions overall and chronic (Agency for Healthcare Research and Quality [AHRQ] Prevention Quality Indicator [PQI] #90 and PQI #92), and depression screening.

**Table D-2** presents additional details on these measures and the service utilization measures used in the outcome regression models.

### D.1.6 Nursing Facility-Related Measures

Two measures of annual NF-related utilization are derived from the MDS. Characteristics of new long-stay NF residents at admission are also included to monitor nursing facility case mix and acuity levels.

- Nursing facility admission rate
- Percentage of long-stay nursing facility users
- Functional status of new long-stay nursing facility residents
- Percentage of new long-stay nursing facility residents with severe cognitive impairment
- Percentage of new long-stay nursing facility residents with a low level of care need

The rate of new long-stay nursing facility (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 an NF for 101 days or more and who were long-stay in their last quarter of

demonstration eligibility. The probability of any long-stay NF use includes both new admissions from the community and continuation of a stay in an NF.

Characteristics of new long-stay NF residents at admission are also included to monitor nursing facility case mix and acuity levels. Functional status and low level of care need are determined by the Resource Utilization Group 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 and who were in the three lowest RUG-IV categories. Severe cognitive impairment is assessed by the Brief Interview for Mental Status, poor short-term memory, or severely impaired decision-making skills.

Table D-2
Detailed definitions and measure specifications for the utilization, quality of care, and nursing facility-related outcome measures

Outcome measure	Definition	Detailed specifications
Monthly inpatient admissions	The monthly probability of having any inpatient admission in which a beneficiary has an admission date within the observed month. Inpatient admissions include acute, inpatient rehabilitation, and long-term care hospital admissions.	<ul> <li>The following were identified using the last 4 digits of provider number:         <ul> <li>inpatient rehabilitation facilities = 3025–3099 OR the 3rd position of provider number equals 'R' or 'T'</li> <li>long-term care hospitalizations = 2000–2299</li> <li>inpatient hospitalizations = 0001–0979 OR 1300–1399; observational stays are excluded (revenue center code = 0760, 0762 AND HCPCS = G0378, G0379)</li> </ul> </li> </ul>
Monthly emergency department (ED) use	The monthly probability of having any ED visit that occurred during the month that did not result in an inpatient admission.	<ul> <li>Identified any claim with a revenue center code = 0450, 0451, 0452, 0456, 0459, or 0981 AND not followed by an inpatient admission.</li> </ul>

### Table D-2 (continued) Detailed definitions and measure specifications for the utilization, quality of care, and nursing facility-related outcome measures

Outcome measure	Definition	Detailed specifications
Monthly physician visits	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 federally qualified health center or a rural health center.	<ul> <li>Identified physician office visits on either any physician claim line, federally qualified health center claim line, or rural health center claim line:         <ul> <li>Office or Other Outpatient = 99201–99205 or 99211–99215</li> <li>Nursing Facility Services = 99304–99310, 99315, 99316, or 99318</li> <li>Domiciliary, Rest Home, or Custodial Care Services = 99324–99328, 99334–99337 or 99339–99340</li> <li>Home Services = 99341–99345 or 99347–99350</li> <li>Initial Medicare Visit = G0402</li> <li>Annual Wellness Visit = G0438, G0439</li> </ul> </li> </ul>
Monthly skilled nursing facility (SNF) admissions	The monthly probability of having any SNF admission within the month.	<ul> <li>Identified any SNF claims with a clam type code = 4018, 4021, or 4028; where CLM_ACTV_CARE_FROM_DT is the date of the observation month.</li> </ul>
Any long-stay nursing facility use	The annual probability of residing in a nursing facility for 101 days or more during the year.	<ul> <li>Long-stay use is defined as a stay in a nursing facility for 101 days or more as of a beneficiary's last quarter of demonstration eligibility and is derived from the Minimum Data Set.</li> </ul>

Table D-2 (continued)
Detailed definitions and measure specifications for the utilization, quality of care, and nursing facility-related outcome measures

Outcome measure	Definition	Detailed specifications
30-day all-cause risk-standardized readmission	This is calculated descriptively as the rate of risk-standardized readmission, defined as the percentage of enrollees who were readmitted within 30 days following a hospital discharge, as well as the number of risk-standardized readmissions that occurs during the year.	For both the numerator and denominator, identified all acute inpatient stays with a discharge date during the measurement period. Beneficiaries are included only if eligible during the month(s) of admission and discharge as well as during the 30-day follow-up period.
		$\frac{\left(\frac{\sum_{ig} x_{ig}}{\sum_{ig} n_{ig}} * C\right)}{Prob_g} * 100$
		<ul><li>Numerator:</li><li>C = the national average of 30-day</li></ul>
		readmission rate, .238.
		<ul> <li>Xig = the total number of readmissions for individual i in group g.</li> </ul>
		• $n_{ig}$ = the total number of hospital admissions for individual i in group g. Denominator: $Prob_g$ = the annual average adjusted probability of readmission for individuals in group $g$ .
		Multiply by 100 to get the final measure score.
Annual count of 30- day all-cause readmissions	The annual number of readmissions per beneficiary period.	Among beneficiaries with any index inpatient admission, defined above, a readmission is defined as having any inpatient admission within 30-days of the index discharge date.

Table D-2 (continued)
Detailed definitions and measure specifications for the utilization, quality of care, and nursing facility-related outcome measures

Outcome measure	Definition	Detailed specifications
Monthly preventable ED visits	This is estimated as a continuous variable of weighted ED visits that occur during the month.	Numerator: Sum of the relative percentage of ED visits per diagnosis (see 1–4 below) for conditions that are either preventable/ avoidable or treatable in a primary care setting. <sup>37</sup> The algorithm uses four categories for ED utilization, 1–3 are included in the numerator for this measure, and 4 is excluded:  (1) Non-emergent; (2) Emergent / primary care treatable (3) Emergent / ED care needed – preventable/avoidable (4) – Excluded – Emergent / ED care needed – not preventable/avoidable Denominator: All demonstration eligible Medicare-Medicaid beneficiaries.
30-day follow-up after hospitalization for mental illness (NQF #576)	This is estimated as the monthly probability of any follow-up visits within 30-days post-hospitalization for a mental illness.	<ul> <li>Numerator: Outpatient or carrier visit with a mental health provider within 30 days from the inpatient discharge. One of the following must be met to be included:</li> <li>Visit with a mental health practitioner AND SPMI diagnosis</li> <li>Visit to a behavioral healthcare facility</li> <li>Visit to a non-behavioral healthcare facility with a diagnosis of mental illness</li> <li>Denominator: Discharges for an acute inpatient setting (including acute-care psychiatric facilities) for treatment of SPMI AND no readmission within 30 days.</li> <li>Beneficiaries are included only if eligible during both the month of the discharge and the 30-day follow-up period.</li> </ul>

<sup>&</sup>lt;sup>37</sup> The lists of diagnoses preventable/avoidable or treatable were developed by researchers at the New York University Center for Health and Public Service Research. <a href="https://wagner.nyu.edu/faculty/billings/nyued-background">https://wagner.nyu.edu/faculty/billings/nyued-background</a>

Table D-2 (continued)
Detailed definitions and measure specifications for the utilization, quality of care, and nursing facility-related outcome measures

Outcome measure	Definition	Detailed specifications
ACSC admissions— overall composite (AHRQ PQI #90)	The monthly probability of any acute discharge that meet the AHRQ PQI #90 (Prevention Quality Overall Composite) criteria within the month.	Numerator: Total number of discharges that meet the inclusion and exclusion criteria for 12 Prevention Quality Indicators (PQI) for ambulatory care-sensitive conditions including diabetes—short-term complications (PQI #1); diabetes—long-term complications (PQI #3); COPD or asthma (PQI #5); hypertension (PQI #7); heart failure (PQI #8); dehydration (PQI #10); bacterial pneumonia (PQI #11); UTI (PQI #12); angina without procedure (PQI #13); uncontrolled diabetes (PQI #14); asthma in younger adults (PQI #15); lower-extremity amputations among diabetics (PQI #16) Denominator: All demonstration eligible Medicare-Medicaid beneficiaries.
ACSC admissions— chronic composite (AHRQ PQI #92)	The monthly probability of any acute discharge that meet the AHRQ PQI #92 criteria within the month.	Numerator: Total number of discharges that meet the inclusion and exclusion criteria for eight Prevention Quality Indicators (PQI) for ambulatory care-sensitive chronic conditions including diabetes—short-term complications (PQI #1); diabetes—long-term complications (PQI #3); COPD or asthma (PQI #5); hypertension (PQI #7); heart failure (PQI #8); uncontrolled diabetes (PQI #14); asthma in younger adults (PQI #15); lower-extremity amputations among diabetics (PQI #16) Denominator: All demonstration eligible Medicare-Medicaid beneficiaries.

Table D-2 (continued)

Detailed definitions and measure specifications for the utilization, quality of care, and nursing facility-related outcome measures

Outcome measure	Definition	Detailed specifications
Depression screening and follow-up	Number of depression screenings per eligible beneficiary per month.	Numerator: Demonstration eligible Medicare- Medicaid enrollees whose screening for clinical depression using an age-appropriate standardized tool:
		<ul> <li>Received a depression screening, tested positive and had a follow-up plan is identified by CLM_LINE_HCPCS_CD = G8431.</li> </ul>
		<ul> <li>Received a depression screening, tested positive and follow-up plan not required is identified by CLM_LINE_HCPCS_CD = G8510.</li> </ul>
		<ul> <li>Received a depression screening, tested positive and not eligible for follow-up plan is identified by CLM_LINE_HCPCS_CD = G8940.</li> </ul>
		<ul> <li>Received a depression screening, tested positive, no follow-up plan and reason not documented is identified by CLM_LINE_HCPCS_CD = G8511.</li> </ul>
		Denominator: All demonstration eligible Medicare-Medicaid beneficiaries.

## D.1.7 Descriptive Statistics and Regression Methodology for Determining Demonstration Impact

**Descriptive statistics.** For any health care service type, we calculate average monthly utilization per 1,000 eligible months, the average monthly utilization per 1,000 user months (i.e., months in which there was any use of the service), and the average monthly percentage with any use of the service. Because full-benefit dual eligibility status for the demonstration can vary by month over time for any individual, the analytic observations are at the monthly level. We calculate monthly averages by predemonstration and demonstration year, which account for the variation in demonstration eligibility that any beneficiary may have.

Specifically, the utilization measures were calculated as the aggregate sum of the unit of measurement (e.g., counts, admissions) divided by the aggregated number of eligible member months (and user months) within each demonstration and comparison group by analytic year. We weight all of the descriptive statistics using inverse propensity score weighting, described in *Appendix B. Appendix E* contains the descriptive tables with these results.

In addition, six quality of care and care coordination measures representing specific utilization types of interest are presented in the report. Similar to the utilization and expenditure measures, the quality of care and care coordination measures were calculated as the aggregated

sum of the numerator divided by the aggregated sum of the denominator for each respective outcome within each beneficiary group.

**Table D-2** also describes the risk-standardized readmission rate calculation for descriptive analysis. The average adjusted probabilities for the overall eligible population are listed in **Table D-3**.

Table D-3
Average adjusted probability of readmission by demonstration group

Demonstration group	Average adjusted probability of readmission
Predemonstration year 1	
Ohio	0.2238
Comparison	0.2075
Predemonstration year 2	
Ohio	0.2286
Comparison	0.2112
Demonstration year 1	
Ohio	0.2298
Comparison	0.2140
Demonstration year 2	
Ohio	0.2297
Comparison	0.2113
Demonstration year 3	
Ohio	0.2296
Comparison	0.2079
Demonstration year 4	
Ohio	0.2318
Comparison	0.2078

**Difference-in-differences approach**. To estimate the demonstration impact on our selected outcome measures, we conducted a multivariate DinD regression model with inverse propensity score weighting. We estimated two general types of models. The first model estimated the demonstration effect on the outcome over the entire demonstration period.

Dependent variable<sub>i</sub> = 
$$F(\beta_0 + \beta_1 PostYear + \beta_2 Demonstration + \beta_3 PostYear * Demonstration + \beta_4 Demographics + \beta_{5-j} Market + \epsilon)$$

where *PostYear* is an indicator of whether the observation is from the pre- or demonstration 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  $\beta_0$  reflects the comparison group predemonstration period mean adjusted for demographic and market effects,  $\beta_1$  reflects the average difference between post period and predemonstration period in the comparison group,  $\beta_2$  reflects the difference in the demonstration group and comparison group at predemonstration, and  $\beta_3$  is the overall average demonstration effect during the demonstration period. This last term is the DinD estimator and the primary policy variable of interest, but in all regression models, because of nonlinearities in the underlying distributions, postregression predictions of demonstration impact are performed to obtain the marginal effects of demonstration impact.

In addition, we also produce an annual effects model to estimate the demonstration impact per year:

```
Dependent variable = F (\beta_0 + \beta_{1-k}PostYear<sub>1-n</sub> + \beta_2Demonstration + \beta_{3-k}PostYear<sub>1-n</sub> * Demonstration + \beta_4 Demographics + \beta_{5-j} Market + \epsilon)
```

This equation differs from the previous one in that separate DinD coefficients are estimated for each year. Under this specification, the coefficients  $\beta_{3-k}$  would reflect the impact of the demonstration in each respective year, whereas the previous equation reflects the impact of the entire demonstration period. Depending on the outcome of interest, we estimated the equations using logistic regression, Generalized Linear Models with a log link and gamma distribution, or count models such as negative binomial (e.g., for the number of monthly physician visits).

We used regression results to calculate the marginal effects of demonstration impact. To account for correlation in the error terms, we used clustered standard errors at the county level.

Two outcomes are modelled at a beneficiary-period level. Both the annual probability of any long stay NF visit and the annual number of readmissions are estimated at a beneficiary-period level. This approach requires the use of an additional control variable to account for the variation of exposure to the potential outcome.

Impact estimates across the entire demonstration period are determined using the DinD methodology and are presented in figures for all demonstration eligible beneficiaries. We present a table displaying the cumulative estimate along with the adjusted means for each group and time period for the eligible population. We also display figures showing the annual effects of the demonstration among the overall eligible population. In each figure, the point estimate is displayed for each measure, as well as the 95 percent confidence interval. If the confidence interval includes the value of zero, it is not statistically significant at that confidence level.

To determine whether the demonstration had an effect on the SPMI and LTSS populations, a triple interaction term is used to estimate the interaction effect of each special population (i.e., Demonstration \* Post \* LTSS). In **Section 5, Demonstration Impact on Service Utilization and Quality of Care,** we report the cumulative DinD estimates for both the special population of interest and the rest of the eligible population, and we test the difference in the demonstration effect for each estimate. Annual triple-DinD results are shown in **Appendix E**, **Tables E-2** and **E-3**.

The adjusted means tables presented for the full demonstration eligible population in the report provide both DinD results and accompanying adjusted mean values that allow direct comparisons regarding service utilization and costs across the predemonstration and demonstration periods, separately for the demonstration and comparison groups. To make meaningful comparisons for the adjusted mean value results, we needed to take into account any differences in population characteristics across the four groups. Therefore, we replaced the data values for all demographic, health, and area-related characteristics in each group to be those of the comparison group in the demonstration period, which we selected as the reference group.

The steps involved in this process for each type of outcome measure are as follows:

- 1. *Run* the regression estimating the probability or level of service use or costs.
- 2. Predict DinD (last two columns in each adjusted means table).
- 3. *Replace* the data values for three of the four groups to be those of the comparison group in the demonstration period so all four groups have the same population characteristics.
- 4. *Predict* the regression adjusted mean for each of the four groups using the regression coefficients stored from Step 1.

The DinD estimate is also provided for reference, along with the *p*-value and the relative percentage change of the DinD estimate compared to an average mean value for the comparison group in the entire demonstration period. The relative percentage annual change for the DinD estimate for each outcome measure is calculated as [Overall DinD effect] / [Adjusted mean outcome value of comparison group in the demonstration period].

**Table D-4** provides an illustrative example of the regression output for each independent variable in the logistic regression on monthly inpatient admissions across the entire demonstration period.

Table D-4
Logistic regression results on monthly inpatient admissions
(n = 12,267,790 person months)

Independent variables	Coefficient	Standard error	z-value	<i>p</i> -value
Post period	-0.1040	0.0144	-7.23	<0.001
Demonstration group	0.0347	0.0359	0.97	0.334
Interaction of post period x demonstration group	-0.0601	0.0227	-2.65	0.008
Age (continuous)	0.0021	0.0005	3.84	<0.001
Female	0.0067	0.0131	0.51	0.608
Black	0.0360	0.0233	1.54	0.123
Hispanic	-0.1138	0.0444	-2.56	0.010
Asian	-0.4224	0.0340	-12.41	<0.001
Other race/ethnicity	-0.2224	0.0476	-4.67	<0.001

## **Table D-4 (continued) Logistic regression results on monthly inpatient admissions** (n = 2,545,309 person months)

Independent variables	Coefficient	Standard error	z-value	p-value
Disability as reason for Medicare entitlement	0.0060	0.0184	0.32	0.746
End-stage renal disease	1.5147	0.0213	71.26	<0.001
Participation in other Shared Savings Program	0.1566	0.0334	4.69	<0.001
Hierarchical Condition Category score	0.3568	0.0070	50.62	<0.001
Metropolitan statistical area residence	0.0722	0.0394	1.83	0.067
Medicare spending per dual, age 19+	-0.0001	0.0000	-1.92	0.054
Percentage of population married	-0.0027	0.0008	-3.35	0.001
Medicare Advantage penetration rate	-0.2628	0.1958	-1.34	0.180
Medicaid spending per dual, age 19+	0.0000	0.0000	0.44	0.658
Medicaid-Medicare fee index	-0.0329	0.0618	-0.53	0.594
Fraction of dually elig. beneficiaries using nursing facility, age 65+	0.3763	0.2406	1.56	0.118
Fraction of dually elig. beneficiaries using HCBS, age 65+	0.1095	0.0918	1.19	0.233
Population per square mile, all ages	0.0006	0.0001	0.88	0.377
Patient care physicians per 1,000 population	-0.1504	0.1860	-0.81	0.419
Percentage of adults with college education	-0.0022	0.0006	-3.73	<0.001
Percentage of adults who are unemployed	-0.0031	0.0017	-1.89	0.058
Percentage of adults with self-care limitation	-0.0010	0.0015	-0.69	0.490
Distance to nearest hospital	-0.0011	0.0025	-0.43	0.664
Distance to nearest nursing facility	-0.0001	0.0034	-0.03	0.977
Percentage of households with individuals younger than 18	-0.0016	0.0009	-1.74	0.082
Percentage of households with individuals older than 60	-0.0015	0.0009	-1.64	0.101
Medicaid-to-Medicare fee index (FFS)	0.8013	0.3319	2.41	0.016
Intercept	-3.293	0.4173	-7.89	<0.001

HCBS = home and community-based services.

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## Appendix E Descriptive and Special Population Supplemental Analysis

**Tables E-1**, **E-2**, and **E-3** provide the regression-adjusted DinD estimates for all measures and populations, both cumulatively and for each demonstration year. We provide both the 95 and 90 percent confidence intervals for a clearer understanding of the estimate's precision.

Table E-1
Cumulative and annual demonstration impacts on service utilization and quality of care measures for eligible beneficiaries in Ohio, demonstration years 1–4, May 1, 2014–
December 31, 2018

Measure	Adjusted DinD estimate	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval
Probability of inpatient admission					
Cumulative	-0.0024	-5.7	0.0095	(-0.0043, -0.0006)	(-0.0040, -0.0009)
Demonstration year 1	-0.0040	-9.0	<0.0001	(-0.0058, -0.0021)	(-0.0055, -0.0024)
Demonstration year 2	-0.0023	NS	0.0532	(-0.0046, 0.0000)	(-0.0043, -0.0003)
Demonstration year 3	-0.0033	-7.8	0.0077	(-0.0057, -0.0009)	(-0.0053, -0.0013)
Demonstration year 4	-0.0001	NS	0.9678	(-0.0026, 0.0025)	(-0.0022, 0.0021)
Count of all-cause 30-day readmiss	sions				
Cumulative	-0.0136	NS	0.0561	(-0.0275, 0.0004)	(-0.0253, -0.0019)
Demonstration year 1	-0.0176	-5.9	0.0188	(-0.0323, -0.0029)	(-0.0299, -0.0053)
Demonstration year 2	-0.0135	NS	0.1141	(-0.0302, 0.0032)	(-0.0275, 0.0006)
Demonstration year 3	-0.0125	NS	0.3043	(-0.0364, 0.0114)	(-0.0326, 0.0075)
Demonstration year 4	-0.0141	NS	0.1170	(-0.0317, 0.0035)	(-0.0288, 0.0007)
Probability of ACSC admission, over	erall				
Cumulative	0.0007	8.8	0.0472	(0.0000, 0.0014)	(0.0001, 0.0013)
Demonstration year 1	-0.0006	-7.7	0.0141	(-0.0011, -0.0001)	(-0.0010, -0.0002)
Demonstration year 2	0.0001	NS	0.7298	(-0.0007, 0.0010)	(-0.0005, 0.0008)
Demonstration year 3	-0.0004	NS	0.4016	(-0.0013, 0.0005)	(-0.0011, 0.0004)
Demonstration year 4	0.0037	50.2	<0.0001	(0.0019, 0.0055)	(0.0022, 0.0052)
Probability of ACSC admission, chr	onic				
Cumulative	0.0010	19.1	0.0068	(0.0003, 0.0017)	(0.0004, 0.0016)
Demonstration year 1	-0.0002	NS	0.4280	(-0.0007, 0.0003)	(-0.0006, 0.0002)
Demonstration year 2	0.0002	NS	0.6311	(-0.0005, 0.0009)	(-0.0004, 0.0008)
Demonstration year 3	-0.0003	NS	0.5034	(-0.0010, 0.0005)	(-0.0009, 0.0004)
Demonstration year 4	0.0042	86.9	<0.0001	(0.0022, 0.0063)	(0.0025, 0.0060)
Probability of ED visit					
Cumulative	0.0120	16.4	<0.0001	(0.0094, 0.0146)	(0.0098, 0.0142)
Demonstration year 1	0.0055	7.2	0.0001	(0.0027, 0.0083)	(0.0032, 0.0078)
Demonstration year 2	0.0129	17.7	<0.0001	(0.0097, 0.0160)	(0.0102, 0.0155)
Demonstration year 3	0.0156	21.6	<0.0001	(0.0132, 0.0181)	(0.0136, 0.0177)
Demonstration year 4	0.0164	23.6	<0.0001	(0.0130, 0.0198)	(0.0136, 0.0193)

Table E-1 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures for eligible beneficiaries in Ohio, demonstration years 1–4, May 1, 2014–
December 31, 2018

Measure	Adjusted DinD estimate	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval
Count of preventable ED visits					
Cumulative	0.0120	26.4	<0.0001	(0.0097, 0.0143)	(0.0101, 0.0139)
Demonstration year 1	0.0069	14.3	<0.0001	(0.0044, 0.0093)	(0.0048, 0.0089)
Demonstration year 2	0.0140	31.2	<0.0001	(0.0118, 0.0162)	(0.0121, 0.0158)
Demonstration year 3	0.0142	31.6	<0.0001	(0.0115, 0.0170)	(0.0119, 0.0165)
Demonstration year 4	0.0145	33.8	<0.0001	(0.0104, 0.0185)	(0.0111, 0.0179)
Probability of SNF admission					
Cumulative	-0.0000	NS	0.9133	(-0.0009, 0.0008)	(-0.0007, 0.0006)
Demonstration year 1	-0.0002	NS	0.6371	(-0.0011, 0.0007)	(-0.0009, 0.0005)
Demonstration year 2	0.0006	NS	0.2995	(-0.0005, 0.0018)	(-0.0004, 0.0016)
Demonstration year 3	0.0008	NS	0.1233	(-0.0002, 0.0017)	(-0.0001, 0.0016)
Demonstration year 4	-0.0012	NS	0.0603	(-0.0024, 0.0001)	(-0.0022, -0.0001)
Probability of any long-stay NF use					
Cumulative	-0.0112	-6.5	0.0004	(-0.0174, -0.0050)	(-0.0164, -0.0060)
Demonstration year 1	0.0014	NS	0.6855	(-0.0056, 0.0085)	(-0.0044, 0.0073)
Demonstration year 2	-0.0122	-6.9	0.0005	(-0.0190, -0.0053)	(-0.0179, -0.0064)
Demonstration year 3	-0.0156	<b>-</b> 9.5	<0.0001	(-0.0231, -0.0082)	(-0.0219, -0.0094)
Demonstration year 4	-0.0194	-11.7	<0.0001	(-0.0264, -0.0125)	(-0.0252, -0.0136)
Probability of 30-day follow-up after	mental health dis	charge			
Cumulative	0.0596	14.1	0.0205	(0.0092, 0.1100)	(0.0173, 0.1019)
Demonstration year 1	-0.0032	NS	0.8964	(-0.0510, 0.0447)	(-0.0433, 0.0370)
Demonstration year 2	0.0224	NS	0.4202	(-0.0320, 0.0767)	(-0.0233, 0.0680)
Demonstration year 3	0.0456	NS	0.1373	(-0.0145, 0.1057)	(-0.0049, 0.0960)
Demonstration year 4	0.1434	36.1	<0.0001	(0.0878, 0.1990)	(0.0968, 0.1901)
Number of physician E&M visits					
Cumulative	0.3019	28.6	<0.0001	(0.1617, 0.4422)	(0.1842, 0.4196)
Demonstration year 1	0.0663	6.1	0.0309	(0.0061, 0.1265)	(0.0158, 0.1168)
Demonstration year 2	0.2872	26.9	<0.0001	(0.1484, 0.4261)	(0.1707, 0.4037)
Demonstration year 3	0.2873	27.7	<0.0001	(0.1688, 0.4058)	(0.1878, 0.3867)
Demonstration year 4	0.6117	59.0	<0.0001	(0.3244, 0.8989)	(0.3706, 0.8528)

ACSC = ambulatory care sensitive condition; ED = emergency department; E&M = evaluation and management; NF = nursing facility; NS = not statistically significant; SNF = skilled nursing facility.

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data, and Minimum Data Set data.

Table E-2
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with LTSS use versus those without LTSS use in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

	1				-	·		
Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non- LTSS)
Service Utilization	Measures							
	Cumulative	LTSS users	0.0049	10.2	0.0008	(0.0020, 0.0078)	(0.0025, 0.0073)	0.0096***
	Cumulative	Non-LTSS users	-0.0047	-15.5	<0.0001	(-0.0062, -0.0033)	(-0.0059, -0.0035)	0.0096
	D V 1	LTSS users	0.0039	7.8	0.0150	(0.0008, 0.0071)	(0.0013, 0.0066)	0.0400***
	Demo Year 1	Non-LTSS users	-0.0067	-21.3	<0.0001	(-0.0080, -0.0055)	(-0.0078, -0.0057)	0.0106***
Probability of	D	LTSS users	0.0055	11.9	0.0018	(0.0020, 0.0089)	(0.0026, 0.0083)	0.0000***
inpatient admission	Demo Year 2	Non-LTSS users	-0.0045	-15.1	<0.0001	(-0.0064, -0.0025)	(-0.0061, -0.0028)	0.0099***
	Demo Year 3	LTSS users	0.0053	11.5	0.0103	(0.0012, 0.0093)	(0.0019, 0.0087)	0.0109***
		Non-LTSS users	-0.0056	-18.5	<0.0001	(-0.0084, -0.0029)	(-0.0079, -0.0033)	
	5 7 4	LTSS users	0.0059	12.6	0.0053	(0.0017, 0.0100)	(0.0024, 0.0093)	0.0070444
	Demo Year 4	Non-LTSS users	-0.0020	-6.9	0.0471	(-0.0040, -0.0000)	(-0.0037, -0.0003)	0.0079***
	0 1 "	LTSS users	0.0104	16.2	<0.0001	(0.0069, 0.0138)	(0.0075, 0.0133)	0.000
	Cumulative	Non-LTSS users	0.0080	10.5	<0.0001	(0.0046, 0.0114)	(0.0052, 0.0109)	0.0023
		LTSS users	0.0061	9.4	0.0006	(0.0026, 0.0096)	(0.0032, 0.0090)	0.00104
	Demo Year 1	Non-LTSS users	0.0020	NS	0.2411	(-0.0014, 0.0054)	(-0.0008, 0.0049)	0.0040*
Probability of ED	5 V 0	LTSS users	0.0117	18.6	<0.0001	(0.0073, 0.0161)	(0.0080, 0.0154)	0.0000
visit	Demo Year 2	Non-LTSS users	0.0097	12.6	<0.0001	(0.0059, 0.0135)	(0.0065, 0.0129)	0.0020
	D	LTSS users	0.0143	22.6	<0.0001	(0.0107, 0.0178)	(0.0113, 0.0173)	0.0000
De	Demo Year 3	Non-LTSS users	0.0110	14.5	<0.0001	(0.0070, 0.0150)	(0.0076, 0.0144)	0.0033
	5 V 1	LTSS users	0.0148	23.2	<0.0001	(0.0105, 0.0190)	(0.0112, 0.0183)	0.0034
	Demo Year 4	Non-LTSS users	0.0113	15.7	<0.0001	(0.0066, 0.0161)	(0.0074, 0.0153)	

Table E-2 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with LTSS use versus those without LTSS use in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p-</i> value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non- LTSS)
Service Utilization	Measures (contin	nued)				<u>'</u>		
	Common lations	LTSS users	0.4475	32.9	<0.0001	(0.3073, 0.5877)	(0.3298, 0.5651)	0.4025***
	Cumulative	Non-LTSS users	0.2540	35.2	<0.0001	(0.1336, 0.3744)	(0.1530, 0.3550)	0.1935***
	D V 1	LTSS users	0.2560	18.6	<0.0001	(0.1799, 0.3322)	(0.1921, 0.3199)	0.0000***
	Demo Year 1	Non-LTSS users	0.0228	NS	0.3561	(-0.0257, 0.0713)	(-0.0179, 0.0636)	0.2332***
Count of physician	D V 0	LTSS users	0.4530	33.2	<0.0001	(0.2810, 0.6250)	(0.3087, 0.5974)	0.000.4***
E&M visits	Demo Year 2	Non-LTSS users	0.2307	32.2	0.0002	(0.1103, 0.3511)	(0.1296, 0.3317)	0.2224***
	Demo Year 3	LTSS users	0.4953	37.0	<0.0001	(0.3430, 0.6475)	(0.3675, 0.6230)	0.2545***
		Non-LTSS users	0.2408	34.0	<0.0001	(0.1378, 0.3438)	(0.1544, 0.3272)	
	D V 1	LTSS users	0.8785	65.4	<0.0001	(0.5139, 1.2430)	(0.5725, 1.1844)	0.2504***
	Demo Year 4	Non-LTSS users	0.5284	75.2	<0.0001	(0.3054, 0.7513)	(0.3412, 0.7155)	0.3501***
	0	LTSS users	0.0063	36.0	<0.0001	(0.0045, 0.0080)	(0.0048, 0.0077)	0.0007***
	Cumulative	Non-LTSS users	-0.0004	NS	0.2017	(-0.0011, 0.0002)	(-0.0010, 0.0001)	0.0067***
	Dama Va an 4	LTSS users	0.0064	33.6	<0.0001	(0.0045, 0.0082)	(0.0048, 0.0079)	0.0075***
	Demo Year 1	Non-LTSS users	-0.0011	-61.7	0.0057	(-0.0018, -0.0003)	(-0.0017, -0.0004)	0.0075***
Probability of SNF	Demo Year 2	LTSS users	0.0069	41.0	<0.0001	(0.0047, 0.0092)	(0.0051, 0.0088)	0.0072***
admission	Demo Year 2	Non-LTSS users	-0.0002	NS	0.5708	(-0.0011, 0.0006)	(-0.0009, 0.0005)	0.0072
	Demo Year 3	LTSS users	0.0075	47.2	<0.0001	(0.0053, 0.0097)	(0.0056, 0.0093)	0.0071***
	Demo Year 3	Non-LTSS users	0.0004	NS	0.2634	(-0.0003, 0.0010)	(-0.0002, 0.0009)	0.0071****
	Demo Year 4	LTSS users	0.0037	24.2	0.0111	(0.0009, 0.0066)	(0.0013, 0.0061)	0.0045**
	Deffio Year 4	Non-LTSS users	-0.0007	NS	0.0660	(-0.0015, 0.0000)	(-0.0014, -0.0001)	0.0045**

Table E-2 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with LTSS use versus those without LTSS use in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non- LTSS)
Quality of Care Me	easures							
	Cumulative	LTSS users	0.0102	27.7	<0.0001	(0.0078, 0.0125)	(0.0082, 0.0121)	0.0012
	Cumulative	Non-LTSS users	0.0090	18.1	<0.0001	(0.0053, 0.0126)	(0.0059, 0.0120)	0.0012
	Dama Vaar 1	LTSS users	0.0067	17.6	<0.0001	(0.0038, 0.0096)	(0.0043, 0.0091)	0.0022
	Demo Year 1	Non-LTSS users	0.0044	8.2	0.0060	(0.0013, 0.0075)	(0.0018, 0.0070)	0.0023
Count of	D V 0	LTSS users	0.0116	32.8	<0.0001	(0.0085, 0.0147)	(0.0090, 0.0142)	0.0040
preventable ED visits	Demo Year 2	Non-LTSS users	0.0129	26.9	<0.0001	(0.0095, 0.0163)	(0.0101, 0.0158)	-0.0013
	Demo Year 3	LTSS users	0.0127	35.4	<0.0001	(0.0101, 0.0154)	(0.0105, 0.0150)	0.0022
		Non-LTSS users	0.0105	21.5	<0.0001	(0.0058, 0.0153)	(0.0065, 0.0145)	
	Dama Vaar 4	LTSS users	0.0134	37.5	<0.0001	(0.0107, 0.0161)	(0.0111, 0.0156)	0.0027
	Demo Year 4	Non-LTSS users	0.0097	20.8	0.0009	(0.0040, 0.0154)	(0.0049, 0.0144)	0.0037
	O manufation	LTSS users	0.0021	22.2	<0.0001	(0.0011, 0.0031)	(0.0012, 0.0029)	0.0004***
	Cumulative	Non-LTSS users	-0.0003	NS	0.2600	(-0.0009, 0.0002)	(-0.0008, 0.0001)	0.0024***
	D V 1	LTSS users	0.0007	NS	0.1809	(-0.0003, 0.0017)	(-0.0002, 0.0015)	0.0040**
	Demo Year 1	Non-LTSS users	-0.0012	-25.6	<0.0001	(-0.0016, -0.0007)	(-0.0015, -0.0008)	0.0018**
Probability of	Dama Vaar 2	LTSS users	0.0024	28.0	<0.0001	(0.0012, 0.0036)	(0.0014, 0.0035)	0.0022***
ACSC admission, overall	Demo Year 2	Non-LTSS users	-0.0008	NS	0.0647	(-0.0017, 0.0001)	(-0.0016, -0.0001)	0.0033***
	Demo Year 3	LTSS users	0.0015	NS	0.0532	(-0.0000, 0.0031)	(0.0002, 0.0028)	0.0030***
	Demo real 3	Non-LTSS users	-0.0014	-27.5	0.0003	(-0.0022, -0.0007)	(-0.0021, -0.0008)	0.0030
	Dama Vaar 4	LTSS users	0.0058	69.4	<0.0001	(0.0034, 0.0082)	(0.0038, 0.0078)	0.0040***
	Demo Year 4	Non-LTSS users	0.0018	37.3	0.0055	(0.0005, 0.0030)	(0.0007, 0.0028)	0.0040***

Table E-2 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with LTSS use versus those without LTSS use in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non- LTSS)
Quality of Care Me	asures (continue	d)						
	Cumulative	LTSS users	0.0022	42.5	<0.0001	(0.0013, 0.0031)	(0.0015, 0.0029)	0.0023***
	Cumulative	Non-LTSS users	-0.0001	NS	0.6970	(-0.0007, 0.0005)	(-0.0006, 0.0004)	0.0023
	Doma Vaar 1	LTSS users	0.0009	17.3	0.0224	(0.0001, 0.0017)	(0.0003, 0.0016)	0.0018***
	Demo Year 1	Non-LTSS users	-0.0009	-27.1	0.0016	(-0.0015, -0.0003)	(-0.0014, -0.0004)	0.0018****
Probability of	Dama Vaar 2	LTSS users	0.0016	33.3	0.0021	(0.0006, 0.0027)	(0.0008, 0.0025)	0.0022**
ACSC admission, chronic	Demo Year 2	Non-LTSS users	-0.0006	NS	0.1638	(-0.0014, 0.0002)	(-0.0013, 0.0001)	0.0022**
	Demo Year 3	LTSS users	0.0016	28.0	0.0077	(0.0004, 0.0028)	(0.0006, 0.0026)	0.0030***
		Non-LTSS users	-0.0014	-31.7	<0.0001	(-0.0021, -0.0007)	(-0.0019, -0.0008)	
	Demo Year 4	LTSS users	0.0069	161.1	<0.0001	(0.0043, 0.0095)	(0.0047, 0.0091)	0.0049***
	Demo Year 4	Non-LTSS users	0.0020	53.6	0.0043	(0.0006, 0.0034)	(0.0008, 0.0031)	0.0049
	O	LTSS users	0.0590	17.0	0.0289	(0.0061, 0.1119)	(0.0146, 0.1034)	0.0045
	Cumulative	Non-LTSS users	0.0545	NS	0.0526	(-0.0006, 0.1095)	(0.0082, 0.1007)	0.0045
	Demo Year 1	LTSS users	-0.0082	NS	0.7865	(-0.0673, 0.0510)	(-0.0578, 0.0414)	0.0014
Probability of 30-	Demo Year I	Non-LTSS users	-0.0096	NS	0.7366	(-0.0656, 0.0464)	(-0.0566, 0.0374)	0.0014
day follow-up after	Demo Year 2	LTSS users	0.1068	38.6	0.0161	(0.0198, 0.1939)	(0.0338, 0.1799)	0.1082*
mental health	Dellio Teal 2	Non-LTSS users	-0.0013	NS	0.9631	(-0.0585, 0.0559)	(-0.0494, 0.0467)	0.1062
discharge	Demo Year 3	LTSS users	0.0332	NS	0.2003	(-0.0176, 0.0841)	(-0.0095, 0.0759)	-0.0097
	Demo Year 3	Non-LTSS users	0.0429	NS	0.2227	(-0.0261, 0.1120)	(-0.0150, 0.1009)	-0.0097
	Demo Year 4	LTSS users	0.0993	26.4	0.0218	(0.0144, 0.1841)	(0.0281, 0.1705)	-0.0521
	Dellio Teal 4	Non-LTSS users	0.1514	36.2	<0.0001	(0.0866, 0.2162)	(0.0970, 0.2058)	-0.052 i

**Table E-2 (continued)** 

Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with LTSS use versus those without LTSS use in Ohio, demonstration years 1-4, May 1, 2014-December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p-</i> value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non- LTSS)
Quality of Care Me	asures (continue	d)						
	Cumulativa	LTSS users	-0.0031	NS	0.7304	(-0.0205, 0.0143)	(-0.0177, 0.0115)	0.0075
	Cumulative	Non-LTSS users	-0.0106	NS	0.0780	(-0.0223, 0.0012)	(-0.0205, -0.0007)	0.0075
	Demo Year 1	LTSS users	-0.0099	NS	0.3388	(-0.0301, 0.0103)	(-0.0268, 0.0071)	0.0027
		Non-LTSS users	-0.0136	NS	0.1992	(-0.0343, 0.0071)	(-0.0310, 0.0038)	0.0037
Count of all-cause	Dama Vaar 2	LTSS users	-0.0022	NS	0.8697	(-0.0288, 0.0243)	(-0.0245, 0.0201)	0.0054
30-day readmissions	Demo Year 2	Non-LTSS users	-0.0076	NS	0.4568	(-0.0277, 0.0124)	(-0.0244, 0.0092)	0.0054
	Demo Year 3	LTSS users	0.0079	NS	0.6997	(-0.0321, 0.0478)	(-0.0257, 0.0414)	0.0246
	Demo Year 3	Non-LTSS users	-0.0168	NS	0.0664	(-0.0347, 0.0011)	(-0.0318, -0.0017)	0.0246
	D V 4	LTSS users	-0.0064	NS	0.6121	(-0.0313, 0.0184)	(-0.0273, 0.0144)	
	Demo Year 4	Non-LTSS users	-0.0091	NS	0.4033	(-0.0306, 0.0123)	(-0.0272, 0.0089)	0.0027

<sup>\*</sup> *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

ACSC = ambulatory care sensitive condition; ED = emergency department; E&M = evaluation and management; LTSS = long-term services and supports; NS = not statistically significant; SNF = skilled nursing facility.

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Table E-3
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with SPMI versus those without SPMI in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non- SPMI)
Service Utilization	n Measures							
	Ourse de thus	SPMI	-0.0063	-11.0	<0.0001	(-0.0088, -0.0039)	(-0.0084, -0.0043)	0.0047***
	Cumulative	Non-SPMI	-0.0016	-5.6	0.0394	(-0.0032, -0.0001)	(-0.0030, -0.0003)	-0.0047***
	Daws V 4	SPMI	-0.0075	-13.0	<0.0001	(-0.0102, -0.0048)	(-0.0097, -0.0052)	0.0040***
	Demo Year 1	Non-SPMI	-0.0027	-7.7	0.0028	(-0.0044, -0.0009)	(-0.0041, -0.0012)	-0.0048***
Probability of inpatient Demo Year 2 admission	SPMI	-0.0062	-10.6	0.0006	(-0.0098, -0.0027)	(-0.0092, -0.0033)	0.0040*	
	Demo Year 2	Non-SPMI	-0.0020	NS	0.0626	(-0.0041, 0.0001)	(-0.0038, -0.0002)	-0.0042*
	D	SPMI	-0.0090	-15.4	<0.0001	(-0.0128, -0.0051)	(-0.0122, -0.0057)	0.0004***
	Demo Year 3	Non-SPMI	-0.0009	NS	0.2957	(-0.0024, 0.0007)	(-0.0022, 0.0005)	-0.0081***
	5 V 4	SPMI	-0.0040	-7.2	0.0048	(-0.0068, -0.0012)	(-0.0063, -0.0017)	0.0044*
	Demo Year 4	Non-SPMI	0.0001	NS	0.9580	(-0.0022, 0.0024)	(-0.0019, 0.0020)	-0.0041*
	0 1 "	SPMI	0.0102	10.9	<0.0001	(0.0068, 0.0135)	(0.0074, 0.0130)	0.0004
	Cumulative	Non-SPMI	0.0097	17.8	<0.0001	(0.0075, 0.0120)	(0.0078, 0.0117)	0.0004
	D V 1	SPMI	0.0040	NS	0.0524	(-0.0000, 0.0080)	(0.0006, 0.0073)	0.0040
	Demo Year 1	Non-SPMI	0.0050	8.2	<0.0001	(0.0031, 0.0069)	(0.0034, 0.0066)	-0.0010
Probability of ED	D	SPMI	0.0096	10.2	<0.0001	(0.0061, 0.0132)	(0.0066, 0.0126)	0.0000
visit	Demo Year 2	Non-SPMI	0.0116	22.2	<0.0001	(0.0080, 0.0152)	(0.0086, 0.0146)	-0.0020
	D	SPMI	0.0128	13.8	<0.0001	(0.0093, 0.0162)	(0.0099, 0.0157)	0.0000
	Demo Year 3	Non-SPMI	0.0135	26.6	<0.0001	(0.0107, 0.0163)	(0.0112, 0.0159)	-0.0008
	D 1	SPMI	0.0138	15.5	<0.0001	(0.0092, 0.0183)	(0.0100, 0.0176)	0.0007
	Demo Year 4	Non-SPMI	0.0131	26.6	<0.0001	(0.0093, 0.0168)	(0.0099, 0.0162)	0.0007

Table E-3 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with SPMI versus those without SPMI in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non- SPMI)
Service Utilization	Measures (contin	nued)						•
	Cumulative	SPMI	0.3586	26.0	<0.0001	(0.1872, 0.5301)	(0.2147, 0.5025)	0.1855***
	Cumulative	Non-SPMI	0.1731	22.5	0.0005	(0.0751, 0.2711)	(0.0909, 0.2553)	0.1655
	Demo Year 1	SPMI	0.0761	5.5	0.0479	(0.0007, 0.1515)	(0.0128, 0.1394)	0.0410
	Demo Year I	Non-SPMI	0.0343	NS	0.1894	(-0.0169, 0.0854)	(-0.0087, 0.0772)	0.0418
Count of physician	D V 0	SPMI	0.3049	21.7	0.0003	(0.1395, 0.4704)	(0.1661, 0.4438)	0.1137*
E&M visits Demo Year 2	Demo Year 2	Non-SPMI	0.1912	25.1	0.0004	(0.0848, 0.2976)	(0.1019, 0.2805)	0.1137
	Demo Year 3	SPMI	0.3006	22.1	<0.0001	(0.1606, 0.4406)	(0.1831, 0.4181)	0.1201**
	Dellio Fear 3	Non-SPMI	0.1805	25.6	<0.0001	(0.1008, 0.2602)	(0.1136, 0.2474)	0.1201
	Demo Year 4	SPMI	0.6943	50.5	<0.0001	(0.3679, 1.0207)	(0.4204, 0.9682)	0.3065***
	Dellio Feal 4	Non-SPMI	0.3878	56.8	0.0004	(0.1746, 0.6010)	(0.2088, 0.5667)	0.3065
	Cumulative	SPMI	-0.0013	NS	0.0685	(-0.0027, 0.0001)	(-0.0025, -0.0001)	0.0011
	Cumulative	Non-SPMI	-0.0002	NS	0.5490	(-0.0009, 0.0005)	(-0.0007, 0.0003)	-0.0011
	Demo Year 1	SPMI	-0.0011	NS	0.1716	(-0.0027, 0.0005)	(-0.0025, 0.0002)	0.0000
	Demo Year I	Non-SPMI	-0.0003	NS	0.4554	(-0.0010, 0.0005)	(-0.0009, 0.0003)	-0.0008
Probability of SNF	Dama Vaar 2	SPMI	-0.0004	NS	0.6819	(-0.0024, 0.0016)	(-0.0021, 0.0012)	0.0002
admission	Demo Year 2	Non-SPMI	-0.0001	NS	0.8421	(-0.0012, 0.0010)	(-0.0010, 0.0008)	-0.0003
	Domo Voor 2	SPMI	-0.0005	NS	0.5574	(-0.0023, 0.0012)	(-0.0020, 0.0009)	0.0000
	Demo Year 3	Non-SPMI	0.0004	NS	0.3733	(-0.0005, 0.0013)	(-0.0003, 0.0012)	-0.0009
	Demo Year 4	SPMI	-0.0030	-18.8	0.0034	(-0.0050, -0.0010)	(-0.0047, -0.0013)	0.0025**
	Defilo Year 4	Non-SPMI	-0.0005	NS	0.1225	(-0.0012, 0.0001)	(-0.0011, 0.0000)	-0.0025**

Table E-3 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with SPMI versus those without SPMI in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non- SPMI)
Quality of Care Me	easures							
	Commendations	SPMI	0.0127	22.1	<0.0001	(0.0097, 0.0157)	(0.0101, 0.0152)	0.0020**
	Cumulative	Non-SPMI	0.0095	28.0	<0.0001	(0.0071, 0.0119)	(0.0075, 0.0115)	0.0032**
Demo Year 1	D V 4	SPMI	0.0074	12.1	0.0004	(0.0033, 0.0115)	(0.0040, 0.0109)	0.0040
	Demo Year 1	Non-SPMI	0.0058	15.3	<0.0001	(0.0040, 0.0075)	(0.0043, 0.0072)	0.0016
Count of preventable ED Demo Year 2 visits	SPMI	0.0134	23.1	<0.0001	(0.0107, 0.0161)	(0.0112, 0.0156)	0.0044	
	Demo Year 2	Non-SPMI	0.0120	38.1	<0.0001	(0.0091, 0.0150)	(0.0096, 0.0145)	0.0014
	D	SPMI	0.0141	24.9	<0.0001	(0.0108, 0.0173)	(0.0113, 0.0168)	2 2222
	Demo Year 3	Non-SPMI	0.0119	37.2	<0.0001	(0.0085, 0.0152)	(0.0090, 0.0147)	0.0022
	5 7 4	SPMI	0.0151	28.7	<0.0001	(0.0101, 0.0201)	(0.0109, 0.0193)	0.0040*
	Demo Year 4	Non-SPMI	0.0109	35.3	<0.0001	(0.0063, 0.0156)	(0.0070, 0.0148)	0.0042*
		SPMI	0.0012	12.0	0.0257	(0.0001, 0.0023)	(0.0003, 0.0021)	
	Cumulative	Non-SPMI	0.0003	NS	0.3350	(-0.0003, 0.0009)	(-0.0002, 0.0008)	0.0009
	5 7 4	SPMI	-0.0005	NS	0.1688	(-0.0012, 0.0002)	(-0.0010, 0.0001)	0.0004
	Demo Year 1	Non-SPMI	-0.0006	NS	0.0650	(-0.0012, 0.0000)	(-0.0011, -0.0001)	0.0001
Probability of	5 V 6	SPMI	0.0006	NS	0.3250	(-0.0006, 0.0017)	(-0.0004, 0.0016)	
ACSC admission, overall	Demo Year 2	Non-SPMI	-0.0002	NS	0.7235	(-0.0013, 0.0009)	(-0.0012, 0.0007)	0.0008
	D	SPMI	-0.0005	NS	0.4167	(-0.0017, 0.0007)	(-0.0015, 0.0005)	0.0005
	Demo Year 3	Non-SPMI	-0.0000	NS	0.9865	(-0.0008, 0.0008)	(-0.0006, 0.0006)	-0.0005
		SPMI	0.0046	47.7	0.0001	(0.0023, 0.0069)	(0.0026, 0.0065)	0.0040#
	Demo Year 4	Non-SPMI	0.0027	52.9	<0.0001	(0.0014, 0.0039)	(0.0016, 0.0037)	0.0019*

Table E-3 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures on beneficiaries with SPMI versus those without SPMI in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	<i>p</i> -value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non- SPMI)
Quality of Care Me	easures (continue	d)						
	0	SPMI	0.0015	22.7	0.0043	(0.0005, 0.0025)	(0.0006, 0.0023)	0.0000
	Cumulative	Non-SPMI	0.0006	15.1	0.0393	(0.0000, 0.0012)	(0.0001, 0.0011)	0.0009
	D V 1	SPMI	-0.0000	NS	0.9280	(-0.0007, 0.0006)	(-0.0006, 0.0005)	0.0000
	Demo Year 1	Non-SPMI	-0.0002	NS	0.4301	(-0.0007, 0.0003)	(-0.0007, 0.0002)	0.0002
Probability of	D V 0	SPMI	0.0005	NS	0.3146	(-0.0004, 0.0014)	(-0.0003, 0.0012)	0.0005
ACSC admission, chronic	Demo Year 2	Non-SPMI	-0.0000	NS	0.9904	(-0.0010, 0.0010)	(-0.0008, 0.0008)	0.0005
	Demo Year 3	SPMI	-0.0003	NS	0.5081	(-0.0014, 0.0007)	(-0.0012, 0.0005)	-0.0004
	Demo rear 3	Non-SPMI	0.0001	NS	0.8225	(-0.0006, 0.0008)	(-0.0005, 0.0007)	-0.0004
	Dama Vaar 4	SPMI	0.0051	81.5	<0.0001	(0.0026, 0.0076)	(0.0030, 0.0072)	0.0019**
	Demo Year 4	Non-SPMI	0.0032	93.5	<0.0001	(0.0017, 0.0046)	(0.0020, 0.0044)	0.0019
	Cumulative	SPMI	-0.0118	NS	0.1400	(-0.0274, 0.0039)	(-0.0249, 0.0013)	0.0037
	Cumulative	Non-SPMI	-0.0155	NS	0.0656	(-0.0319, 0.0010)	(-0.0293, -0.0016)	0.0037
	Demo Year 1	SPMI	-0.0215	NS	0.0867	(-0.0460, 0.0031)	(-0.0421, -0.0009)	-0.0091
	Demo real i	Non-SPMI	-0.0124	NS	0.1066	(-0.0274, 0.0027)	(-0.0250, 0.0002)	-0.0091
Count of all-cause	Dama Vaar 2	SPMI	-0.0073	NS	0.4340	(-0.0255, 0.0110)	(-0.0226, 0.0080)	0.0169
30-day readmissions	Demo Year 2	Non-SPMI	-0.0242	NS	0.1048	(-0.0535, 0.0050)	(-0.0488, 0.0003)	0.0169
	Demo Year 3	SPMI	-0.0129	NS	0.3584	(-0.0404, 0.0146)	(-0.0360, 0.0102)	-0.0051
	Dellio Year 3	Non-SPMI	-0.0078	NS	0.4347	(-0.0272, 0.0117)	(-0.0241, 0.0086)	-0.0051
	Demo Year 4	SPMI	-0.0110	NS	0.1857	(-0.0272, 0.0053)	(-0.0246, 0.0027)	0.0086
	Demo real 4	Non-SPMI	-0.0196	NS	0.2443	(-0.0525, 0.0134)	(-0.0472, 0.0081)	0.0000

<sup>\*</sup> *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

ACSC = ambulatory care sensitive condition; ED = emergency department; E&M = evaluation and management; NS = not statistically significant; SNF = skilled nursing facility; SPMI = serious and persistent mental illness.

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

**Table E-4** presents results on the average percentage of demonstration eligible beneficiaries using selected Medicare service during the months in which they met demonstration eligibility criteria in the predemonstration and demonstration periods. In addition, average counts of service use 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 are shown for the predemonstration and demonstration period for both Ohio eligible beneficiaries (i.e., the demonstration group) and the comparison group. We also provide tables for the RTI quality of care and care coordination measures (*Table E-5*) and NF-related measures derived from the MDS (*Table E-6*). The results reflect the underlying experience of the two groups; 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 (baseline) years and the demonstration years (*Table E-4*). However, there were a few outcomes where some differences were apparent. For example, ED use, observation stays, and physician E&M visits were higher for the demonstration group than for the comparison group. The percentage with use of outpatient therapy was also higher in the demonstration group than in the comparison group, but independent therapy and other hospital outpatient services were higher in the comparison group.

As with the service utilization measures, the Ohio demonstration eligible beneficiaries were similar to the comparison group in many, but not all, of the RTI quality of care and care coordination measures (*Table E-5*). In general, compared with the comparison group, the demonstration group had fewer 30-day all-cause readmissions and screenings for clinical depression over the predemonstration and demonstration periods. Preventable ED visits were more prevalent in the demonstration group than in the comparison group across all demonstration years. The demonstration group also had more admissions for overall and chronic ACSC diagnoses and a greater number of 30-day follow-up visits after mental health discharge in demonstration year 4.

Finally, across all years, the demonstration eligible group had a lower rate of new long-stay NF admissions than the comparison group (*Table E-6*). In demonstration years 3 and 4, the demonstration eligible group had a lower percentage of long-stay NF users than the comparison group. There were differences in some characteristics of long-stay NF residents at admission: compared with the comparison group, demonstration eligible beneficiaries had better functional status, similar percentages with low level of care needs through the demonstration period, and a lower proportion of beneficiaries with severe cognitive impairment.

Measures by setting	Group	Pre- demonstration year 1	Pre- demonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Number of demonstration eligible beneficiaries		106,398	103,693	66,472	63,776	71,996	80,016
Number of comparison beneficiaries		110,959	108,900	121,277	110,269	113,642	112,066
Institutional setting							
Inpatient admissions <sup>1</sup>							
% with use	Demonstration	5.4	4.9	4.3	4.2	4.1	4.3
Utilization per 1,000 user months	Demonstration	1,170.8	1,166.4	1,141.2	1,145.8	1,140.9	1,172.7
Utilization per 1,000 eligible months		62.8	57.2	48.7	48.7	47.3	50.0
Inpatient admissions <sup>1</sup>							
% with use	Comparison	4.9	4.6	4.4	4.2	4.2	4.1
Utilization per 1,000 user months	Companson	1,166.1	1,165.5	1,165.0	1,171.8	1,168.7	1,160.0
Utilization per 1,000 eligible months		57.4	53.4	51.4	49.8	49.5	47.4
Inpatient psychiatric							
% with use	Demonstration	0.4	0.4	0.4	0.4	0.4	0.5
Utilization per 1,000 user months	Demonstration	1,097.1	1,095.5	1,078.8	1,077.4	1,083.5	1,113.6
Utilization per 1,000 eligible months		4.9	4.9	3.9	4.2	4.1	6.1
Inpatient psychiatric							
% with use	Comparison	0.4	0.4	0.4	0.4	0.4	0.4
Utilization per 1,000 user months	Comparison	1,086.6	1,086.3	1,068.6	1,076.1	1,109.3	1,072.3
Utilization per 1,000 eligible months		4.3	4.2	3.9	3.8	4.3	3.9

**Table E-4 (continued)** Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Ohio, May 1, 2014-December 31, 2018

		Pre-	Pre-				
Measures by setting	Group	demonstration year 1	demonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Inpatient nonpsychiatric							
% with use	Demonstration	5.0	4.5	3.9	3.9	3.8	3.8
Utilization per 1,000 user months	Demonstration	1,164.3	1,160.3	1,136.6	1,141.2	1,135.5	1,160.4
Utilization per 1,000 eligible months		57.8	52.3	44.8	44.4	43.2	43.8
Inpatient nonpsychiatric							
% with use	C	4.6	4.2	4.1	3.9	3.9	3.8
Utilization per 1,000 user months	Comparison	1,161.4	1,158.8	1,161.4	1,166.0	1,159.6	1,156.3
Utilization per 1,000 eligible months		53.1	49.1	47.5	45.9	45.1	43.4
Emergency department use (non-admit)							
% with use	Demonstration	7.2	7.3	7.7	8.2	8.4	8.3
Utilization per 1,000 user months		1,253.4	1,249.8	1,317.5	1,375.1	1,350.0	1,367.0
Utilization per 1,000 eligible months		90.5	90.9	102.0	112.4	114.0	113.8
Emergency department use (non-admit)	Comparison						
% with use		7.5	7.5	7.6	7.3	7.2	7.0
Utilization per 1,000 user months		1,291.8	1,318.8	1,328.1	1,303.6	1,319.4	1,278.7
Utilization per 1,000 eligible months		96.7	98.6	101.2	94.8	95.4	89.0

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Ohio, May 1, 2014—December 31, 2018

Measures by setting	Group	Pre- demonstration year 1	Pre- demonstration year 2	onstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Emergency department use (psychiatric)							
% with use	Demonstration	0.3	0.3	0.3	0.4	0.4	0.4
Utilization per 1,000 user months		1,210.5	1,164.6	1,210.9	1,217.6	1,195.7	1,207.5
Utilization per 1,000 eligible months		3.9	4.0	4.0	4.3	4.2	4.3
Emergency department use (psychiatric)							
% with use	Comparison	0.4	0.4	0.4	0.4	0.4	0.4
Utilization per 1,000 user months		1,188.1	1,200.6	1,223.8	1,181.4	1,307.3	1,271.7
Utilization per 1,000 eligible months		5.2	4.8	5.5	4.6	5.5	4.9
Observation stays							
% with use	Demonstration	0.8	1.1	1.2	1.5	1.6	1.6
Utilization per 1,000 user months	Demonstration	1,049.7	1,044.0	1,148.5	1,242.1	1,223.6	1,250.2
Utilization per 1,000 eligible months		8.8	11.2	14.3	19.0	19.0	20.4
Observation stays							
% with use	Comparison	0.9	1.0	1.0	1.0	0.8	0.9
Utilization per 1,000 user months		1,052.4	1,054.0	1,068.2	1,063.0	1,065.1	1,047.4
Utilization per 1,000 eligible months		9.5	10.0	10.9	10.3	9.0	8.9

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Ohio, May 1, 2014—December 31, 2018

Measures by setting	Group	Pre- demonstration year 1	Pre- demonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Skilled nursing facility							
% with use	Demonstration	1.8	1.6	1.5	1.5	1.4	1.2
Utilization per 1,000 user months	Demonstration	1,107.9	1,103.1	1,100.3	1,113.9	1,118.1	1,111.8
Utilization per 1,000 eligible months		19.6	17.9	16.2	16.5	15.6	12.8
Skilled nursing facility							
% with use	Camananiaan	1.4	1.2	1.2	1.2	1.1	1.1
Utilization per 1,000 user months	Comparison	1,088.9	1,094.9	1,089.7	1,098.6	1,083.3	1,083.8
Utilization per 1,000 eligible months		15.6	13.3	13.1	12.7	11.6	11.6
Hospice							
% with use	Demonstration	2.8	2.4	1.7	1.8	2.1	2.1
Utilization per 1,000 user months	Demonstration	1,028.6	1,012.7	1,015.6	1,014.5	1,016.0	1,039.3
Utilization per 1,000 eligible months		28.9	24.8	17.7	18.7	21.6	21.8
Hospice							
% with use	Comparison	1.8	1.7	1.4	1.5	1.5	1.7
Utilization per 1,000 user months		1,081.9	1,021.8	1,013.3	1,011.1	1,013.9	1,010.4
Utilization per 1,000 eligible months		19.8	17.2	14.2	14.9	15.5	16.9

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Ohio, May 1, 2014—December 31, 2018

Measures by setting	Group	Pre- demonstration year 1	Pre- demonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Non-institutional setting							
Physician E&M visits							
% with use	Demonstration	59.3	59.4	57.8	59.4	58.0	57.7
Utilization per 1,000 user months	Demonstration	1,916.6	1,930.7	2,164.1	2,476.0	2,508.4	3,098.2
Utilization per 1,000 eligible months		1,137.0	1,146.8	1,251.8	1,470.3	1,454.6	1,786.2
Primary care E&M visits							
% with use	Comparison	53.3	55.2	55.4	54.3	53.1	52.6
Utilization per 1,000 user months	Comparison	1,850.4	1,890.7	1,906.8	1,943.1	1,938.2	1,965.2
Utilization per 1,000 eligible months		987.0	1,044.0	1,056.8	1,055.8	1,029.6	1,033.2
Outpatient therapy (PT, OT, ST)							
% with use	Demonstration	7.4	7.3	7.1	7.7	7.1	7.5
Utilization per 1,000 user months	Demonstration	21,527.4	23,833.6	22,228.4	21,024.2	20,036.8	20,693.4
Utilization per 1,000 eligible months		1,585.1	1,730.3	1,574.4	1,623.8	1,432.2	1,542.3
Outpatient therapy (PT, OT, ST)							
% with use	C	5.7	5.6	6.1	6.5	6.5	6.9
Utilization per 1,000 user months	Comparison	22,637.2	24,172.5	25,625.4	25,857.3	25,517.2	25,741.7
Utilization per 1,000 eligible months		1,289.3	1,363.1	1,551.6	1,691.5	1,659.0	1,788.6

Measures by setting	Group	Pre- demonstration year 1	Pre- demonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Independent therapy (PT, OT, ST)							
% with use	Demonstration	0.8	0.7	0.7	0.7	0.7	0.8
Utilization per 1,000 user months	Demonstration	8,036.0	9,530.1	11,290.8	10,022.6	9,790.0	10,700.0
Utilization per 1,000 eligible months		60.9	65.3	75.6	73.0	69.8	84.0
Independent therapy (PT, OT, ST)							
% with use	0	1.4	1.5	1.5	1.6	1.9	2.0
Utilization per 1,000 user months	Comparison	9,851.6	10,338.6	10,930.0	10,766.6	10,698.8	11,185.5
Utilization per 1,000 eligible months		139.1	151.8	163.3	177.5	198.9	228.2
Other hospital outpatient services							
% with use	D	30.2	30.2	28.6	29.1	28.6	28.8
Utilization per 1,000 user months	Demonstration	_	_	_	_	_	_
Utilization per 1,000 eligible months		_	_	_	_	_	_
Other hospital outpatient services	Comparison						
% with use		32.1	31.8	33.2	31.7	30.8	31.0
Utilization per 1,000 user months		_	_	_	_	_	_
Utilization per 1,000 eligible months		_	_	_	_	_	_

<sup>— =</sup> data not available. E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

<sup>&</sup>lt;sup>1</sup> Includes acute admissions, inpatient rehabilitation, and long-term care hospital admissions.

SOURCE: RTI International analysis of Medicare claims and encounter data.

Table E-5

Quality of care and care coordination outcomes for the demonstration and comparison groups in Ohio, May 1, 2014–
December 31, 2018

Quality and care coordination measures	Group	Predemonstration year 1	Predemonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
30-day all-cause risk-	Demonstration	19.7	19.5	17.7	17.9	18.1	17.8
standardized readmission rate (%)	Comparison	20.3	20.3	20.0	20.0	20.5	20.3
Preventable emergency	Demonstration	0.0441	0.0440	0.0511	0.0544	0.0551	0.0533
department visits per eligible month	Comparison	0.0458	0.0469	0.0484	0.0443	0.0441	0.0411
Rate of 30-day follow-up after	Demonstration	41.4	42.8	39.0	35.3	36.5	45.9
hospitalization for mental illness (%)	Comparison	49.7	51.2	47.9	40.8	40.2	39.8
Ambulatory care sensitive	Demonstration	0.0105	0.0090	0.0081	0.0088	0.0088	0.0177
condition admissions per eligible month—overall composite (AHRQ PQI #90)	Comparison	0.0096	0.0085	0.0083	0.0082	0.0087	0.0077
Ambulatory care sensitive	Demonstration	0.0066	0.0059	0.0055	0.0062	0.0068	0.0156
condition admissions per eligible month—chronic composite (AHRQ PQI #92)	Comparison	0.0058	0.0053	0.0052	0.0054	0.0063	0.0051
Screening for clinical	Demonstration	0.0007	0.0011	0.0016	0.0013	0.0019	0.0058
depression per eligible month	Comparison	0.0005	0.0012	0.0058	0.0090	0.0076	0.0076

AHRQ PQI = Agency for Healthcare Research and Quality Prevention Quality Indicator. SOURCE: RTI International analysis of Medicare FFS claims and encounter data.

Measures by setting	Group	Pre- demonstration year 1	Pre- demonstration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Annual NF utilization							
Number of demonstration beneficiaries		65,453	66,475	40,309	44,022	52,244	57,011
New long-stay NF admissions per 1,000 eligible beneficiaries	Demonstration	19.0	17.4	18.9	13.5	12.6	12.0
Number of comparison beneficiaries		72,096	73,043	75,796	77,046	82,046	77,632
New long-stay NF admissions per 1,000 eligible beneficiaries	Comparison	19.1	15.1	25.2	17.9	14.0	15.0
Number of demonstration beneficiaries		82,648	82,112	48,927	53,139	61,610	66,310
Long-stay NF users as percentage of eligible beneficiaries	Demonstration	22.0	20.3	18.8	17.9	15.9	14.7
Number of comparison beneficiaries		87,147	87,082	89,125	91,964	96,641	91,532
Long-stay NF users as percentage of eligible beneficiaries	Comparison	18.4	17.1	17.3	17.5	16.0	16.2
Characteristics of new long-stay NF residen	nts at admission	า					
Number of admitted demonstration beneficiaries	Demonstration	1,242	1,155	763	592	658	686
Number of admitted comparison beneficiaries	Comparison	1,376	1,103	1,912	1,379	1,152	1,162
Functional status (RUG-IV ADL scale)	Demonstration	7.9	7.7	7.8	7.5	7.6	7.4
Functional status (RUG-IV ADL scale)	Comparison	8.1	8.2	8.2	7.9	8.4	7.6
Percentage w/ severe cognitive impairment	Demonstration	35.4	34.5	28.9	28.1	27.8	22.7
Percentage w/ severe cognitive impairment	Comparison	37.1	37.0	34.2	35.3	30.8	37.7
Percentage with low level of care needs	Demonstration	1.8	1.4	2.0	2.7	2.5	2.0
Percentage with low level of care needs	Comparison	2.7	1.6	2.1	2.1	2.2	2.2

ADL = activities of daily living; MDS = Nursing Home Minimum Data Set; NF = nursing facility; RUG-IV = Resource Utilization Group Version 4.

NOTE: A higher score on the RUG-IV ADL scale indicates greater impairment, or worse functional status.

SOURCE: RTI International analysis of Nursing Home Minimum Data Set data.

**Tables E-7** and **E-8** present descriptive statistics for the demonstration enrollees and the demonstration eligible beneficiaries who were not enrollees, for each service by demonstration year, to help understand the utilization experience over time.

Non-enrollees generally had higher utilization than the demonstration enrollees across most service settings, the exception being ED use and observation stays, which was higher for enrollees in all demonstration years (*Table E-7*). For the quality of care and care coordination measures, non-enrollees had a higher probability of both overall and chronic ACSC admissions and screening for clinical depression apart from demonstration year 4 (*Table E-8*). Generally, non-enrollees had more 30-day all-cause readmissions and a lower number of preventable ED visits and 30-day follow-up visits after mental health discharge.

Table E-7
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Ohio, May 1, 2014—December 31, 2018

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Number of demonstration enrollees		46,358	48,256	56,750	63,408
Number of demonstration non-enrollees		20,114	15,520	15,246	16,608
Institutional setting					
Inpatient admissions <sup>1</sup>					
% with use	Enrollees	3.7	4.0	3.8	4.1
Utilization per 1,000 user months	Enrollees	1,126.3	1,141.9	1,137.7	1,177.7
Utilization per 1,000 eligible months		41.5	45.2	43.5	47.8
Inpatient admissions <sup>1</sup>					
% with use	Non-enrollees	5.3	4.9	5.1	4.8
Utilization per 1,000 user months	Non-enrollees	1,150.8	1,151.2	1,146.6	1,156.6
Utilization per 1,000 eligible months		60.8	56.7	58.9	55.5
Inpatient psychiatric					
% with use	Enrollees	0.4	0.4	0.4	0.6
Utilization per 1,000 user months	Enrollees	1,085.7	1,086.9	1,091.7	1,118.4
Utilization per 1,000 eligible months		4.0	4.5	4.2	6.7
Inpatient psychiatric					
% with use	Non-enrollees	0.3	0.3	0.3	0.4
Utilization per 1,000 user months	Non-emoliees	1,059.3	1,041.1	1,048.8	1,088.5
Utilization per 1,000 eligible months		3.0	3.1	3.3	4.1
Inpatient nonpsychiatric					
% with use	Enrollees	3.3	3.6	3.5	3.5
Utilization per 1,000 user months	EIIIOIIEES	1,120.4	1,135.6	1,132.0	1,162.7
Utilization per 1,000 eligible months		37.5	40.7	39.3	41.1
Inpatient nonpsychiatric					
% with use	Non-enrollees	5.0	4.7	4.9	4.5
Utilization per 1,000 user months	NOH-emonees	1,148.5	1,149.5	1,142.9	1,151.3
Utilization per 1,000 eligible months		57.7	53.5	55.4	51.3

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Emergency department use (non-admit)					
% with use	Firmallana	8.2	8.7	8.8	8.7
Utilization per 1,000 user months	Enrollees	1,375.7	1,423.8	1,379.0	1,395.6
Utilization per 1,000 eligible months		112.3	123.7	121.6	121.6
Emergency department use (non-admit)					
% with use	Non annelless	6.2	6.6	7.0	7.0
Utilization per 1,000 user months	Non-enrollees	1,218.4	1,203.2	1,221.2	1,244.8
Utilization per 1,000 eligible months		75.3	79.2	85.2	86.5
Emergency department use (psychiatric)					
% with use	<b>5</b>	0.4	0.4	0.4	0.4
Utilization per 1,000 user months	Enrollees	1,291.3	1,257.1	1,212.4	1,200.8
Utilization per 1,000 eligible months		4.6	4.9	4.6	4.5
Emergency department use (psychiatric)					
% with use	Nam amalla aa	0.2	0.2	0.3	0.3
Utilization per 1,000 user months	Non-enrollees	1,071.4	1,031.7	1,055.0	1,248.9
Utilization per 1,000 eligible months		2.4	2.4	2.7	3.4
Observation stays					
% with use	F	1.3	1.6	1.6	1.8
Utilization per 1,000 user months	Enrollees	1,232.3	1,301.8	1,265.3	1,292.0
Utilization per 1,000 eligible months		16.2	21.4	20.7	22.7
Observation stays					
% with use	N	1.1	1.2	1.3	1.2
Utilization per 1,000 user months	Non-enrollees	1,049.3	1,039.0	1,052.6	1,062.0
Utilization per 1,000 eligible months		11.9	12.6	13.3	12.8
Skilled nursing facility					
% with use	Franklin e e	1.2	1.3	1.3	1.0
Utilization per 1,000 user months	Enrollees	1,106.0	1,115.5	1,119.1	1,112.4
Utilization per 1,000 eligible months		13.1	14.5	14.0	10.9

Table E-7 (continued)
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Ohio, May 1, 2014—December 31, 2018

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Skilled nursing facility					
% with use	Nan annulla an	2.3	2.0	1.9	1.7
Utilization per 1,000 user months	Non-enrollees	1,102.0	1,113.0	1,118.1	1,111.2
Utilization per 1,000 eligible months		25.4	21.8	21.0	18.5
Hospice					
% with use	Franklass	1.0	1.4	1.8	1.7
Utilization per 1,000 user months	Enrollees	1,031.1	1,016.2	1,019.5	1,055.1
Utilization per 1,000 eligible months		9.9	13.8	18.2	18.3
Hospice					
% with use	Non-enrollees	4.1	3.3	3.3	3.2
Utilization per 1,000 user months	Non-enrollees	1,010.0	1,012.8	1,009.7	1,011.4
Utilization per 1,000 eligible months		41.7	33.0	33.7	32.9
Non-institutional setting					
Primary care E&M visits					
% with use	Enrollees	52.1	55.1	54.8	55.1
Utilization per 1,000 user months	Enrollees	2,351.1	2,682.3	2,683.6	3,476.6
Utilization per 1,000 eligible months		1,225.0	1,478.4	1,471.0	1,916.9
Primary care E&M visits					
% with use	Non-enrollees	73.2	71.3	69.3	67.0
Utilization per 1,000 user months	Non-enrollees	2,136.9	2,066.3	2,066.8	2,097.1
Utilization per 1,000 eligible months		1,564.6	1,474.1	1,432.8	1,404.2
Outpatient therapy (PT, OT, ST)					
% with use	Franklass	4.6	6.1	5.9	6.3
Utilization per 1,000 user months	Enrollees	17,434.5	18,205.6	17,815.1	19,144.0
Utilization per 1,000 eligible months		805.1	1,111.2	1,056.5	1,214.0
Outpatient therapy (PT, OT, ST)					
% with use	Non onrolless	13.4	12.2	11.4	11.1
Utilization per 1,000 user months	Non-enrollees	25,726.9	24,688.9	23,905.3	23,466.7
Utilization per 1,000 eligible months		3,449.6	3,009.0	2,716.3	2,594.1

Table E-7 (continued)
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Ohio, May 1, 2014–December 31, 2018

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
Independent therapy (PT, OT, ST)					
% with use	Enrollees	0.6	0.6	0.6	0.7
Utilization per 1,000 user months	Enrollees	10,496.3	9,249.9	9,081.5	10,400.2
Utilization per 1,000 eligible months		66.2	59.2	56.5	75.9
Independent therapy (PT, OT, ST)					
% with use	Non-enrollees	0.8	1.0	1.0	1.0
Utilization per 1,000 user months	Non-emonees	12,620.6	11,339.4	11,219.0	11,472.4
Utilization per 1,000 eligible months		102.1	111.2	115.8	117.3
Other hospital outpatient services					
% with use	Enrollees	26.4	28.2	28.0	28.5
Utilization per 1,000 user months	Enrollees	_	_	_	_
Utilization per 1,000 eligible months		<del>-</del>	_	_	_
Other hospital outpatient services					
% with use	Non-enrollees	32.3	31.4	30.5	29.9
Utilization per 1,000 user months	Non-emonees	_	_	_	_
Utilization per 1,000 eligible months		_	_	_	_

<sup>— =</sup> data not available. E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

<sup>&</sup>lt;sup>1</sup> Includes acute admissions, inpatient rehabilitation, and long-term care hospital admissions.

SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Quality and care coordination measures	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4
30-day all-cause risk-standardized	Enrollees	17.4	17.7	17.5	17.1
readmission rate (%)	Non-enrollees	18.4	18.5	19.3	18.9
Droventable CD visits per eligible menth	Enrollees	0.0569	0.0602	0.0591	0.0571
Preventable ED visits per eligible month	Non-enrollees	0.0346	0.0374	0.0399	0.0397
Rate of 30-day follow-up after hospitalization for mental illness (%)	Enrollees	39.4	36.4	37.8	48.1
	Non-enrollees	40.1	32.6	32.1	33.8
Ambulatory care sensitive condition admissions per eligible month—overall composite (AHRQ PQI #90)	Enrollees	0.0071	0.0082	0.0083	0.0202
	Non-enrollees	0.0098	0.0104	0.0104	0.0095
Ambulatory care sensitive condition admissions per eligible month—chronic composite (AHRQ PQI #92)	Enrollees	0.0049	0.0059	0.0065	0.0184
	Non-enrollees	0.0063	0.0065	0.0074	0.0065
Screening for clinical depression per eligible month	Enrollees	0.0013	0.0007	0.0019	0.0070
	Non-enrollees	0.0022	0.0027	0.0021	0.0022

AHRQ PQI = Agency for Healthcare Research and Quality Prevention Quality Indicator; ED = emergency department. SOURCE: RTI International analysis of Medicare FFS claims and encounter data.

Table E-9 presents descriptive statistics for the demonstration enrollees for services traditionally paid by Medicaid to help understand the Medicaid utilization experience over time. Long-stay nursing home and dental services are excluded from analysis due to issues with the encounter data. Long-stay NF service use derived from MMP-submitted Medicaid encounters is excluded from analysis in all FAI States because CMS and RTI decided it was not possible to reliably separate Medicare SNF periods from NF stays that became long-term NF stays. Instead, each evaluation report includes an analysis of long-stay NF use using MDS data. Neither CMS nor RTI reviewed dental encounters so that they could become part of this report.

Table E-9
Medicaid use for demonstration enrollees in Ohio,
May 1, 2014–December 31, 2018

Measure	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4			
Personal care							
Users as percentage of enrollees per enrollee month (%)	16.5%	17.3%	16.1%	15.3%			
Service days per enrollee month	3.01	3.29	3.10	2.96			
Service days per user month	18.28	18.97	19.32	19.28			
Other HCBS services							
Users as percentage of enrollees per enrollee month (%)	24.7%	23.2%	20.7%	20.7%			
Service days per enrollee month	3.85	3.30	2.89	2.89			
Service days per user month	15.57	14.23	13.98	13.99			
Behavioral health services							
Users as percentage of enrollees per enrollee month (%)	13.7%	13.9%	14.3%	14.5%			
Service days per enrollee month	0.44	0.45	0.45	0.45			
Service days per user month	3.17	3.25	3.14	3.10			
Non-emergency transportation services							
Users as percentage of enrollees per enrollee month (%)	8.3%	9.4%	8.6%	8.2%			
Service days per enrollee month	0.20	0.09	0.09	0.08			
Service days per user month	2.38	1.00	1.00	1.00			

SOURCE: Urban Institute analysis of Ohio Medicaid encounter data for the demonstration eligible (output: OH\_IDR\_SUMMARY-v06112021.xlsx).

## **E.1** Service Use by Demographic Characteristics of Eligible Beneficiaries

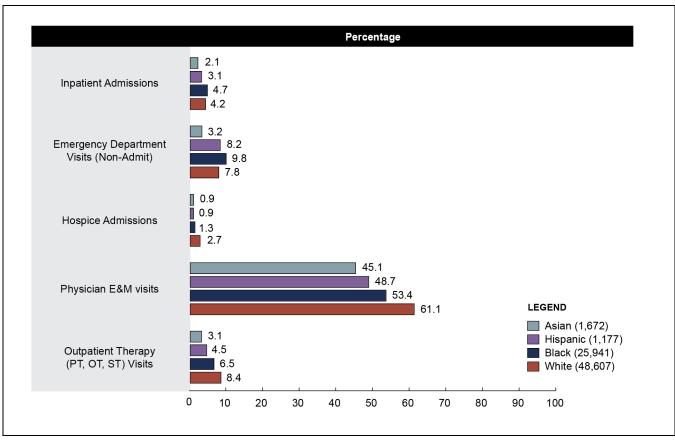
To examine any differences in racial and ethnic groups, *Figures E-1*, *E-2*, and *E-3* provide month-level results for five settings of interest for Ohio eligible beneficiaries: inpatient admissions, ED visits (non-admit), hospice admissions, primary care E&M visits, and outpatient therapy (physical therapy, occupational therapy, and speech therapy visits). Results across these five settings are displayed using three measures: percentage with any use of the respective service, counts per 1,000 eligible beneficiaries with any use of the respective service, and counts per 1,000 demonstration eligible beneficiaries.

Figure E-1 presents the percentage of use of selected Medicare services. African American beneficiaries had slightly higher inpatient admissions and ED visits, relative to other racial categories. A slightly higher percentage of White beneficiaries had monthly physician E&M visits, relative to other races. White beneficiaries also received more outpatient therapy visits and hospice admissions than did other races.

Regarding counts of services used among users of each respective service, as presented in *Figure E-2*, there were limited differences across racial groups for inpatient admissions and hospice use. However, White beneficiaries had slightly fewer ED visits relative to other racial groups in months when there was any use. African American beneficiaries had the highest number of primary care E&M visits, whereas White beneficiaries had the highest number of outpatient therapy visits.

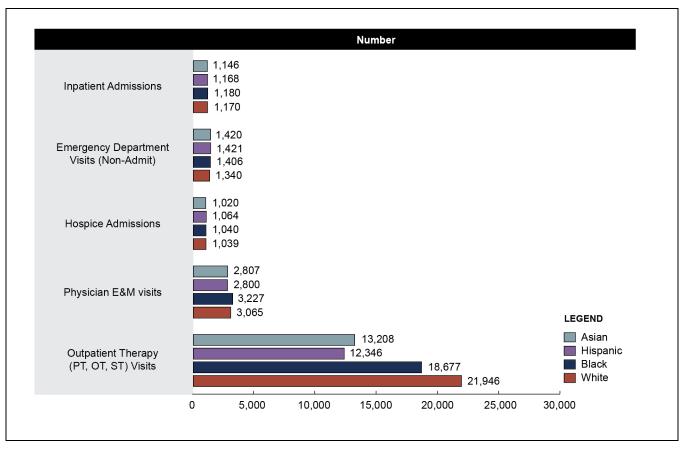
Figure E-3 presents counts of services across all Ohio demonstration eligible beneficiaries regardless of having any use of the respective services. When looking at use for all eligible beneficiaries in all eligible months, the results are quite different from those of users of services in Figure E-2. African American beneficiaries had more inpatient admissions and ED visits relative to the other racial groups. White beneficiaries had more primary care E&M visits relative to the other racial groups, in addition to more hospice admissions and outpatient therapy visits.

Figure E-1
Percentage with use of selected Medicare services among Ohio demonstration eligible beneficiaries, January 1, 2018–December 31, 2018



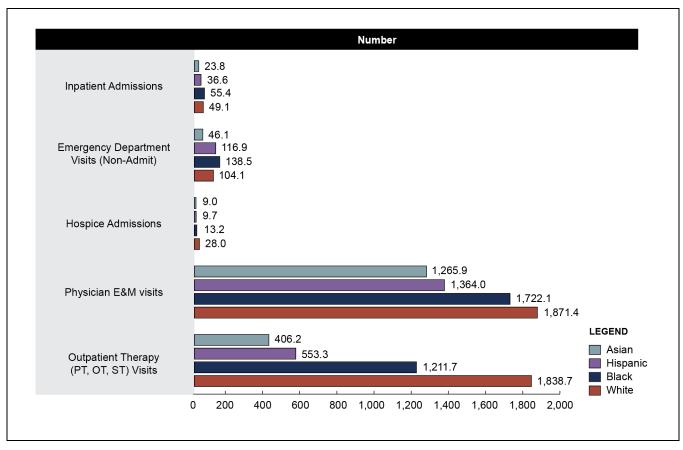
E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.

Figure E-2 Service use per 1,000 user months among Ohio demonstration eligible beneficiaries, January 1, 2018–December 31, 2018



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

Figure E-3
Service use per 1,000 eligible months among Ohio demonstration eligible beneficiaries,
January 1, 2018–December 31, 2018



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

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# Appendix F Cost Savings Methodology and Supplemental Tables

### F.1 Adjustments to Medicare Expenditures

Several 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 F-1* summarizes each adjustment and the application of the adjustments to FFS expenditures or to the capitation rate.

Additionally, corrections were made to impact estimates from earlier reports that resulted in differences in our current impact estimates for demonstration year 1 and 2. We attribute the differences in the estimates to changes in the definition of the intervention group and implementing monthly exclusion criteria. Specifically, we made the following corrections: (1) confirmed dual status for State-identified FAI eligible beneficiaries against IDR data and (2) applied IDR-based exclusion criteria for all monthly observations in the comparison group during the predemonstration period and demonstration period and to the demonstration group during the predemonstration period.

Table F-1
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)	The 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. Because the predemonstration period includes months prior to April 2013, it is necessary to apply the adjustment to these months of data.	Reduced FFS claim payments incurred before April 2013 by 2%.
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%.

(continued)

Table F-1 (continued)
Adjustments to Medicare expenditures variable

Data source	Adjustment description	Reason for adjustment	Adjustment detail
Capitation rate (MA)	Bad debt	The Medicare portion of the capitation rate includes an upward adjustment to account for bad debt. Bad debt is not included in the FFS claim payments 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.)	Reduced capitation rate to account for bad debt load (historical bad debt baseline percentage). This is 0.93% for CY 2012, 0.91% for CY 2013, 0.89% for CY 2014, 0.89% for CY 2015, 0.97% for CY 2016, 0.81% for CY 2018.
Capitation rate (MMP)	Bad debt	The Medicare portion of the capitation rate includes an upward adjustment to account for bad debt. Bad debt is not included in the FFS claim payments 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.)	Reduced blended capitation rate to account for bad debt load (historical bad debt baseline percentage). This is 0.89% for CY 2014, 0.89% for CY 2015, 0.97% for CY 2016, 0.81% for CY1 207, and 0.82% for CY 2018. Reduced the FFS portion of the capitation rate by an additional 1.89% for CY 2014 1.71% for CY 2015, 1.84% for CY 2016, 1.74% for CY 2018 to account for the disproportional share of bad debt attributable to Medicare-Medicaid enrollees in Medicare FFS.
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. 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 FFS expenditures were divided by the appropriate county-specific 1-year AGA factor for each year. Capitation rates were divided by the appropriate county-specific 5-year AGA factor for each year.  Note that the AGA factor applied to the capitated rates for 2014 reflected the 50/50 blend that was applicable to the payment year.

(continued)

Table F-1 (continued)
Adjustments to Medicare expenditures variable

Data source	Adjustment description	Reason for adjustment	Adjustment detail
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 at the contract level). Note, education user fees are not applicable in the FFS context and do not cover specific Part A and Part B services. Although they result in a small reduction to the capitation payment received by MMPs, 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, a 2% was applied in the second demonstration year, and a 3% quality withhold was applied in the third and fourth demonstration year but was not reflected in the capitation rate used in the analysis.	Final quality withhold repayments for CY 2014, CY 2015, CY 2016, CY 2017, and CY 2018 were incorporated into the dependent variable construction.

CY = calendar year; FFS = fee-for-service; MA = Medicare Advantage; MARx = Medicare Advantage and Part D Inquiry System; MMP = Medicare-Medicaid Plan.

The capitation payments in MARx reflect the savings assumptions applied to the Medicare components of the rate (1 percent for the first demonstration year, 3 percent for the second demonstration year, and 4 percent for the third and fourth demonstration year), but do not reflect the quality withhold amounts.

### **F.2** Model Covariates

Model covariates included the following variables, which were also included in the comparison group selection process. Variables were included in the model after variance inflation factor testing.

- Demographic variables included in the Medicare model were as follows:
  - Age
  - Sex
  - Race/ethnicity
  - Enrolled in another Medicare shared saving program

- End-stage renal disease status
- Disability as reason for Medicare entitlement
- MA status
- Area-level variables included in the Medicare model were as follows:
  - Medicare spending per Medicare-Medicaid enrollee age 19 or older
  - MA penetration rate
  - Medicaid-to-Medicare FFS fee index for all services
  - Medicaid spending per Medicare-Medicaid enrollee age 19 or older
  - Proportion of Medicare-Medicaid enrollees using
    - NFs, age 65 or older
    - HCBS, age 65 or older
    - Medicaid managed care, age 19 or older
  - Physicians per 1,000 population
  - Percentage of population living in married household
  - Percentage of households with member greater than age 60
  - Percentage of households with member less than age 18
  - Percentage of adults with college degree
  - Unemployment rate
  - Percentage of adults with self-care limitation
  - Metropolitan Statistical Area (MSA)
  - Distance to nearest hospital
  - Distance to nearest nursing home

# **F.3** Medicare Descriptive Results

Once we finalized the adjustments to the dependent variable, we tested a key assumption of a DinD model: parallel trends in the predemonstration period. We plotted the mean monthly Medicare expenditures for both the comparison group and demonstration group, with the PS weights applied. *Figure F-1* shows the resulting plot and suggests that there were parallel trends in the predemonstration period.

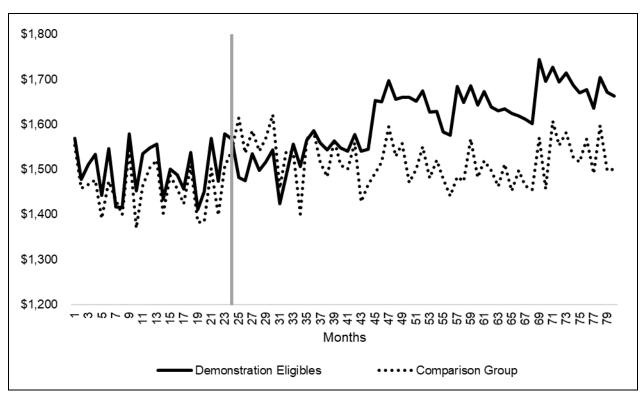


Figure F-1
Mean monthly Medicare expenditures (weighted), predemonstration and demonstration period, demonstration and comparison group, May 2012–December 2018

SOURCE: RTI Analysis of Ohio demonstration eligible and comparison group Medicare data (program: OHDY4 1471 Trends.log).

The DinD values in *Tables F-2* through *F-9* 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 DinD value. This value would be equal to zero if the differences between predemonstration and the demonstration year 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. However, if the DinD confidence interval includes zero, then the value is not statistically significant. These results are only meant to provide a descriptive exploration of the results; the results presented in the *Section 6*, *Demonstration Impact on Cost Savings* and *Table F-10* represent the most accurate adjusted impact on Medicare costs.

**Tables F-2**, **F-3**, **F-4**, and **F-5** show the mean monthly Medicare expenditures for the demonstration group and comparison group in the predemonstration and each demonstration period, unweighted, whereas **Tables F-6** through **F-9** show weighted mean payments. The unweighted and weighted tables show increases in mean monthly Medicare expenditures during each demonstration year for the demonstration group, for all demonstration years. Although the comparison group shows a similar pattern of increases, the magnitude of the increase is larger in the demonstration group. The only exception is found in **Table F-6**, which shows a negative

unadjusted DinD estimate of -\$39 PMPM, indicating a greater increase in comparison group costs.

Table F-2
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 1, unweighted

Group	Predemonstration period	Demonstration year 1	Difference
	(May 2012–Apr 2014)	(May 2014–Dec 2015)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,532.44	\$30.05
	(\$1464.9, \$1539.89)	(\$1496.02, \$1568.87)	(-\$0.6, \$60.7)
Comparison	\$1,369.31	\$1,398.53	\$29.22
	(\$1309.43, \$1429.19)	(\$1331.82, \$1465.24)	(\$13.32, \$45.12)
DinD	N/A	N/A	\$0.83 (-\$33.38, \$35.04)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

Table F-3
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 2, unweighted

Group	Predemonstration period	Demonstration year 2	Difference
	(May 2012–Apr 2014)	(Jan 2016–Dec 2016)	(95% confidence
	(95% confidence intervals))	(95% confidence intervals))	intervals)
Demonstration	\$1,502.39	\$1,642.11	\$139.72
	(\$1464.9, \$1539.89)	(\$1593.53, \$1690.69)	(\$97.51, \$181.93)
Comparison	\$1,369.31	\$1,406.20	\$36.89
	(\$1309.43, \$1429.19)	(\$1346.68, \$1465.72)	(\$20.26, \$53.52)
DinD	N/A	N/A	\$102.83 (\$57.85, \$147.81)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

Table F-4
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 3, unweighted

Group	Predemonstration period	Demonstration year 3	Difference
	(May 2012–Apr 2014)	(Jan 2017–Dec 2017)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,640.39	\$137.99
	(\$1464.9, \$1539.89)	(\$1588.17, \$1692.61)	(\$97.52, \$178.47)
Comparison	\$1,369.31	\$1,424.13	\$54.82
	(\$1309.43, \$1429.19)	(\$1376.03, \$1472.22)	(\$26.45, \$83.19)
DinD	N/A	N/A	\$83.18 (\$34.28, \$132.08)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

Table F-5
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 4, unweighted

Group	Predemonstration period	Demonstration year 4	Difference
	(May 2012–Apr 2014)	(Jan 2018–Dec 2018)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,689.86	\$187.46
	(\$1464.9, \$1539.89)	(\$1626.84, \$1752.88)	(\$134.52, \$240.41)
Comparison	\$1,369.31	\$1,484.13	\$114.82
	(\$1309.43, \$1429.19)	(\$1437.66, \$1530.6)	(\$87.62, \$142.03)
DinD	N/A	N/A	\$72.64 (\$13.36, \$131.93)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

Table F-6
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 1, weighted

Group	Predemonstration period	Demonstration year 1	Difference
	(May 2012–Apr 2014)	(May 2014–Dec 2015)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,532.44	\$30.05
	(\$1464.9, \$1539.89)	(\$1496.02, \$1568.87)	(-\$0.6, \$60.7)
Comparison	\$1,460.42	\$1,529.48	\$69.05
	(\$1375.31, \$1545.54)	(\$1430.93, \$1628.02)	(\$39.28, \$98.82)
DinD	N/A	N/A	-\$39.00 (- \$81.45, \$3.44)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

Table F-7
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 2, weighted

Group	Predemonstration period	Demonstration year 2	Difference
	(May 2012–Apr 2014)	(Jan 2016–Dec 2016)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,642.11	\$139.72
	(\$1464.9, \$1539.89)	(\$1593.53, \$1690.69)	(\$97.51, \$181.93)
Comparison	\$1,460.42	\$1,511.15	\$50.73
	(\$1375.31, \$1545.54)	(\$1424.19, \$1598.12)	(-\$11.63, \$113.09)
DinD	N/A	N/A	\$88.99 (\$14.01, \$163.98)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

Table F-8

Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 3, weighted

Group	Predemonstration period	Demonstration year 3	Difference
	(May 2012–Apr 2014)	(Jan 2017–Dec 2017)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,640.39	\$137.99
	(\$1464.9, \$1539.89)	(\$1588.17, \$1692.61)	(\$97.52, \$178.47)
Comparison	\$1,460.42	\$1,488.95	\$28.53
	(\$1375.31, \$1545.54)	(\$1412.3, \$1565.61)	(-\$29.6, \$86.65)
DinD	N/A	N/A	\$109.47 (\$39.05, \$179.89)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh dy4 cs1500 Tables.log)

Table F-9
Mean monthly Medicare expenditures for demonstration group and comparison group, predemonstration period and demonstration year 4, weighted

Group	Predemonstration period	Demonstration year 4	Difference
	(May 2012–Apr 2014)	(Jan 2018–Dec 2018)	(95% confidence
	(95% confidence intervals)	(95% confidence intervals)	intervals)
Demonstration	\$1,502.39	\$1,689.86	\$187.46
	(\$1464.9, \$1539.89)	(\$1626.84, \$1752.88)	(\$134.52, \$240.41)
Comparison	\$1,460.42	\$1,539.25	\$78.82
	(\$1375.31, \$1545.54)	(\$1470.36, \$1608.13)	(\$39.64, \$118)
DinD	N/A	N/A	\$108.64 (\$42.68, \$174.6)

DinD = difference-in-differences; N/A = not applicable.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1500\_Tables.log)

## F.4 Medicare Regression

Table F-10 shows the main results from the DinD analysis for demonstration years 1–4 and for the entire demonstration period, controlling for beneficiary demographics and market characteristics. Relative to the comparison group, the demonstration was associated with statistically significant cost increases to the Medicare program during demonstration years 2 through 4, although it was not associated with a statistically significant increase in Medicare costs during demonstration year 1. The cumulative impact estimate over all 4 demonstration years was statistically significant suggesting that, overall, the demonstration was associated with increases in Medicare costs of \$97.55 PMPM.

Table F-10
Cumulative and annual demonstration effects on Medicare Parts A and B costs in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Period	Adjusted coefficient DinD (\$)	<i>p</i> -value	95% confidence interval (\$)	90% confidence interval (\$)
Demonstration Year 1 (May 2014– December 2015)	-24.52	0.2196	(-63.68, 14.63)	(-57.38, 8.33)
Demonstration Year 2 (January 2016–December 2016)	127.35	<0.001	(57.99, 196.71)	(69.14, 185.55)
Demonstration Year 3 (January 2017–December 2017)	147.66	<0.001	(80.64, 214.68)	(91.41, 203.91)
Demonstration Year 4 (January 2018–December 2018)	183.89	<0.001	(125.83, 241.95)	(135.17, 232.62)
Cumulative (Demonstration Years 1–4, May 2014–December 2018	97.55	<0.001	(48.86, 146.23)	(56.69, 138.4)

DinD = difference-in-differences.

SOURCE: RTI analysis of Medicare claims (program: oh dy4 cs1480 GLM.log)

Table F-11 presents the results from the DinD analysis for the enrollee-subgroup. The enrollee-subgroup analysis focused on beneficiaries identified as enrolled for at least 3 months in the demonstration period and with at least 3 months of baseline eligibility. 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 (May 1, 2014–December 31, 2018) and at least 3 months of eligibility in the predemonstration period (May 1, 2012– April 30, 2014), analogous to the criteria for identifying enrollees. The results indicate statistically significant additional costs associated with enrollees. This enrollee sub-group analysis is limited by the absence of person-level data on characteristics that would potentially lead an individual in a comparison area to enroll in a similar demonstration; thus, the results should only be considered in the context of this limitation.

Table F-11 Cumulative and annual demonstration effects on Medicare Parts A and B costs among enrolled beneficiaries in Ohio, demonstration years 1–4, May 1, 2014–December 31, 2018

Period	Adjusted coefficient DinD (\$)	<i>p</i> -value	95% confidence interval (\$)	90% confidence interval (\$)
Demonstration Year 1 (May 2014– December 2015)	70.13	<0.001	(28.37, 111.9)	(35.08, 105.18)
Demonstration Year 2 (January 2016–December 2016)	242.49	<0.001	(181.04, 303.94)	(190.92, 294.06)
Demonstration Year 3 (January 2017–December 2017)	270.99	<0.001	(203.07, 338.92)	(213.99, 328)
Demonstration Year 4 (January 2018–December 2018)	308.48	<0.001	(251.7, 365.26)	(260.83, 356.13)
Cumulative (Demonstration Years 1–4, May 2014–December 2018	196.79	<0.001	(150.54, 243.04)	(157.98, 235.6)

DinD = difference-in-differences.

SOURCE: RTI analysis of Medicare claims (program: oh\_dy4\_cs1510\_Enrollee.log)

NOTE: For this enrollee-only analysis, the comparison group used in this analysis is a subset of the comparison group in the main analysis (of demonstration eligible beneficiaries).

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