FINANCIAL ALIGNMENT INITIATIVE

Texas Dual Eligible Integrated Care Demonstration: Preliminary Third Evaluation Report

December 2023

Prepared for

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FINANCIAL ALIGNMENT INITIATIVE
TEXAS DUAL ELIGIBLE INTEGRATED CARE DEMONSTRATION:
PRELIMINARY THIRD EVALUATION REPORT

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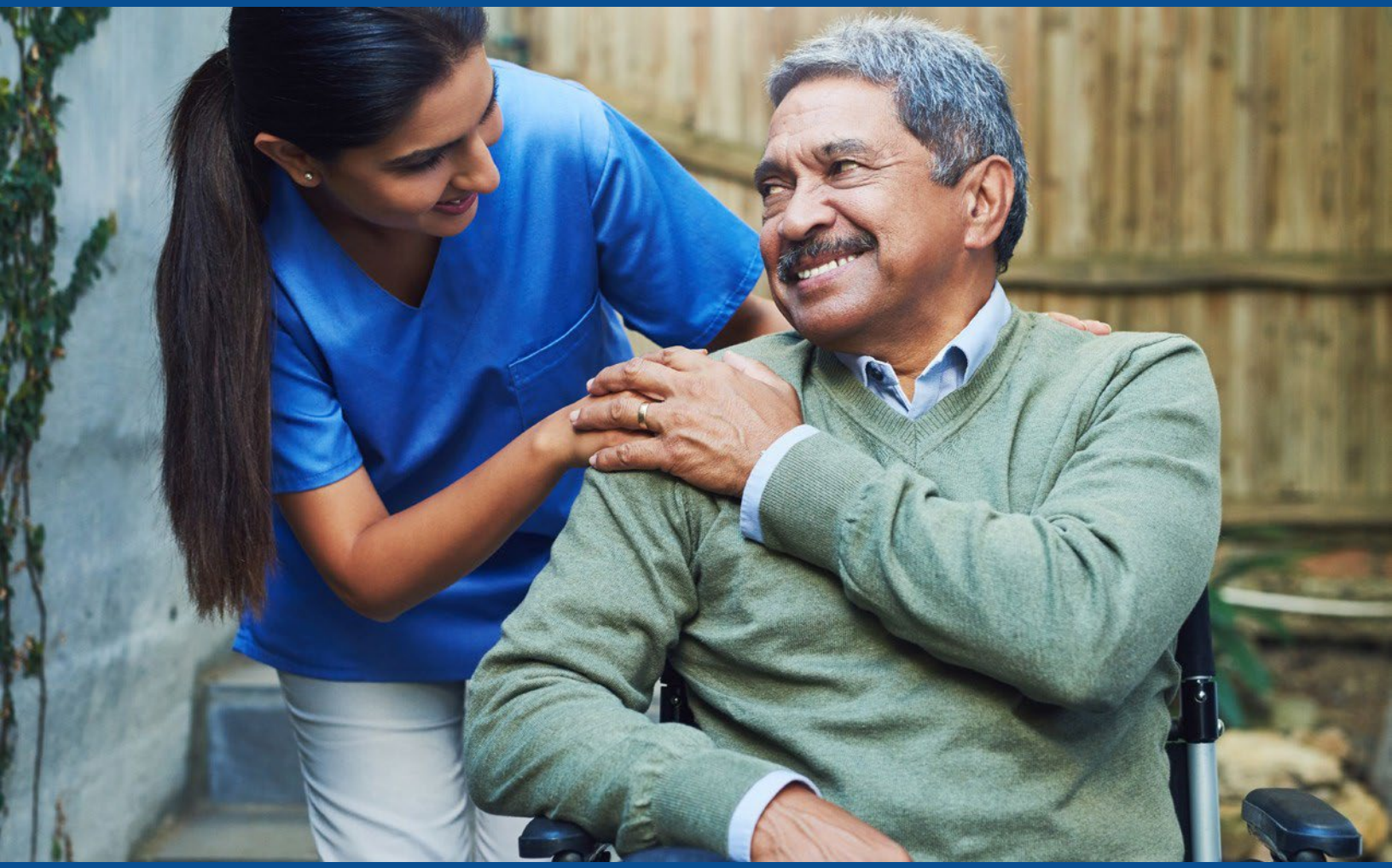
Glossary of Acronyms

ACSC	Ambulatory care sensitive condition
ADL	Activities of daily living
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
ENE	Eligible not enrolled
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
LTSS	Long-term services and supports
MA	Medicare Advantage
MARx	Medicare Advantage Prescription Drug System
MCO	Managed care organization
MDS	Minimum Data Set
MMCO	Medicare-Medicaid Coordination Office
MMP	Medicare-Medicaid Plan
NF	Nursing facility
SNF	Skilled nursing facility
PHE	Public Health Emergency

PMPM	Per member per month
SDRS	State Data Reporting System
SPMI	Serious and persistent mental illness

Executive Summary



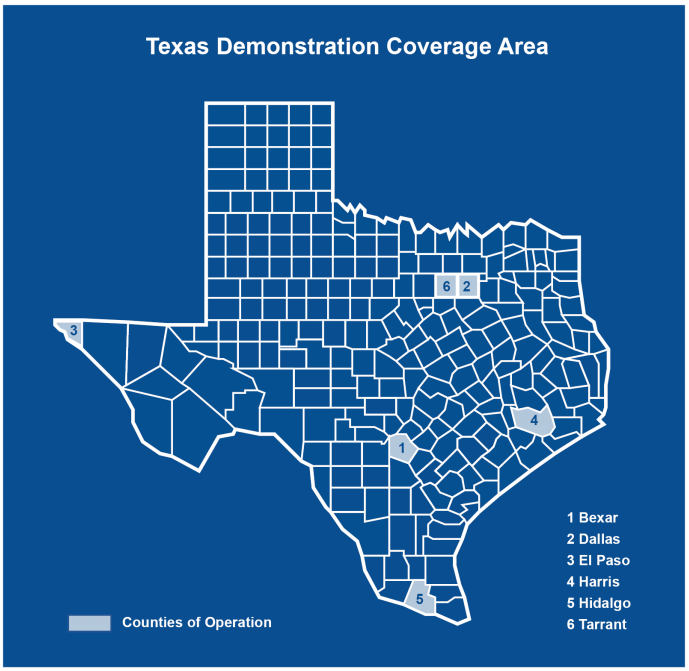
The Texas Dual Eligible Integrated Care demonstration was launched in March 2015 and operates in six service areas (Bexar, Dallas, El Paso, Harris, Hidalgo, and Tarrant counties). The Texas Health and Human Services Commission (HHSC) administers the demonstration, which serves full-benefit Medicare-Medicaid enrollees age 21 and older who are eligible for the demonstration. Just under a quarter of eligible beneficiaries have been enrolled in the demonstration, on average. The core elements of the demonstration design remained consistent over the course of the demonstration.

The demonstration was associated with a favorable decrease in the probability of any skilled nursing facility (SNF) admission and the probability of having any long-stay nursing facility (NF) use. However, the demonstration had an unfavorable increase in all-cause 30-day readmissions, emergency department (ED) visits, and preventable ED visits. In addition, the demonstration had a less favorable impact for beneficiaries with serious and persistent mental illness (SPMI) than for those with SPMI, with an increased probability of any inpatient admission and an increased number of preventable ED visits for those without SPMI. The demonstration showed no impact on Medicare or Medicaid expenditures over the first 5 demonstration years.

The Medicare-Medicaid Coordination Office and the Innovation Center at the Centers for Medicare & Medicaid Services (CMS) created the Medicare-Medicaid Financial Alignment Initiative (FAI) to test, in partnerships with States, integrated care models for dually eligible enrollees.

The Texas Dual Eligible Integrated Care demonstration began on March 1, 2015, and was extended through December 31, 2023.[1] It is a capitated model integrating all Medicaid services, including STAR+PLUS, the State's Medicaid managed care program that includes managed long-term services and supports (MLTSS), and all Medicare services.

The demonstration operates in six service areas (Bexar, Dallas, El Paso, Harris, Hidalgo, and Tarrant counties; see ***Texas Demonstration Coverage Area*** map). Eligible beneficiaries enroll in a Medicare-Medicaid Plan (MMP) that covers all Medicare and Medicaid services, as well as service coordination,[2] and flexible benefits, which vary by MMP. Beneficiaries are eligible if they are age 21 or older and get their Medicaid benefits through



[1] In 2022, as part of the contract year 2023 Medicare Advantage and Part D rulemaking process, capitated model States were given an opportunity to extend their demonstrations (no later than December 31, 2025) to convert their MMPs into integrated Dual Eligible Special Needs Plans and contingent upon submitting to CMS a transition plan by October 1, 2022. As of September 2023, CMS and the State were negotiating an extension through either December 31, 2024 or December 31, 2025.

[2] "Care coordination" is referred to as "service coordination" in the Texas demonstration.

STAR+PLUS[3], unless they are otherwise excluded from the demonstration.[4] The MMPs operate under a three-way contract with CMS and HHSC.

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 third evaluation report for the Texas Dual Eligible Integrated Care demonstration describes its implementation and includes an analysis of the demonstration's impacts on select outcomes. We include qualitative evaluation information for calendar year 2021 (demonstration year 6) with relevant updates from 2022,[5] and quantitative results for March 2015 through December 2020 (demonstration years 1 through 5). Demonstration year 1 includes March 2015 through December 2016. Subsequent demonstration years—demonstration years 2 through 6—include full single calendar years.

As specified in the three-way contract, the demonstration excluded those who were enrolled in Medicaid 1915(c) waivers. In this analysis, we apply the waiver exclusion to the demonstration group.[6] ***Section 5, Demonstration Impact on Service Utilization and Quality of Care*** and ***Section 6, Demonstration Impact on Cost Savings*** describe in more detail the impact of these exclusions on the analytic sample. Previous evaluation reports did not apply these exclusions due to the lack of reliable Medicaid eligibility data for all years. Thus, the results reported here differ somewhat from and are considered more accurate than those previously reported.

Highlights

Integration of Medicare and Medicaid	As in prior years, HHSC continued to express concerns about the administrative impact associated with the joint management of a three-way contract.
Eligibility and Enrollment	In 2021, enrollment totaled 23.4 percent of all eligible beneficiaries, a slight decrease from previous years.

[3] Although STAR+PLUS includes all Medicaid benefits, STAR+PLUS primarily covers LTSS.
[4] Individuals are not eligible to enroll in the demonstration if they live in intermediate care facilities for individuals with intellectual disabilities and related conditions (ICF/IIDs), or if they have an intellectual or developmental disability and receive services through one of four home and community-based service waivers for individuals with intellectual disabilities: Community Living Assistance and Support Services (CLASS); Deaf Blind with Multiple Disabilities; Home and Community-Based Services; or the Texas Home Living Program.
[5] In 2022, we conducted individual interviews with enrollees (see ***Appendix A, Data Sources*** for details). Although these interviews were conducted outside the reporting period and because this is the last evaluation report for this demonstration, the data were included to highlight the beneficiary experience with the demonstration.
[6] We applied Medicaid waiver exclusions to the demonstration group only because 1915(c) waiver programs in the comparison group States do not necessarily target a similar population. Applying these exclusions to the demonstration group only avoids introducing additional biases caused by removing Medicaid waiver enrollees from the comparison group as well.

Eligibility and Enrollment (continued)	MMPs and the State continued to express disappointment with the level of beneficiary enrollment in the demonstration.
Service Coordination	The Public Health Emergency (PHE) limited service coordinators' access to enrollees and negatively impacted enrollee engagement with service coordinators.
	The Contract Management Team (CMT), HHSC and stakeholders identified opportunities for improving the person-centeredness and quality of service coordination, such as increasing primary care provider participation in care teams.
Stakeholder Engagement	The State engaged stakeholders through committees and groups focused on improving quality and services for STAR+PLUS and other programs.
	MMPs continued to rely on enrollee advisory groups for input on initiatives and demonstration goals.
Financing and Payment	MMPs maintained their profitability, with some MMPs expecting to pay the Medicare program experience rebates for excess profits for 2021.
	MMPs consistently submitted encounter data on time and without error.
Quality of Care	The demonstration continued to benefit from the quality management structure HHSC developed for its other Medicaid managed care programs.
	Over the course of the demonstration, MMPs improved their performance on quality measures, although results varied across MMPs and over the years.

Beneficiary Experience	Beneficiaries expressed overall satisfaction with their MMPs, but individual enrollee interviews suggested that enrollees often did not have a strong relationship with their service coordinator.
	Access to specialist care and some long-term services and support (LTSS) continued to be a challenge for enrollees.
Demonstration Impact on Service Utilization and Quality of Care	As shown in ***Table ES-1,*** over the course of the first 5 demonstration years, the probability of any SNF admission decreased relative to the comparison group, as did the probability of having any long-stay NF use. On the other hand, all-cause 30-day readmissions, ED visits, and preventable ED visits increased among demonstration eligible beneficiaries relative to the comparison group.
	The demonstration impact among those using LTSS was not different from that among those who did not use LTSS (see ***Table ES-1***).
	Table ES-1 shows the demonstration had a less favorable impact for beneficiaries with SPMI than for those without SPMI. The demonstration was associated with an increased probability of any inpatient admission and an increased number of preventable ED visits for those with SPMI relative to the demonstration effect for those without SPMI.
Demonstration Impact on Cost Savings	As summarized in ***Table ES-2***, the demonstration shows no impact on Medicare expenditures over the first 5 demonstration years relative to the comparison group.
	Similarly, the demonstration shows no impact on Medicaid expenditures over the first 5 demonstration years relative to the comparison group (see ***Table ES-2***).[7]

[7] The primary analysis of Medicaid expenditures does not include large Medicaid experience rebates paid from the MMPs to the State. A sensitivity analysis including the Medicaid experience rebates finds similar results, that the demonstration shows no impact on Medicaid expenditures over the first 5 demonstration years.

Table ES-1 summarizes the cumulative effects of the Texas demonstration on service utilization and quality of care outcomes over demonstration years 1 through 5 (demonstration start through 2020), 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.

Table ES-1
Summary of Texas cumulative demonstration effects on service utilization and quality of care measures for demonstration period, March 1, 2015–December 31, 2020

Measure	Demonstration effect (all eligible beneficiaries)	Difference in demonstration effect (LTSS versus non-LTSS)	Difference in demonstration effect (SPMI versus non-SPMI)
Monthly probability of any inpatient admission	NS	NS	Increase[R]
Monthly probability of any ACSC admission, overall	NS	NS	NS
Monthly probability of any ACSC admission, chronic	NS	NS	NS
Number of all-cause 30-day readmissions per 1,000 discharges	Increase[R]	NS	NS
Monthly probability of ED visits	Increase[R]	NS	NS
Monthly number of preventable ED visits per 1,000 beneficiaries	Increase[R]	NS	Increase[R]
Probability of 30-day follow-up after mental health discharge	NS	NS	N/A
Monthly probability of any SNF admission	Decrease[G]	NS	NS
Annual probability of any long-stay nursing facility use	Decrease[G]	N/A	N/A
Monthly number of physician E&M visits per 1,000 beneficiaries	NS	NS	NS

ACSC = ambulatory care sensitive condition; ED = emergency department; E&M = evaluation and management; LTSS = long-term services and supports; N/A = not applicable; NS = not statistically significant; SNF = skilled nursing facility; 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 and Medicaid expenditures for all eligible beneficiaries, including both the cumulative effect over the 5-year demonstration period and the annual effect for each demonstration year.

Table ES-2
Summary of Texas demonstration effects on total Medicare and Medicaid expenditures among all eligible beneficiaries, March 1, 2015–December 31, 2020

Measure	Measurement period	Demonstration effect
Medicare Parts A and B cost	Cumulative (demonstration years 1–5)	NS
	Demonstration year 1	NS
	Demonstration year 2	NS
	Demonstration year 3	NS
	Demonstration year 4	NS
	Demonstration year 5	NS
Medicaid cost	Cumulative (demonstration years 1–5)	NS
	Demonstration year 1	NS
	Demonstration year 2	NS
	Demonstration year 3	NS
	Demonstration year 4	NS
	Demonstration year 5	NS

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 6-1*** in ***Section 6, Demonstration Impact on Cost Savings***. For numeric estimates of the demonstration's effect on total Medicaid expenditures, see ***Figure 6-2***. 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 difference-in-differences (DinD) regression estimate of the demonstration effect during the specified measurement period.
SOURCE: RTI analysis of Medicare and Medicaid claims.

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) created the Medicare-Medicaid Financial Alignment Initiative (FAI) to test, in partnerships with States, integrated care models for dually eligible enrollees.

The Texas Dual Eligible Integrated Care demonstration began its first phase of enrollment on March 1, 2015, and was extended through December 31, 2023. It is a capitated model integrating all Medicaid services, including STAR+PLUS, the State's Medicaid managed care program that includes managed long-term services and supports (MLTSS), and all Medicare services.

The demonstration operates in six service areas (Bexar, Dallas, El Paso, Harris, Hidalgo, and Tarrant counties). Eligible beneficiaries enroll in a Medicare-Medicaid Plan (MMP) that covers all Medicare and Medicaid services; service coordination; and flexible benefits, which vary by MMP. Beneficiaries are eligible if they are age 21 or older and get their Medicaid benefits through STAR+PLUS,[8] unless they are otherwise excluded from the demonstration.[9] The MMPs operate under a three-way contract with CMS and the Texas Health and Human Services Commission (HHSC).

1.2 Purpose of this Report

CMS contracted with RTI International to monitor implementation of the demonstrations under the FAI and to evaluate their impact on beneficiary experience, quality, utilization, and cost. The First Evaluation Report includes extensive background information about the demonstration. The Preliminary Second Evaluation Report provides implementation updates for 2018 through 2020. In this report, we include qualitative evaluation information for calendar year 2021 (demonstration year 6), with relevant updates from 2022. We refer to this time period as "the reporting period" or "the report period" in the qualitative narrative. We provide updates to previous evaluation reports in key areas, including enrollment, service coordination,[10] beneficiary experience, and stakeholder engagement activities, and discuss the challenges, successes, and emerging issues identified during the reporting period.

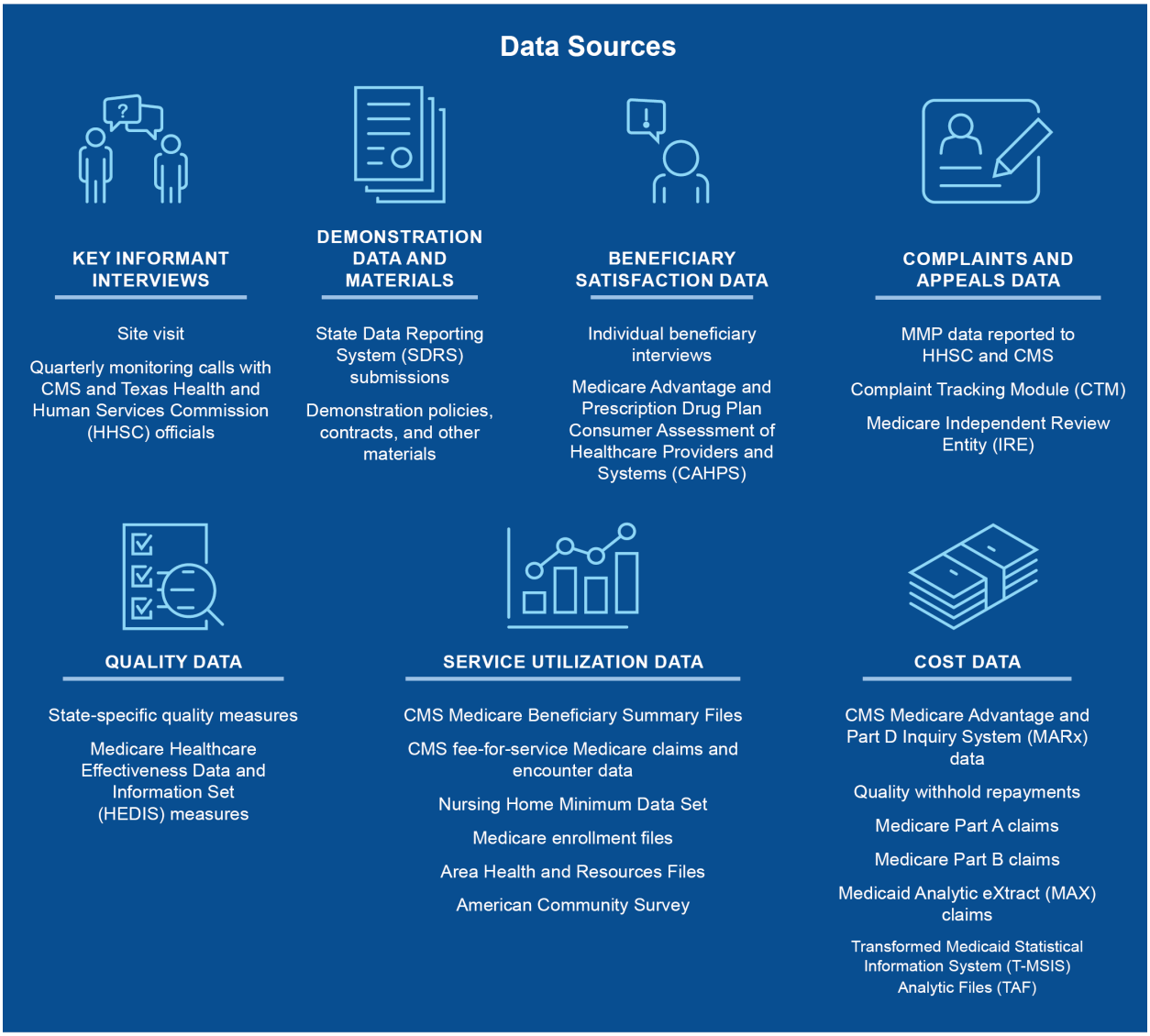
We present quantitative analysis results on quality of care, service utilization and costs for the period spanning March 1, 2015, through December 31, 2020 (the first 5 demonstration years). The difference in timeframes between qualitative and quantitative analyses is due to the longer lag of secondary data used in quantitative analysis. Demonstration year 1 includes March

[8] Although STAR+PLUS includes all Medicaid benefits, STAR+PLUS primarily covers LTSS.
[9] Individuals are not eligible to enroll in the demonstration if they live in intermediate care facilities for individuals with intellectual disabilities and related conditions (ICF/IIDs), or if they have an intellectual or developmental disability and receive services through one of four home and community-based service waivers for individuals with intellectual disabilities: Community Living Assistance and Support Services (CLASS); Deaf Blind with Multiple Disabilities; Home and Community-based Services; or the Texas Home Living Program.
[10] "Care coordination" is referred to as "service coordination" in the Texas demonstration.

2015 through December 2016. Subsequent demonstration years—demonstration years 2 through 6—include full single calendar years.

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.



SECTION 2

Demonstration Design and State Context

2.1 Changes in Demonstration Design

The Texas three-way contract was amended four times. As reported in the First Evaluation Report and Preliminary Second Evaluation Report, two earlier amendments aligned the demonstration with new federal regulations governing Medicaid managed care and changes to the STAR+PLUS program; extended the demonstration period; and made other adjustments that did not change the overall design of the demonstration.[11] During this reporting period, the three-way contract was amended in December 2021 and December 2022. Each of these amendments extended the demonstration period by 1 year and clarified or updated the savings percentages.[12] As discussed in ***Section 3.1, Integration of Medicare and Medicaid***, in 2022, HHSC and CMS continued negotiating further changes to the three-way contract to reflect changes that HHSC had made to the STAR+PLUS program.

Implementation Effectiveness: Fidelity

Now that the FAI demonstrations have been in place for several years, we have identified several measures as indicators of implementation effectiveness or success, based on the standard implementation science approach, that we believe are useful for this evaluation. The four measures are (1) fidelity of the demonstration to the original design, (2) demonstration reach, (3) implementation dose, and (4) the State's and CMS' reflections on demonstration effectiveness. We discuss each of these measures in this report, starting with fidelity.

Implementation fidelity can be considered as the degree to which an intervention is implemented as originally designed, even if adaptations to the strategy become necessary. For States, plans, and other stakeholders, including policymakers, it is helpful to reflect on the changes to the demonstration model that were made as implementation unfolded, and the impact of those changes. These findings can inform design or implementation of future models.

As seen in ***Table 2-1***, the Texas Dual Eligible Integrated Care demonstration has been implemented with a high degree of fidelity to the original design. Payment rates were lowered to reflect the lower costs of enrollees relative to those enrolled in STAR+PLUS, Texas's Medicaid managed care program that includes MLTSS.

In addition to these contractual changes, in 2022, an acquisition resulted in the consolidation of two MMPs. In 2021, HHSC required MMPs (and other Medicaid managed care organizations [MCOs]) to provide nonemergency medical transportation (NEMT) services, effective June 1 of that year; previously, NEMT had been carved out of the capitated payment to Medicaid MCOs.

Table 2-1 illustrates the major changes to key Texas demonstration characteristics from its start in early 2015 through the end of 2021.

[11] See the First Evaluation Report and Preliminary Second Evaluation Report for further detail on these contract amendments.

[12] As described in the Preliminary Second Evaluation Report, the MMP contracts could only be extended 1 year at a time under bridge contracts because the procurement for the STAR+PLUS portion of the contract had exceeded the State's limit of 8 operational years.

Table 2-1
Key changes to Texas Dual Eligible Integrated Care demonstration (March 2015 through December 2021)

Key demonstration feature	Changes to the original demonstration design
Timeline	Extended through December 31, 2023.[1]
Eligibility	No changes.
Geography/Number of participating MMPs	The Texas demonstration started with five participating MMPs. At the end of 2021, one of the MMPs withdrew from the demonstration and transitioned its enrollees to another MMP effective January 2022. No changes to the geography of the demonstration.
Services	Transitioned nonemergency medical transportation from the State's responsibility to the MMP's.
Payment	The Medicaid capitation rates were lowered in 2018, after the State's analysis showed that demonstration enrollees were less costly, on average, compared to beneficiaries enrolled in STAR+PLUS.

MMP = Medicare-Medicaid Plan.
[1] As of September 2023, CMS and the State were negotiating an extension through either December 31, 2024 or December 31, 2025.

2.2 Overview of State Context

In the Preliminary Second Evaluation Report, we described a number of reforms HHSC had initiated to streamline its operations and improve its oversight of its Medicaid managed care program, STAR+PLUS. Included among these reforms was a major reorganization of HHSC and several initiatives aimed at creating systems and infrastructure to support consistent quality assurance and quality improvement across the State's Medicaid managed care programs. These activities and their impact extended into this reporting period and are discussed later in this report.

HHSC also continued to act upon legislative initiatives to improve the provision of long-term services and supports (LTSS) in Texas, including initiatives to expand the use of telehealth and improve access to personal care attendant services.

In addition to the COVID-19 public health emergency (PHE) that began in 2020 and continued through 2021 and 2022, in February 2021, Texas experienced an ice storm that resulted in power outages, road closures, and record cold temperatures, as well as the loss of heat and access to water in many areas. MMPs reported that steps taken to address the PHE prepared them for continuing services during this weather event. For example, one MMP relied on teams from regions that had power to serve enrollees when the enrollees' usual service coordinators did not have power.

SECTION 3

Update on Demonstration Implementation

In this section, we provide updates on important aspects of demonstration implementation that have occurred since the Preliminary Second Evaluation Report. This includes updates on integration, enrollment, service coordination, stakeholder engagement, financing and payment, and quality management.

3.1 Integration of Medicare and Medicaid

The Contract Management Team (CMT) operated effectively during 2021, although HHSC expressed concerns about the administrative burden associated with the joint management of a three-way contract.

HHSC and CMS jointly manage the demonstration through the Contract Management Team (CMT) and monitor MMPs' performance in integrating the delivery of care. In this section, we provide updates on the CMT's activities and on demonstration integration structures.

3.1.1 Joint Management of the Demonstration

The CMT includes demonstration leads from HHSC and contract managers for the MMPs participating in the demonstration. As discussed in the Preliminary Second Evaluation Report, it took some time for the CMT to adjust to the reconfiguration of CMT membership following the reorganization of HHSC.[13] In 2021, CMS and HHSC reported that the CMT continued to operate effectively. Although the composition of the CMT had changed over the course of 2021, neither party saw these changes as disruptive.

HHSC and CMS cited the MMPs' response to COVID-19 as the CMT's top priority in 2021, continuing its focus on ensuring enrollee safety and access to care. The CMT also worked with MMPs to promote and increase COVID-19 vaccination rates among enrollees. In addition, the CMT monitored the impact of HHSC's transition of nonemergency medical transportation from the State's responsibility to the MMP, as well as the exit of an MMP from the demonstration and the transition of that MMP's enrollees to another MMP. As discussed in ***Section 3.3, Service Coordination***, the CMT also conducted a review of care plans to assess the person-centeredness of the planning process.

Consistent with concerns expressed in the Preliminary Second Evaluation Report, HHSC continued to cite the added administrative responsibilities associated with a three-way contract. In 2022, HHSC, CMS and the MMPs continued to amend the three-way contract to incorporate changes HHSC had made to the STAR+PLUS contract and align the demonstration with Federal changes to Medicare managed care rules. HHSC noted that the review process within each organization was lengthy and time-consuming and required reconciling differences in Medicare and Medicaid policy. Adding to this complexity was the misalignment between the contract years for demonstration (based on the calendar year) and the STAR+PLUS program (based on the State's fiscal year, starting September 1 and extending through August 31 of the following year), as well as the timeline for the STAR+PLUS procurement process relative to the period of

[13] The reorganization of HHSC occurred over the course of 2015 through 2017. In 2020, members of the CMT reported that the CMT was working effectively.

performance for MMP contracts. Although HHSC did not articulate a plan for the future of integrated care in Texas, the administrative burden associated with a three-way contract in combination with the additional responsibilities associated with the CMT's joint management of the demonstration were factors they intend to consider in developing their plan.

3.1.2 Integrated Delivery System

Each MMP contracts with medical, behavioral health, and LTSS providers to provide integrated Medicare and Medicaid services. Through 2021, five MMPs operated in Texas. Effective January 1, 2022, one MMP left the demonstration, and its enrollees transitioned to another MMP. This transition was facilitated by extensive coordination between the two MMPs prior to the transition. In addition, the remaining MMP hired the exiting MMP's service coordinators to maintain continuity for enrollees.

In the First Evaluation Report, we reported that a provider representative had indicated that a large portion of Texas' community-based LTSS providers were certified to provide either Medicare services or Medicaid services, but MMPs sought to contract only with providers with both certifications. In late 2021, a provider representative again reported that some MMPs limited their provider network to providers with both certifications,[14] and as a result, beneficiaries receiving services from a provider with only Medicaid certification were unlikely to opt into the demonstration or stay in if they were passively enrolled. The MMPs interviewed during the 2021 site visit indicated that their provider networks did not exclude providers who were only Medicaid-certified. CMS was unaware of this practice in Texas.

Starting in 2016, HHSC implemented a value-based payment initiative that required all of its Medicaid MCOs to transition fee-for-service (FFS) provider payments to value-based alternative payment models. As part of this initiative, HHSC set targets for this transition, making incremental increases each year. MMPs reported that their value-based payment ~~purchasing~~ arrangements with primary care providers and hospitals were primarily risk-based. MMPs primarily used incentive payments to reward LTSS providers for improving the quality of care. For example, one MMP rewarded homecare providers for encouraging enrollees to refill prescriptions or offering additional services.

HHSC noted that the demonstration eliminates confusion for providers because it is able to process both Medicare and Medicaid claims, relieving providers of the responsibility for determining who to bill for services and which type of service requires a Medicare denial before Medicaid will pay.

[14] In 2021, we interviewed two of five MMPs. The MMPs interviewed during the 2021 site visit did not confirm that their provider networks excluded Medicaid-certified home care providers.

3.2 Eligibility and Enrollment

In 2021, enrollment totaled 23.4 percent of all eligible beneficiaries, a slight decrease from previous years.

MMPs and the State continued to express disappointment with the level of beneficiary enrollment in the demonstration.

As discussed in the Preliminary Second Evaluation Report, following initial waves of passive enrollment, enrollment in the demonstration declined steadily until August 2017, when system changes allowed Texas to implement monthly passive enrollment. After 2017, enrollment in the demonstration stabilized at just under 25 percent of eligible beneficiaries.

In this section, we provide updates on eligibility and enrollment processes, including integration of eligibility systems, enrollment methods, and outreach.

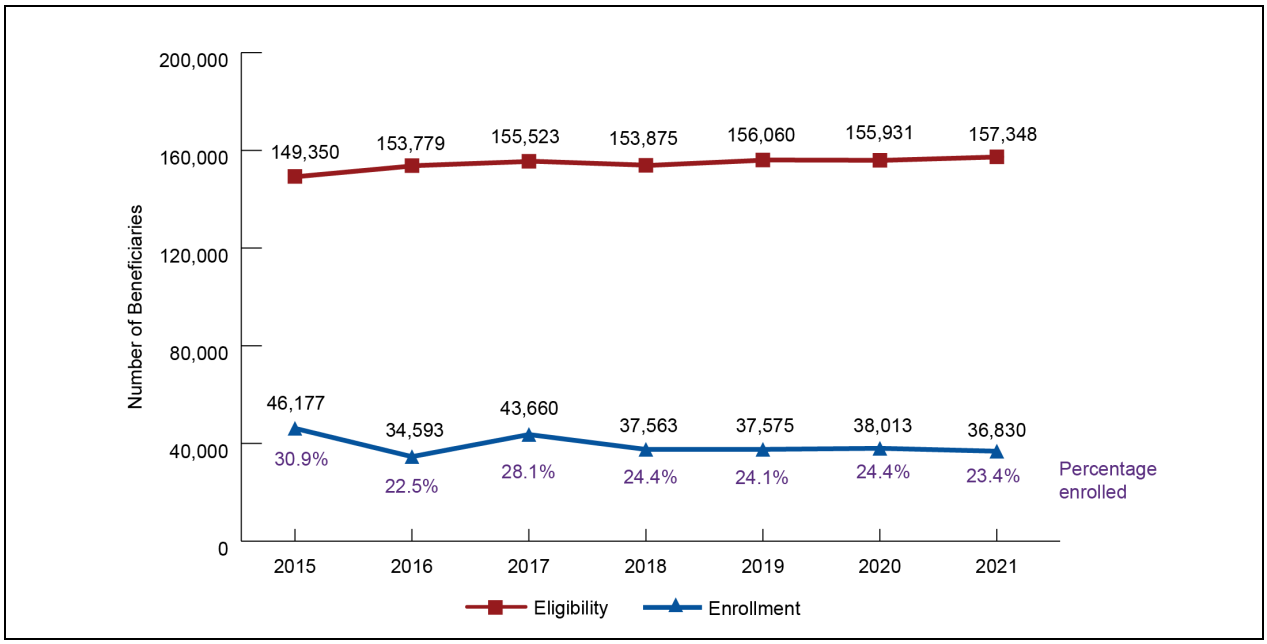
Implementation Effectiveness: Reach

"Reach" is an individual-level measure of participation and refers to the percentage of persons who are affected by a policy, program, or initiative. To measure reach in the FAI, we examine the percentage of eligible beneficiaries who are enrolled in the demonstration.

Figure 3-1 shows the changes in enrollment and in the percentage of eligible beneficiaries enrolled during the demonstration to date. The percentage of eligible beneficiaries who were enrolled increased in 2017 when monthly passive enrollment was implemented but remained in the 23 to 24 percent range from 2018 through 2021. Overall, the demonstration to date has been able to reach, on average, about one-quarter of eligible beneficiaries.

Enrollment continued to represent about one-quarter of eligible beneficiaries during the reporting period. ***Figure 3-1*** provides a summary of demonstration enrollment from December 2015 through December 2021. In 2021, enrollment totaled 23.4 percent of eligible beneficiaries.

Figure 3-1
Texas Dual Eligible Integrated Care demonstration enrollment and eligibility at the end of each calendar year, 2015 through 2021



FFS = Fee-for-service; SDRS = State Data Reporting System.
NOTE: Enrollment and eligibility are reported as of December each year. Enrollment and eligibility data reported in the SDRS may not match the finder file data used for quantitative analyses, because of the timing for completion and submitting the finder file versus the SDRS. The definition of eligibility used here, and also in ***Section 6, Demonstration Impact on Cost Savings***, includes FFS and Medicare Advantage populations.
SOURCE: SDRS data for 2015-2021. The SDRS items used to collect eligibility and enrollment were "Total number of beneficiaries who are eligible to participate in the demonstration" and "Total number of beneficiaries who are enrolled in the demonstration, as of the end of the given month."

During the reporting period, the State and MMPs indicated that enrollment continued to be lower than they hoped. The State and a provider representative noted that the complex care needs of dually eligible beneficiaries and the number of hours allotted for attendant care contributed to beneficiary hesitancy about changing providers. In addition, a provider representative and a beneficiary advocate agreed that many beneficiaries who were passively enrolled into the demonstration were confused by the change in their plan and often disenrolled as a result.

The demonstration enrollment broker continued to conduct outreach to eligible beneficiaries who had opted out of the demonstration. However, the enrollment broker reported that approximately 40 percent of eligible beneficiaries had "permanently opted out" of the demonstration, substantially reducing the pool of beneficiaries whom the enrollment broker could contact.

Despite challenges increasing the number of enrollees, the State reported that the enrollment process worked smoothly. They said that their earlier efforts to work with each MMP individually, and the resulting strong working relationships among the State, CMS, and each MMP, were primary reasons for the efficient enrollment process.

3.3 Service Coordination

The PHE continued to limit service coordinators' access to enrollees and negatively impacted enrollee engagement with service coordinators.

The CMT, HHSC, and other stakeholders identified important opportunities for improving the person-centeredness and quality of service coordination, such as increasing primary care provider participation in care teams.

In the Preliminary Second Evaluation Report, we described the CMT's efforts at improving the quality of service coordination services and the impact of the PHE on service coordination. In this section, we provide an update on these activities and highlight the major findings on the demonstration's service coordination model, including assessments, care planning, and service coordination.

3.3.1 Assessments

MMPs must conduct a health risk assessment (HRA) for each new enrollee within 90 days of a beneficiary's enrollment[15] and must reassess every 12 months thereafter or sooner if there is a change in the enrollee's condition.

As shown in ***Figure 3-2***, the percentage of enrollees whom MMPs were unable to reach decreased and then increased over the course of the demonstration to date, with variation across the quarters. The percentage of enrollees whom MMPs were unable to reach was lowest, at 11.0 percent, in quarter 2 of 2016, and highest, at 32.8 percent, in quarter 1 of 2021.

Implementation of monthly passive enrollment in August 2017 and the onset of the PHE in 2020 likely contributed to these trends. Prior to August 2017, except for a large wave of passive enrollment at the beginning of the year, enrollment was limited to those opting in; MMPs were more likely to have reliable contact information for beneficiaries choosing to enroll, making them more likely to be reached for assessments and service planning than those passively enrolled. Starting in 2020, the PHE

Implementation Effectiveness: Dose

Earlier in this report, we discussed "reach," which measures the percentage of persons who receive or are affected by or participate in a *policy, program or initiative*. "Dose" is a measure of implementation effectiveness that refers to the amount of, exposure to, or uptake of an *intervention* provided to a target population within a program or initiative. In the FAI, the main intervention is care coordination (or in the Texas demonstration, service coordination).

Because we do not have a direct measure of how many enrollees receive service coordination, we use a proxy measure, routinely reported by MMPs, for dose: the percentage of enrollees that MMPs were not able to reach or locate. This measure gives a sense of how many enrollees were not able to make a choice to engage in service coordination—that is, without connecting with service coordinators, enrollees could not participate in HRAs, have care plans, or identify care goals (these activities are discussed later in this section).

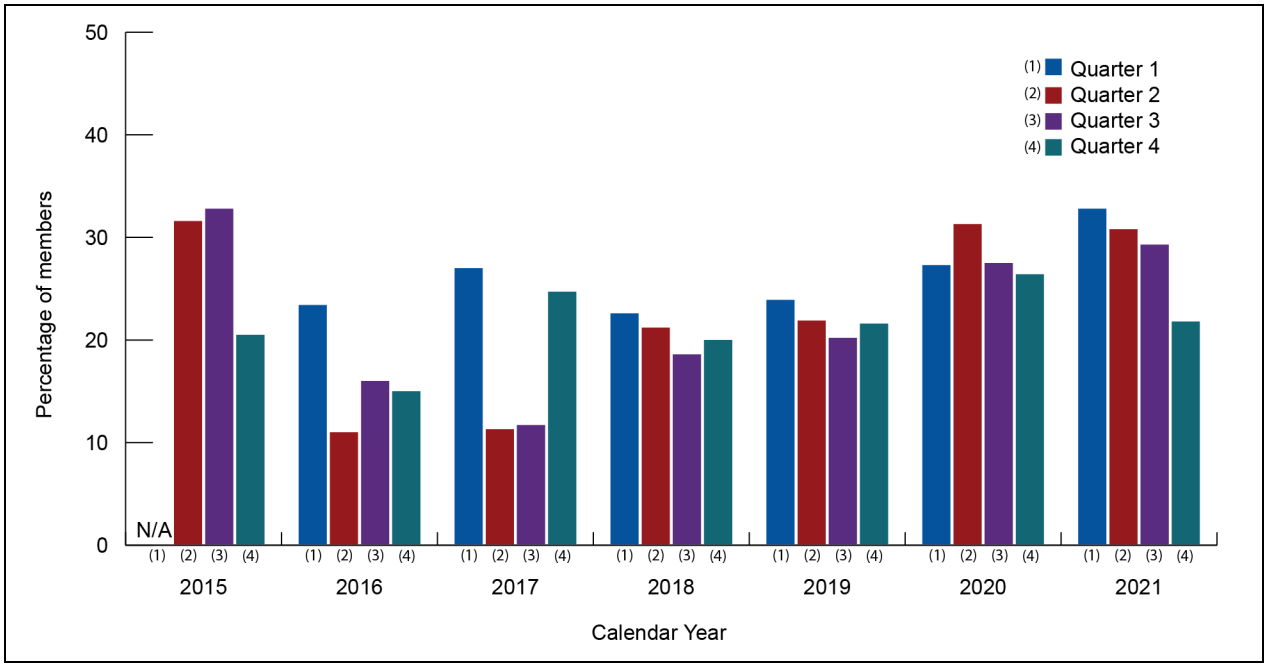
Figure 3-2 shows that this measure generally increased over the course of the demonstration to date, suggesting that a smaller percentage of new enrollees was able to receive service coordination over time.

[15] During the PHE, the timeframe for conducting assessments was extended by an additional 90 days.

limited the types of outreach strategies available to MMPs. As discussed in the Preliminary Second Evaluation Report and reported by MMPs in 2021, access to enrollees residing in nursing facilities (NFs) was particularly challenging.

One MMP also noted that, compared to dually eligible beneficiaries enrolled in STAR+PLUS, the demonstration population is less likely to participate in the assessment process or receive service coordination because the demonstration population tends to be healthier and more independent.

Figure 3-2
Percentage of members that Texas Dual Eligible Integrated Care MMPs were unable to reach following three attempts, within 90 days of enrollment, 2015–2021



MMP = Medicare-Medicaid Plan; N/A = not applicable.
NOTE: Because the Texas demonstration began in March 2015, data are not applicable for Q1 of 2015.
SOURCE: RTI analysis of MMP-reported data for Core Measure 2.1 as of January 2023. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document.

Table 3-1 shows that, among all enrollees, the percentage with an assessment completed within 90 days of enrollment varied over the course of the demonstration. Among enrollees willing to participate and who could be reached, the percentage with assessments completed within 90 days of enrollment remained high, exceeding 92.5 percent in 2016 through 2021.

Table 3-1
Texas Dual Eligible Integrated Care MMP members whose assessments were completed within 90 days of enrollment, 2015–2021

Quarter	Total number of members whose 90th day of enrollment occurred within the reporting period and who were currently enrolled at the end of the reporting period	Percentage of members with assessments completed within 90 days of enrollment[1]	
		All members	All members willing to participate and who could be reached[2]
2015			
Q1	N/A	N/A	N/A
Q2	10,478	54.1	82.2
Q3	25,815	56.4	87.5
Q4	19,001	63.2	81.9
2016			
Q1	6,317	68.3	92.5
Q2	326	84.4	95.5
Q3	412	81.3	99.4
Q4	293	83.3	98.4
2017			
Q1	11,822	67.8	96.2
Q2	574	86.2	98.2
Q3	630	85.7	98.9
Q4	5,525	67.1	92.6
2018			
Q1	5,998	69.6	93.4
Q2	3,252	70.4	94.1
Q3	1,821	75.3	96.1
Q4	2,574	75.7	98.1
2019			
Q1	5,432	72.1	98.0
Q2	2,711	73.3	97.9
Q3	1,940	74.9	98.5
Q4	3,000	73.8	99.3
2020			
Q1	5,743	65.9	95.6
Q2	2,760	62.6	96.1
Q3	1,559	67.5	99.2
Q4	1,296	68.5	99.1

(continued)

Table 3-1 (continued)
Texas Dual Eligible Integrated Care MMP members whose assessments were completed within 90 days of enrollment, 2015–2021

Quarter	Total number of members whose 90th day of enrollment occurred within the reporting period and who were currently enrolled at the end of the reporting period	Percentage of members with assessments completed within 90 days of enrollment[1]	
		All members	All members willing to participate and who could be reached[2]
2021			
Q1	4,617	61.6	98.1
Q2	1,772	64.2	98.7
Q3	1,448	65.6	98.1
Q4	1,124	72.6	98.9

MMP = Medicare-Medicaid Plan; N/A = not applicable; Q = quarter.
[1] The "all members" column presents the percentage of assessments completed for members whose 90th day of enrollment occurred within the reporting period. In the "all members willing to participate and who could be reached" column, the percentages exclude members who were documented as unwilling to participate in an assessment, and members whom the MMP was unable to reach following three documented outreach attempts.
[2] The number of members willing to participate and who could be reached cannot be calculated using the corresponding percentages in this table. As indicated in table note 1, RTI used additional data points to calculate these percentages.
NOTE: Because the Texas demonstration began in March 2015, data are not applicable for Q1 of 2015.
SOURCE: RTI analysis of MMP-reported data for Core Measure 2.1 as of January 2023. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document.

The HRA captures the enrollee's medical, behavioral health, LTSS, and social needs. For enrollees in the highest risk category, the MMP is required to conduct the assessment in person. However, during the PHE, this requirement was lifted, and outreach activities and assessments were conducted telephonically or via videoconferencing; many enrollees did not have access to electronic devices that supported videoconferencing. MMPs reported that not seeing an enrollee's home and living environment limited the MMP's ability to fully identify an enrollee's needs.

3.3.2 Care Planning

Based on the enrollee's needs identified through the HRA, a service coordinator is required to develop an integrated care plan (hereafter called "care plan") within 90 days of enrollment. A reevaluation must be conducted at least once annually.[16]

MMPs report core quality measures that all MMPs are required to report, as well as State-specific measures. MMPs reported on care plan completion using two different measures during the demonstration. From 2015 through 2017, they used a State-specific measure. ***Table 3-2*** shows that, for all enrollees and for all enrollees willing to complete a care plan and who could be reached, the percentage with care plans completed within 90 days of enrollment varied across

[16] As described in the Preliminary Second Evaluation Report, during the PHE, care plans with an end date between March 31, 2020, and November 30, 2020, were extended an additional 12 months.

these years, albeit with the lowest rates in 2015. For enrollees willing to participate and who could be reached, care plan completion rates also varied.

Table 3-2
Texas Dual Eligible Integrated Care MMP members with care plans completed within 90 days of enrollment, 2015–2017

Quarter	Total number of members whose 90th day of enrollment occurred within the reporting period	Percentage of members with care plans completed within 90 days of enrollment[1]	
		All members	All members willing to complete a care plan and who could be reached[2]
2015			
Q1	N/A	N/A	N/A
Q2	10,418	54.7	82.5
Q3	27,709	53.5	78.7
Q4	20,920	53.2	70.6
2016			
Q1	6,370	55.1	75.1
Q2	342	76.9	89.8
Q3	436	70.2	88.7
Q4	306	70.6	90.4
2017			
Q1	11,802	58.4	85.5
Q2	596	80.7	94.1
Q3	668	79.5	92.8
Q4	5,974	62.3	83.8

MMP = Medicare-Medicaid Plan; N/A = not applicable; Q = quarter.
[1] The "all members" column presents the percentage of care plans completed for members whose 90th day of enrollment occurred within the reporting period. In the "all members willing to complete a care plan and who could be reached" column, the percentages exclude members who were documented as unwilling to complete a care plan and members who the MMP was unable to reach following three documented outreach attempts.
[2] The number of members willing to complete a care plan and who could be reached cannot be calculated using the corresponding percentages in this table. As indicated in table note 1, RTI used additional data points to calculate these percentages.
NOTE: Because the Texas demonstration began in March 2015, data are not applicable for Q1 of 2015.
SOURCE: RTI analysis of MMP-reported data for State-specific Measure TX 1.1 as of January 2023. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Texas-Specific Reporting Requirements document.

As of 2018, MMPs reported on care plan completion using a newly introduced core measure that applies across all FAI demonstrations. As shown in ***Table 3-3***, for all enrollees, the percentage with care plans completed within 90 days of enrollment remained in the 60 percent range in 2018 through 2021, except for quarter 3 and quarter 4 of 2018, when the percentages were slightly higher. For all enrollees willing to complete a care plan and who could be reached,

care plan completion rates showed an overall increasing trend from 2018 to 2021, with a low of 86.0 percent in quarter 1 of 2018 and a high of 96.8 percent in quarter 2 of 2021.

Table 3-3
Texas Dual Eligible Integrated Care MMP members with care plans completed within 90 days of enrollment, 2018–2021

Quarter	Total number of members whose 90th day of enrollment occurred within the reporting period and who were currently enrolled at the end of the reporting period	Percentage of members with care plans completed within 90 days of enrollment[1]	
		All members	All members willing to complete a care plan and who could be reached[2]
2018			
Q1	5,982	64.4	86.0
Q2	3,246	65.1	86.3
Q3	1,821	72.8	93.8
Q4	2,561	71.3	92.4
2019			
Q1	5,432	68.6	94.0
Q2	2,711	68.4	93.2
Q3	1,940	68.6	91.6
Q4	3,000	68.8	94.2
2020			
Q1	5,743	61.9	90.2
Q2	2,760	59.8	93.3
Q3	1,559	64.8	95.5
Q4	1,296	65.9	96.7
2021			
Q1	4,617	60.0	96.2
Q2	1,772	62.2	96.8
Q3	1,448	62.4	95.5
Q4	1,124	67.6	94.3

MMP = Medicare-Medicaid Plan; Q= quarter.
[1] The "all members" column presents the percentage of care plans completed for members whose 90th day of enrollment occurred within the reporting period. In the "all members willing to complete a care plan and who could be reached" column, the percentages exclude members who were documented as unwilling to complete a care plan and members whom the MMP was unable to reach following three documented outreach attempts.
[2] The number of members willing to complete a care plan and who could be reached cannot be calculated using the corresponding percentages in this table. As indicated in table note 1, RTI used additional data points to calculate these percentages.
SOURCE: RTI analysis of MMP-reported data for Core Measure 3.2 as of January 2023. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document.

The process for developing a care plan is defined under the three-way contract. The service coordinator leads its development in conjunction with the enrollee (or an enrollee's legally authorized representative) and the service coordination team, which must include the enrollee's primary care physician and family members and needed clinical experts from within the MMP. MMPs viewed the interdisciplinary perspective of the service coordination team as one of the demonstration's key strengths, allowing better integration of care to improve the enrollee's health outcomes.

CMS, the State, and MMPs also identified opportunities for improving the quality of the care plan and the enrollee's engagement in the planning process. Following up on earlier quality improvement initiatives,[17] CMS and the State conducted a care plan review in 2021. For each MMP, the CMT reviewed a care plan for an enrollee with complex medical needs, another for an enrollee with transportation needs, and a third for an enrollee with dementia. Based on this review, the CMT identified several concerns relating to the person-centeredness of the care plans, including a lack of provider participation in the planning process. As discussed in ***Section 3.6, Quality of Care***, in a separate study, HHSC also found that STAR+PLUS service coordinators performed poorly when it came to conducting a follow-up contact after the initiation of a service plan and conducting the required service coordination visits twice annually.[18]

In addition, HHSC reported that, according to MMPs, enrollees and providers rarely participated in integrated care team meetings. Although care plan development requires the inclusion of the enrollee's primary care physician, and in spite of the CMT's efforts to improve provider engagement, providers do not always attend the care team meetings for various reasons.[19] One MMP reported taking steps to ensure enrollees were available for these meetings. MMPs also reported that the PHE had a negative impact on enrollee engagement. They considered home visits as an important strategy for building a relationship between service coordinators and enrollees. Because home visits had been suspended during the PHE, service coordinators had more difficulty building these relationships, particularly for newer enrollees.[20]

The PHE was particularly disruptive for NF residents. Service coordinators are required to visit NF residents at least quarterly. However, during the PHE, NFs restricted service coordinators' access to residents to minimize the spread of COVID-19. HHSC worked with State regulators to obtain confirmation that service coordination was an essential service, and then released a notice saying that NFs must allow service coordinators to enter. In spite of these efforts, HHSC reported that, during 2021, NF staff and residents had reached out to the

[17] In 2017 and 2018, the CMT had engaged in a number of activities focused on improving the quality of service coordination. Based on the findings from care plan reviews conducted during that time period, the CMT distributed guidance on developing person-centered plans with meaningful goals and action steps and using accessible and familiar language. More information about these previous efforts can be found in the Preliminary Second Evaluation Report.

[18] Although this record review focused on the STAR+PLUS population, MMP enrollees were included in the sample.

[19] As part of its 2018 initiative to improve service coordination, the CMT provided MMPs with suggested best practices for improving provider engagement.

[20] Starting September 2021, MMPs were required to offer in-person service coordination again.

Ombudsman about their lack of connection to service coordinators. The CMT planned to focus on improving service coordination for NF residents going forward.

MMPs reported that, in addition to addressing the social determinants of health and making sure enrollees' health and safety needs were met, service coordinators prioritized educating enrollees about COVID-19 safety, including the symptoms of COVID-19, when to seek medical advice, and how to access vaccines.

3.3.3 Service Coordination Capacity

The service coordinator is responsible for coordinating all medical services, behavioral health services, social services, and LTSS. As shown in ***Table 3-4***, the number of service (care) coordinators varied during the demonstration to date, with a notable high of 917 in 2020 and a low of 337 in 2021. The percentage of service coordinators assigned to care management and conducting assessments was mostly consistent in 2016 through 2021 but was noticeably lower in 2020. The enrollee load (case load) was lowest, at 80.3, in 2020, and highest, at 129.9, in 2021. The turnover rate was lower in 2020, at 2.9 percent, than in the rest of the demonstration years. It is likely these lower caseload and turnover rates were related to the impact of the PHE.

Table 3-4
Care coordination staffing at Texas Dual Eligible Integrated Care MMPs, 2015–2021

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 (%)
2015	650	71.7	100.7	15.8
2016	439	82.7	96.3	15.4
2017	392	86.7	122.8	17.1
2018	447	82.3	102.0	10.4
2019	420	80.0	111.9	13.9
2020	917	51.6	80.3	2.9
2021	337	84.0	129.9	15.3

FTE = full time equivalent; MMP = Medicare-Medicaid Plan.
SOURCE: RTI analysis of MMP-reported data for Core Measure 5.1 as of January 2023. The technical specifications for this measure are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document.

MMPs, the Ombudsman, and HHSC emphasized the value of having one service coordinator to help enrollees navigate the complexity of the Medicare and Medicaid delivery systems. However, according to a provider advocate and a beneficiary advocate, and consistent with the findings from individual enrollee interviews conducted in 2022, often enrollees did not know who their service coordinator was. The provider advocate also reported that service coordination was not as effective as it could be because service coordinators did not regularly keep providers updated on any changes in the enrollee's status, or changes in their needs assessment, following a hospital admission or another medical event.

When somebody goes into the hospital … there's not a lot of communication between the service coordinator and the [provider] agency. A lot of times that communication does occur between the family and the agency, but as it relates to … plan changes or … enhancements to that plan that might prevent a future hospitalization or emergency room visit, we're not seeing that level of communication on a regular basis.

— Provider Representative, 2021

3.4 Stakeholder Engagement

The State engaged stakeholders through committees and groups focused on improving the quality and services of STAR+PLUS and other programs with an impact on the demonstration.

MMPs continued to rely on enrollee advisory groups for input on initiatives and program goals.

In this section, we describe stakeholder engagement activities during 2020 and 2021, and the impact of those efforts on the demonstration.

HHSC does not have a stakeholder group focused exclusively on the demonstration. However, HHSC described a variety of ways in which it obtains stakeholder input on its STAR+PLUS program and on a variety of initiatives focused on improving the LTSS system and Medicaid managed care generally.[21] For example, the State's Medicaid Managed Care Advisory Committee includes MCO representatives, providers, and beneficiary advocates. The Committee provides input on the operation of all of Texas' Medicaid managed care programs, including expanding the use of telemedicine, and the flexibilities allowed during the PHE.

HHSC cited numerous other groups formed to provide input on particular initiatives that could improve enrollee access to attendants, consumer-directed services, the use of telehealth, and several other priorities. A taskforce focused on the development of the direct service workforce, included attendants, people accessing attendant services, family members, home health agencies, and representatives from State agencies and local workforce development boards. Another group focused on increasing the use of consumer-directed services and developed educational materials for financial management services agencies, consumer-directed employers, and enrollees. The State worked with multiple stakeholders to plan for the migration of nonemergency medical transportation to the MMPs' benefit package. HHSC also has an advisory group to provide feedback on the Aging Texas Well initiative that includes the area agencies on aging, disability rights advocates, and beneficiary advocates. This initiative will

[21] STAR+PLUS includes MLTSS and makes up the Medicaid component of the demonstration. Changes to the STAR+PLUS program will also impact the demonstration.

work toward better coordination with behavioral health services, promoting person-centered practices and other activities to benefit enrollees and other beneficiaries.

A provider representative and a beneficiary advocate reported having meaningful opportunities to provide input into policy decisions. These advocates participated on or monitored the Medicaid managed care advisory committee and the STAR+PLUS advisory committee. However, they both expressed concern that their input did not always translate into policy changes. Citing policy discussions about network adequacy and service coordination, the beneficiary advocate noted that, although stakeholders provide input often, the actions taken to address a problem were inadequate, and advisory groups were then asked to provide input on "the same old issues" when the problem persisted. The advocate also noted that the PHE limited opportunities for beneficiaries to participate in in-person public meetings, and virtual meetings were inaccessible to many persons without access to broadband, the right electronic device, or the technical skills to participate.

MMPs reported continuing to rely on the enrollee advisory groups for input on initiatives and program goals. For example, one MMP valued getting input on the transition of nonemergency medical transportation to the MMP and getting feedback on service coordination. One MMP, however, had not held enrollee advisory group meetings during the PHE.

3.5 Financing and Payment

MMPs maintained their profitability, with some MMPs expecting to pay the Medicare program experience rebates for excess profits in 2021.

MMPs consistently submitted timely, error-free encounter data.

In this section, we provide an update on financing and payment for the demonstration since 2020 and updates relating to encounter data submissions.

3.5.1 Capitation Rates

As noted in the Preliminary Second Evaluation Report, in 2018, Texas lowered the Medicaid rates for the demonstration to reflect the lower cost of demonstration enrollees relative to those enrolled in the Medicaid-only STAR+PLUS program. This adjustment brought MMP profitability in line with HHSC's expectations.

The PHE impacted rate setting in several ways. HHSC cited the challenges of setting rates during the PHE, given the unpredictable impact of COVID-19 on service utilization. However, HHSC noted that, because the dually eligible population is more likely to use LTSS, service utilization for this group was not as volatile as that of other programs. In addition, in 2021, HHSC continued the temporary rate for NFs to cover additional costs incurred because of the PHE. (Please see the Preliminary Second Evaluation Report for more details about the temporary rates.) In addition, for the first time during the demonstration, preliminary results for late 2020 showed that all MMPs were profitable. Two of the plans reported high enough profits

to meet the threshold for paying an experience rebate for 2021; three plans had paid experience rebates in 2020.[22] ***Table 3-5*** shows the total amount of finalized experience rebates for State fiscal years 2015 through 2018. The decline in rebates in State Fiscal Year 2018 followed the rate reduction made that year.

Table 3-5
Finalized experience rebate totals, State fiscal years 2015–2018, Texas Dual Eligible Integrated Care MMPs

Rebate	SFY 2015*	SFY 2016	SFY 2017	SFY 2018	SFY 2015–2018
Rebate total	$34,603,026	$106,794,237	$46,798,287	$5,655,703	$193,851,254

SFY = State fiscal year.
* SFY 2015 represents 6 months of data.
SOURCE: CMS 2023.

Quality Withhold Percentages

CMS and the State withhold part of their respective capitation payments pending analysis of MMP performance on a set of CMS core and State-specific quality measures. The quality withhold for the Medicaid component of the capitation rate is 3 percent. For the Medicare component, the quality withhold is 4 percent. For more details about quality withhold measures and MMP performance, see ***Section 3.6, Quality of Care***.

Savings Percentage

Medicaid rates are developed by projecting what the Medicaid costs would be absent the demonstration and reducing that by the amount of savings the MMPs are expected to achieve. This discount, called the aggregate savings percentage, is applied equally to Medicare Parts A and B and Medicaid baseline spending amounts and was increased gradually over time until it reached 5.5 percent. Pursuant to a 2022 amendment to the three-way contract, the 5.5 percent savings will remain in place through the remainder of the demonstration.

During the reporting period, MMPs continued to object to the use of the savings percentage, noting the challenges of continuing to find new savings the longer the demonstration was in operation. However, HHSC did not anticipate changing the rate methodology in the few remaining years of the demonstration. In fact, the State valued the ability to apply an assumption about savings to the rates using escalating savings percentages. This flexibility is not allowed under Medicaid because it does not meet typical actuarial soundness requirements. However, the State acknowledged that it was increasingly challenging to use STAR+PLUS experience to project what Medicaid costs would be, but for the demonstration, MMP rates are set based on the experience of a set of STAR+PLUS beneficiaries who enrolled in the demonstration in the base year and on the projected cost if they had remained in STAR-PLUS. The State has had to adjust

[22] The experience rebate limits an MMP's profits to a percentage of total revenue. If the MMP's net income exceeds 3 percent of total revenue, the plan must rebate a portion of net income to the State and CMS. When net income as a percentage of revenue increases, the percentage returned also increases; CMS and the State recoup 100 percent of net income exceeding 12 percent of the adjusted revenue.

for the fact that this group of demonstration enrollees was healthier than those who remained in the demonstration and the size of this group has decreased over time.

3.5.2 Encounter Data

In 2021, HHSC reported that all MMPs submitted encounter data on time and without error. The State attributed these improvements to the quality assurance and quality control measures it put in place and to the close working relationships staff developed with MMPs through regular one-on-one meetings and monthly calls with all MMPs.

3.6 Quality of Care

The demonstration continued to benefit from the quality management structure HHSC developed for its other Medicaid managed care programs.

Over the course of the demonstration, MMPs have improved their performance on quality measures, although results have varied across MMPs and over the years.

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 Healthcare Effectiveness Data and Information Set (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 Measures

MMPs are required to report performance on a combination of CMS core and State-specific quality metrics.[23] Most of these measures are used by the CMT to monitor MMP performance. A subset is also used as quality withhold measures and determines what portion of the capitation rates retained by CMS and the State the MMPs can earn back by meeting quality benchmarks (see ***Section 3.5, Financing and Payment***).

Table 3-6 shows the percentage of quality withhold received by MMPs for 2015 through 2021. Since the beginning of the demonstration, the number of MMPs who met all the quality thresholds and received 100 percent of their quality withhold has increased. In 2015 and 2016, only one MMP received 100 percent, and by 2019, four of the five MMPs received 100 percent. In 2017, 2020, and 2021, MMPs received an adjustment for extreme and uncontrollable circumstances. In 2017, the adjustments were given to two MMPs due to the impact of Hurricane Harvey. In 2020 and 2021, the adjustment was given to all five MMPs due to the PHE in 2020 and severe winter storms that impacted all of Texas in 2021; as a result, all received 100 percent of their quality withhold for both years.

[23] Current and archived measure specifications for core and Texas-specific reporting requirements may be found at https://www.cms.gov/medicare-medicaid-coordination/medicare-and-medicaid-coordination/medicare-medicaid-coordination-office/financialalignmentinitiative/mmpinformationandguidance/mmpreportingrequirements.

Table 3-6
Percentage of quality withhold received, 2015–2021 Texas Dual Eligible Integrated Care MMPs

Texas Dual Eligible Integrated Care MMPs	Percentage of withhold received					
	2015/2016	2017	2018	2019	2020	2021
Amerigroup Texas	75	100	75	100	100	100
Cigna	75	100	100	100	100	100
Molina Healthcare	75	50	75	75	100	100
Superior Health	100	100	100	100	100	100
United Healthcare	50	100	100	100	100	100

MMP = Medicare-Medicaid Plan
SOURCES: CMS n.d.-a; CMS n.d.-b; CMS n.d.-c; CMS n.d.-d; CMS n.d.-e., CMS, n.d.-f.

In late 2021, the State planned to change three quality withhold measures beginning in 2022. The proposed changes included replacing a measure of enrollee participation in decisions about LTSS with a measure of the MMP's success at minimizing the length of stay in an institution; and replacing an NF transition measure with a HEDIS measure of the initiation and engagement of alcohol and other drug dependence treatment. In addition, the State planned to increase the benchmark for an integrated plan of care measure from 91 to 95 percent.

3.6.2 Quality Management Structures and Activities

In addition to quality measurement, the quality management structure for the demonstration includes multiple components, oversight through the CMT, HHSC quality management activities, each MMP's internal quality management structure, HHSC's quality management of its Medicaid managed care programs, and the activities of the external quality review organization responsible for certain quality management activities for Texas' Medicaid managed care organizations.[24]

The CMT monitored the timeliness of HRAs and care plan development, service coordination, and grievances and appeals throughout this reporting period. It increased the frequency for some reports to respond quickly to potential problems. In addition, as discussed in ***Section 3.3, Service Coordination***, the CMT reviewed a sample of care plans for each MMP. Although CMS noted that there were signs of improvement, the CMT also identified an ongoing need for improving the quality of service coordination by increasing enrollee and provider participation in integrated care team meetings.

In conjunction with the External Quality Review Organization, MMPs also undertook several quality improvement activities through their own quality improvement programs. MMPs reported conducting studies focused on emergency department (ED) utilization, follow-up after

[24] Please see the First and Preliminary Second Evaluation Reports for more detail about quality management for the demonstration.

hospitalization for mental illness, and breast cancer screening. MMPs also worked on increasing COVID-19 vaccination rates among their enrollees.

As described in the Preliminary Second Evaluation Report, HHSC did not create a quality management infrastructure specific to the demonstration. However, the demonstration continued to benefit from the quality management infrastructure created for the STAR+PLUS program and its other Medicaid managed care programs. For example, HHSC's utilization review unit conducts an annual record review to review the quality of the assessment and the service planning and service coordination processes for the STAR+PLUS HCBS program. For State Fiscal Year 2021,[25] the record sample for this review included 1,050 individuals, 52 of whom were enrolled in the demonstration. This study showed that MCOs performed well on assessment and service planning measures but continued to perform poorly when it came to conducting a follow-up contact after the initiation of a service plan. In addition, HHSC found that the MCOs failed to comply with the required twice annual service coordination visits. Although these findings are not directly applicable to the demonstration, they suggest that similar issues are likely to occur under the demonstration and are aligned with the CMT's findings from its own record review.

Through its Managed Care Oversight Improvement Initiative,[26] HHSC also developed new infrastructure to support quality. For example, HHSC centralized all managed care member complaints with the Ombudsman, with enhanced metrics and complaint categories, creating greater opportunity for identifying trends across its Medicaid managed care programs. It also began collecting data for measuring the timeliness of initiating community-based attendant care and service coordination activities to monitor the quality of services. The Managed Care Oversight Improvement Initiative also provided an opportunity for HHSC to develop the capacity to better monitor prior authorizations.

3.6.3 HEDIS Quality Measures Reported for Texas Dual Eligible Integrated Care MMPs

MMPs are required to report HEDIS data to CMS and the State. 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 to maintain and/or improve quality. In the FAI, MMPs report data on a subset of the HEDIS measures that are required of all Medicare Advantage plans.

Five of the 13 Medicare HEDIS measures for MMP enrollees that RTI analyzes are reported in ***Figures 3-3*** through ***3-8***, with results on all 13 measures appearing in ***Tables B-1a*** and ***B-1b*** in ***Appendix B***. RTI identified these measures in its Aggregate Evaluation Plan based on their historic completeness, reasonability, and sample size. HEDIS data for 2016–2021 were available for all five Texas Dual Eligible Integrated Care MMPs. In response to the PHE, CMS did not require Medicare plans (including MMPs) to submit HEDIS data covering the 2019 measurement year. Medicare plans (including MMPs) resumed normal reporting for measurement year 2020.

[25] The State Fiscal Year 2021 extended from September 1, 2020, through August 31, 2021.
[26] See the Preliminary Second Evaluation Report for a description of this initiative.

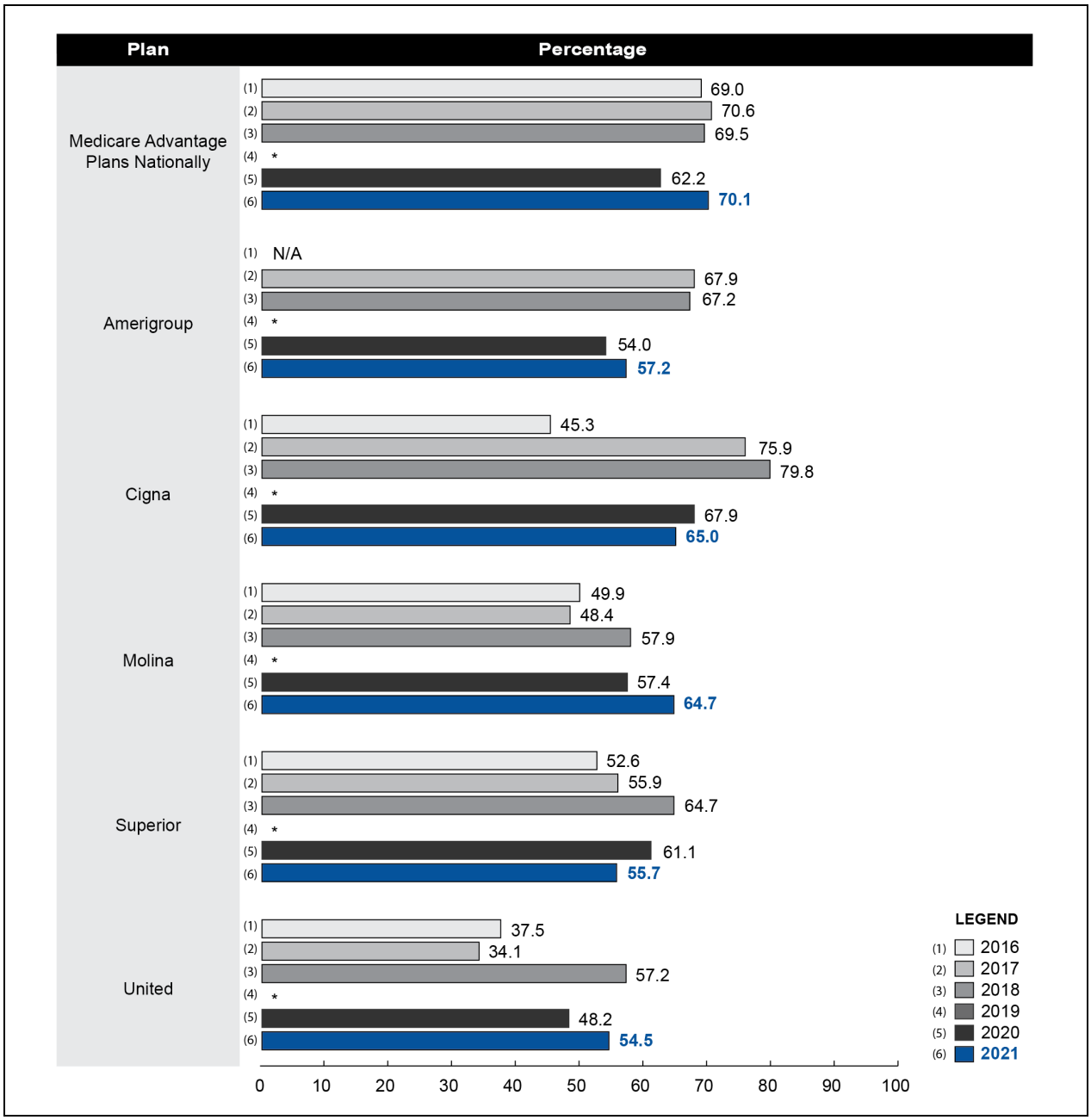
Detailed descriptions of selected HEDIS measures can be found in the RTI Aggregate Evaluation Plan. Results reported in ***Figures 3-3*** through ***3-8*** show the MMPs' 2016 through 2021 HEDIS performance data on measures for blood pressure control, 30-day follow-up after hospitalization for mental 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+).[27]

Although monitoring trends in MMP performance is the primary focus of our HEDIS analysis, the figures and appendix table also compare MMP performance to national Medicare Advantage plan means for reference when available. We provide the national Medicare Advantage plan means with the understanding that Medicare Advantage enrollees and demonstration enrollees may have different health and sociodemographic characteristics, which would affect 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 serving areas with lower income and populations with a higher proportion of minorities (ASPE, 2016). Comparisons to national Medicare Advantage plan means should be considered with these limitations in mind.

As shown in ***Figure 3-3***, nearly all MMPs improved performance on blood pressure control from 2016 through 2021, with some MMPs showing steadier patterns of improvement than others.

[27] These are hospital readmissions.

Figure 3-3
Blood pressure control,[1] 2016–2021: Reported performance rates for Texas Dual Eligible Integrated Care MMPs



* = data not available; HEDIS = Healthcare Effectiveness Data and Information Set; MMP = Medicare-Medicaid Plan; N/A = not applicable, 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.

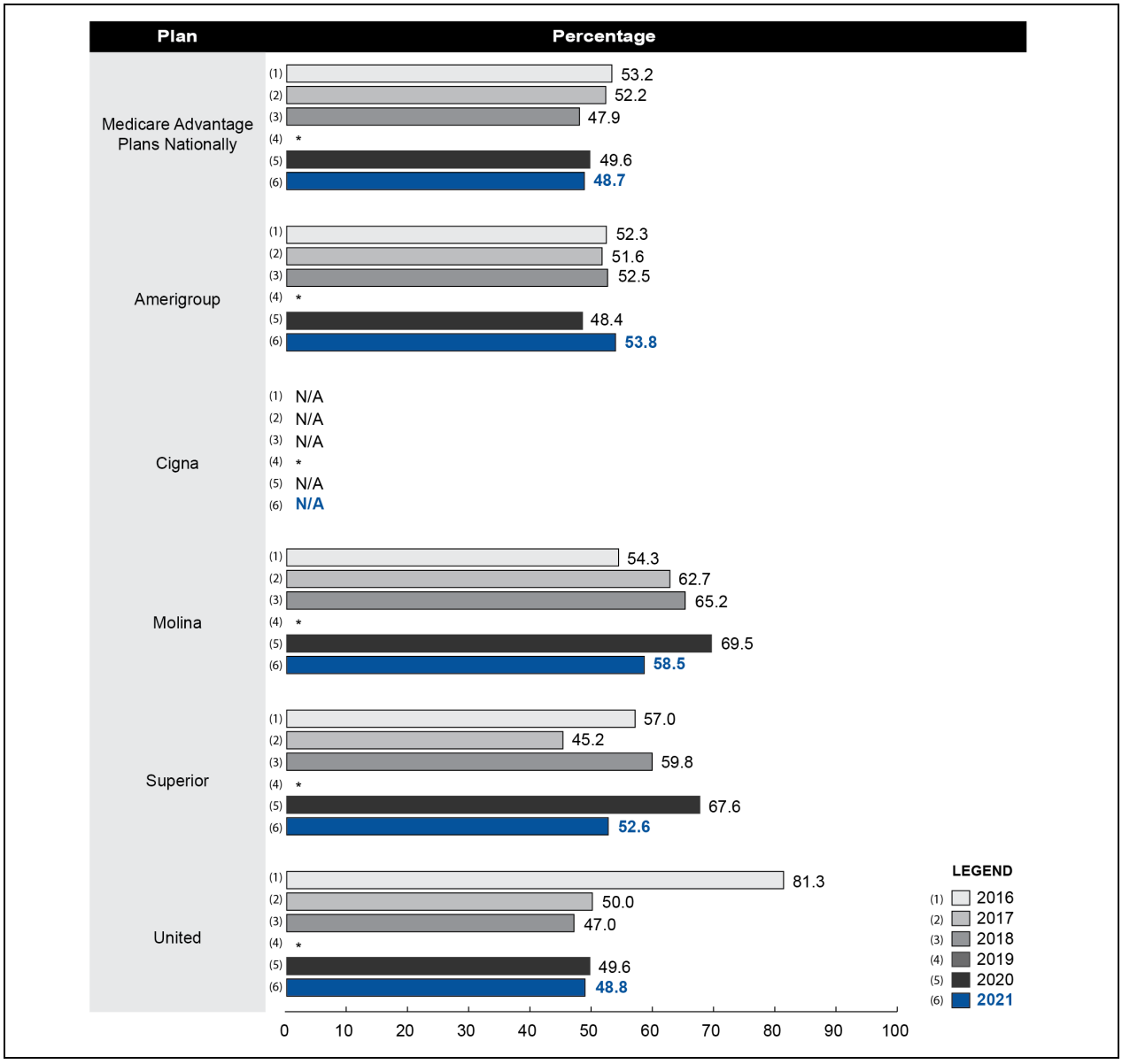
[1] The following criteria were used to determine adequate blood pressure control: less than 140/90 mm Hg for enrollees 18–59 years of age; diagnosis of diabetes and less than 140/90 mm Hg for enrollees 60–85 years of age; no diagnosis of diabetes and <150/90 mm Hg for enrollees 60–85 years of age.

NOTE: In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to submit HEDIS data covering the 2019 measurement year.

SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

Figure 3-4 shows that half of the MMPs meeting sample size criteria for 30-day follow-up after hospitalization for mental illness improved performance from 2016 to 2021, with the other MMPs having mixed performance over time.

Figure 3-4
30-day follow-up after hospitalization for mental illness,[1] 2016–2021: Reported performance rates for Texas Dual Eligible Integrated Care MMPs



*= data not available; HEDIS Effectiveness Data and Information Set; MMP = Medicare-Medicaid Plan; N/A = not applicable, 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.

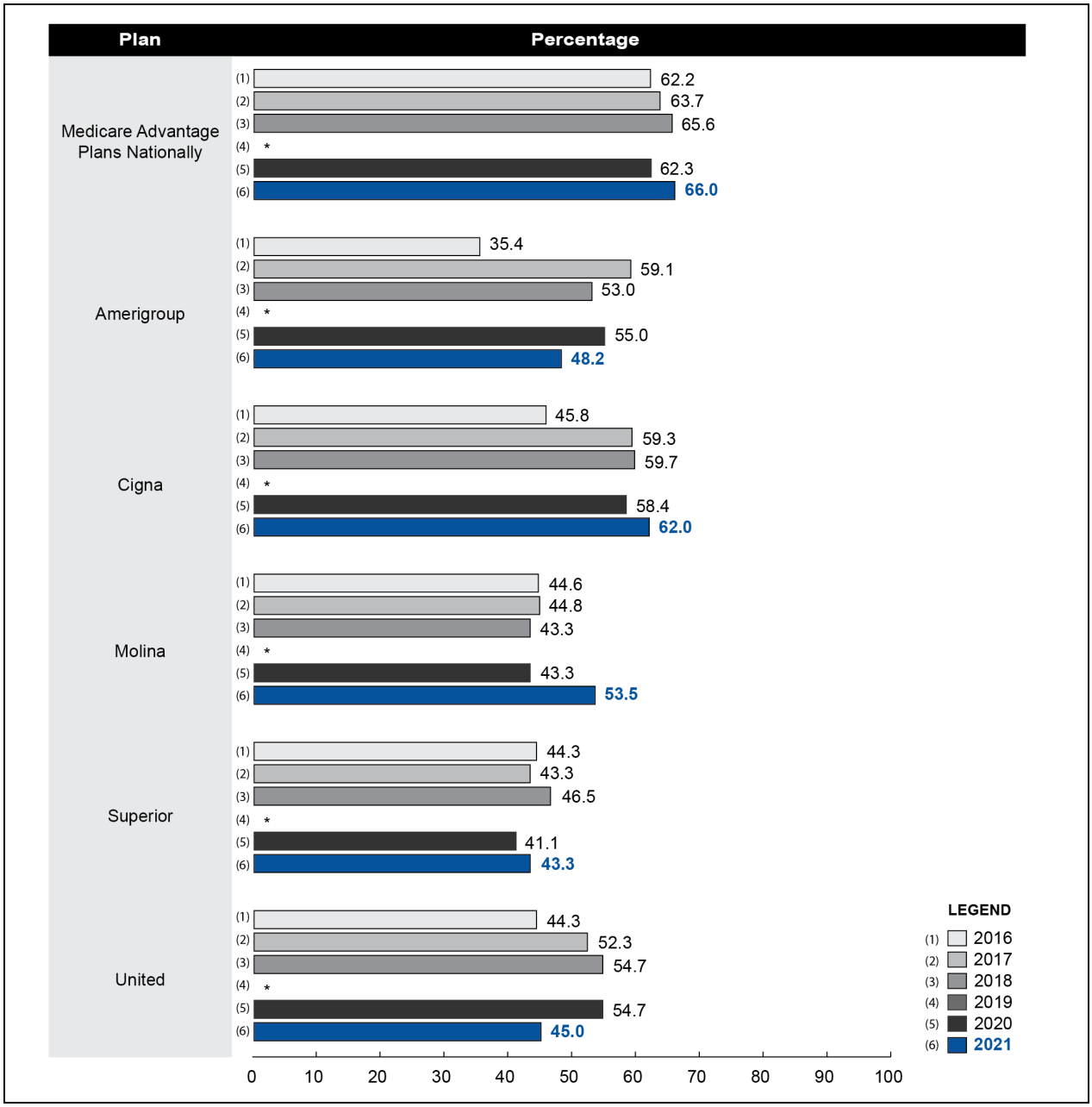
[1] NCQA implemented a significant specification change with HEDIS 2017, disallowing same-day follow-up visits. National benchmarks fell from HEDIS 2017 to HEDIS 2018.

NOTE: In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to submit HEDIS data covering the 2019 measurement year.

SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

As shown in ***Figure 3-5***, most MMPs improved performance on controlling HbA1c levels (< 8.0%) from 2016 to 2021. Increases were generally not steady, with some MMPs reporting dramatic year-over-year increases or decreases.

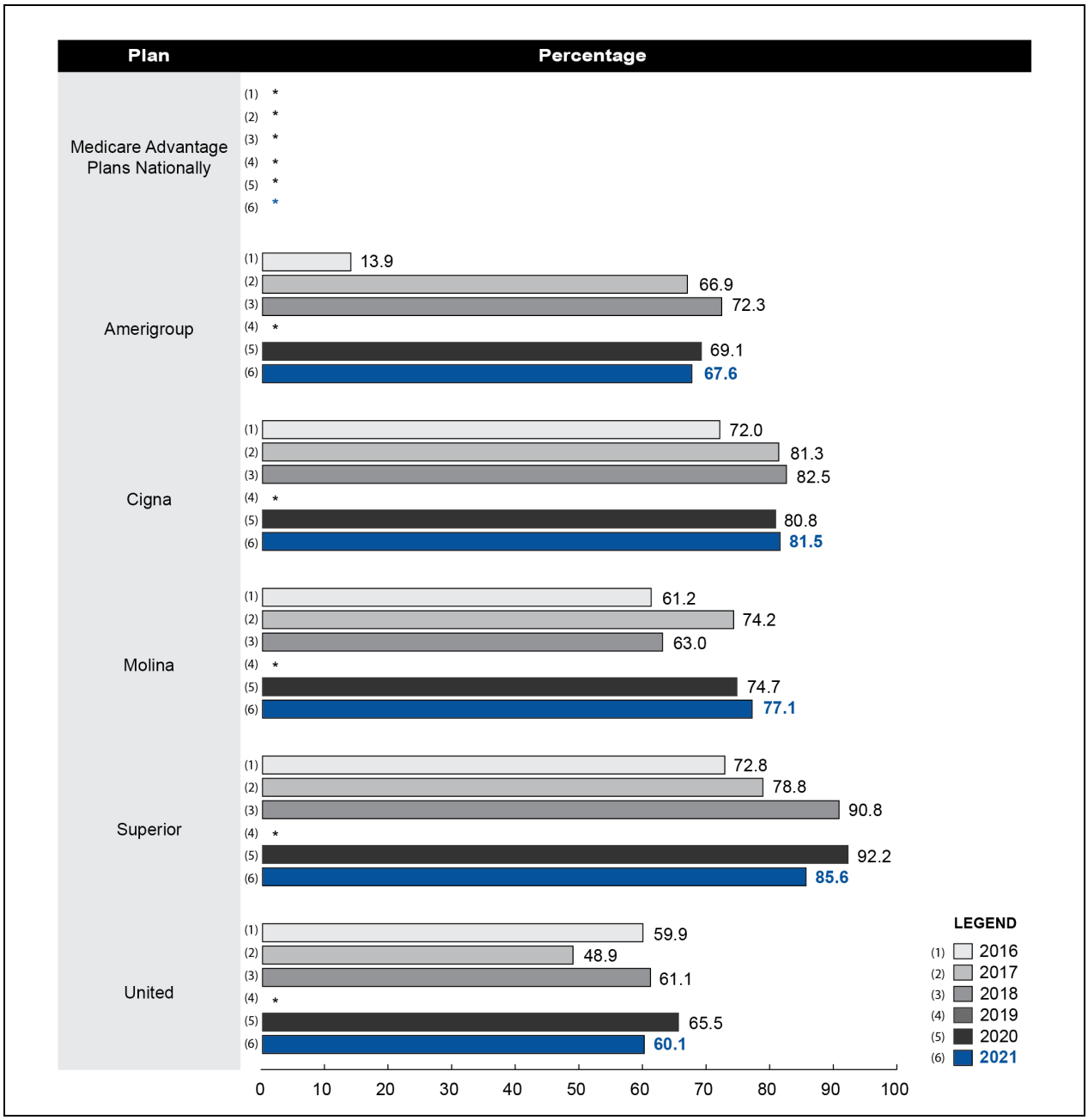
Figure 3-5
Good control of HbA1c level (<8.0%), 2016–2021: Reported performance rates for Texas Dual Eligible Integrated Care MMPs



* = data not available; HEDIS = Healthcare Effectiveness Data and Information Set; MMP = Medicare-Medicaid Plan.
NOTE: In response to the COVID-19 Public Health Emergency, CMS did not require Medicare Advantage plans (including MMPs) to submit HEDIS data covering the 2019 measurement year.
SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

Figure 3-6 shows that, for medication review (one of the Care for Older Adults measures), all MMPs improved performance from 2016 through 2021, with variation over time within each plan. Amerigroup greatly improved overtime, with the most pronounced increase between 2016 and 2017. Non-Special Needs Plan Medicare Advantage (MA) plans do not report the Care for Older Adult measures, so a national MA plan mean is not available.

Figure 3-6
Medication review (one of the Care for Older Adults measures), 2016–2021: Reported performance rates for Texas Dual Eligible Integrated Care MMPs

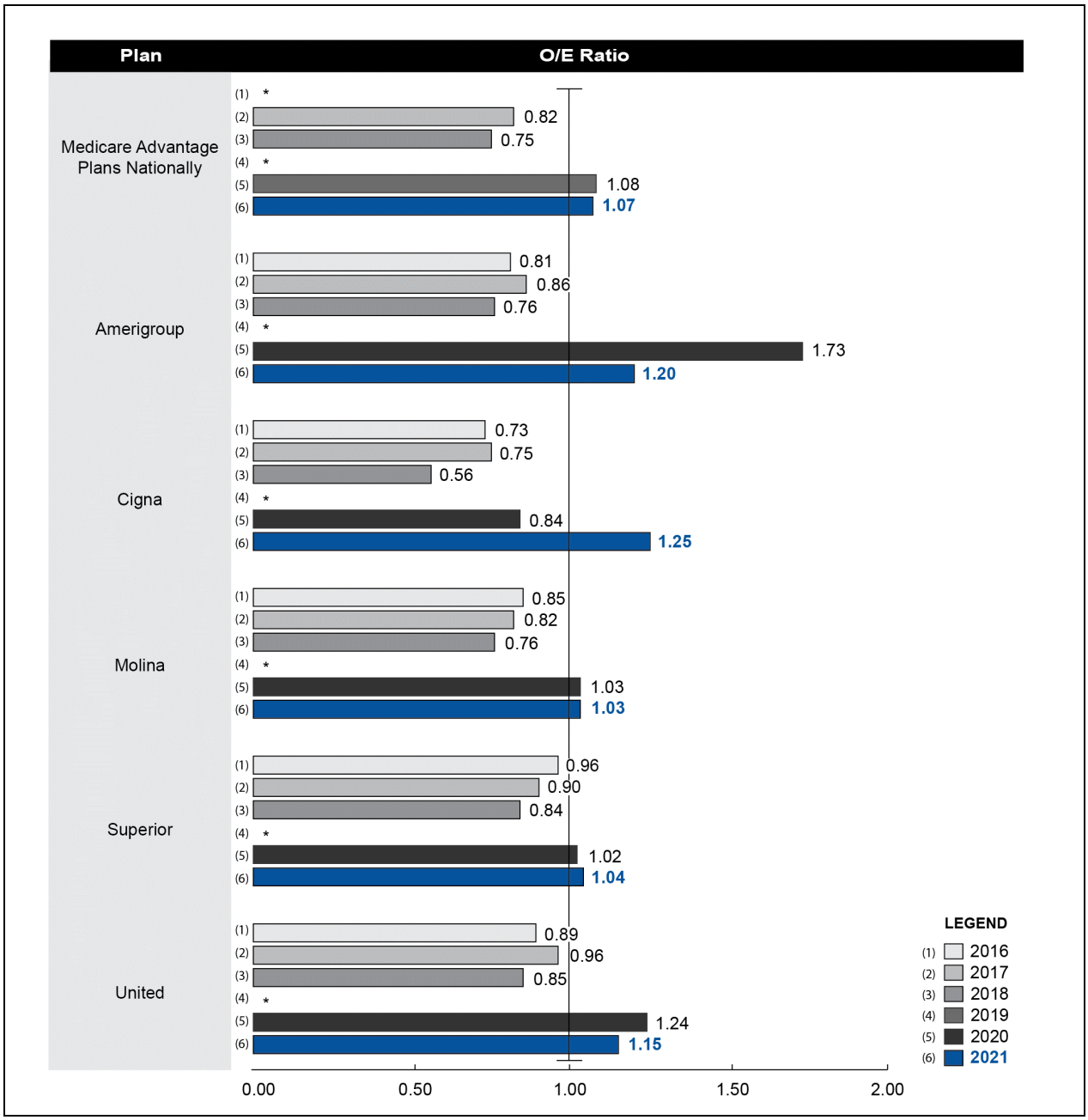


* = data not available; HEDIS = Healthcare Effectiveness Data and Information Set; MMP = Medicare-Medicaid Plan.
NOTE: In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to submit HEDIS data covering the 2019 measurement year.
SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

Plan all-cause readmissions for enrollees ages 18–64 and 65+ are reported in ***Figure 3-7*** and ***Figure 3-8***, respectively, as an observed-to-expected ratio, whereby an MMP's observed readmission rate is compared with its expected readmission rate given its beneficiary case mix. A value below 1.0 (shown by the vertical line at x = 1 in ***Figures 3-7*** and ***3-8***) is favorable and indicates that MMPs had fewer readmissions than expected for their populations based on case mix.

Figure 3-7 shows that, for 2016–2018, all five Texas MMPs reported lower than expected readmissions for enrollees ages 18–64. All MMPs reported higher readmission rates in 2020 and 2021 than in previous years, potentially related to COVID-19. Similarly, ***Figure 3-8*** shows that, for 2016–2018, all five Texas MMPs reported lower than expected readmissions for enrollees ages 65+. All MMPs reported higher readmission rates in 2020 and 2021 than in previous years, potentially related to COVID-19. Although their 2020–2021 rates were higher than previous years, Cigna and Superior each had at least 1 year below the 1.0 threshold indicator.

Figure 3-7
Plan all-cause readmissions, ages 18–64, 2016–2021: Reported observed-to-expected ratios for Texas Dual Eligible Integrated Care MMPs

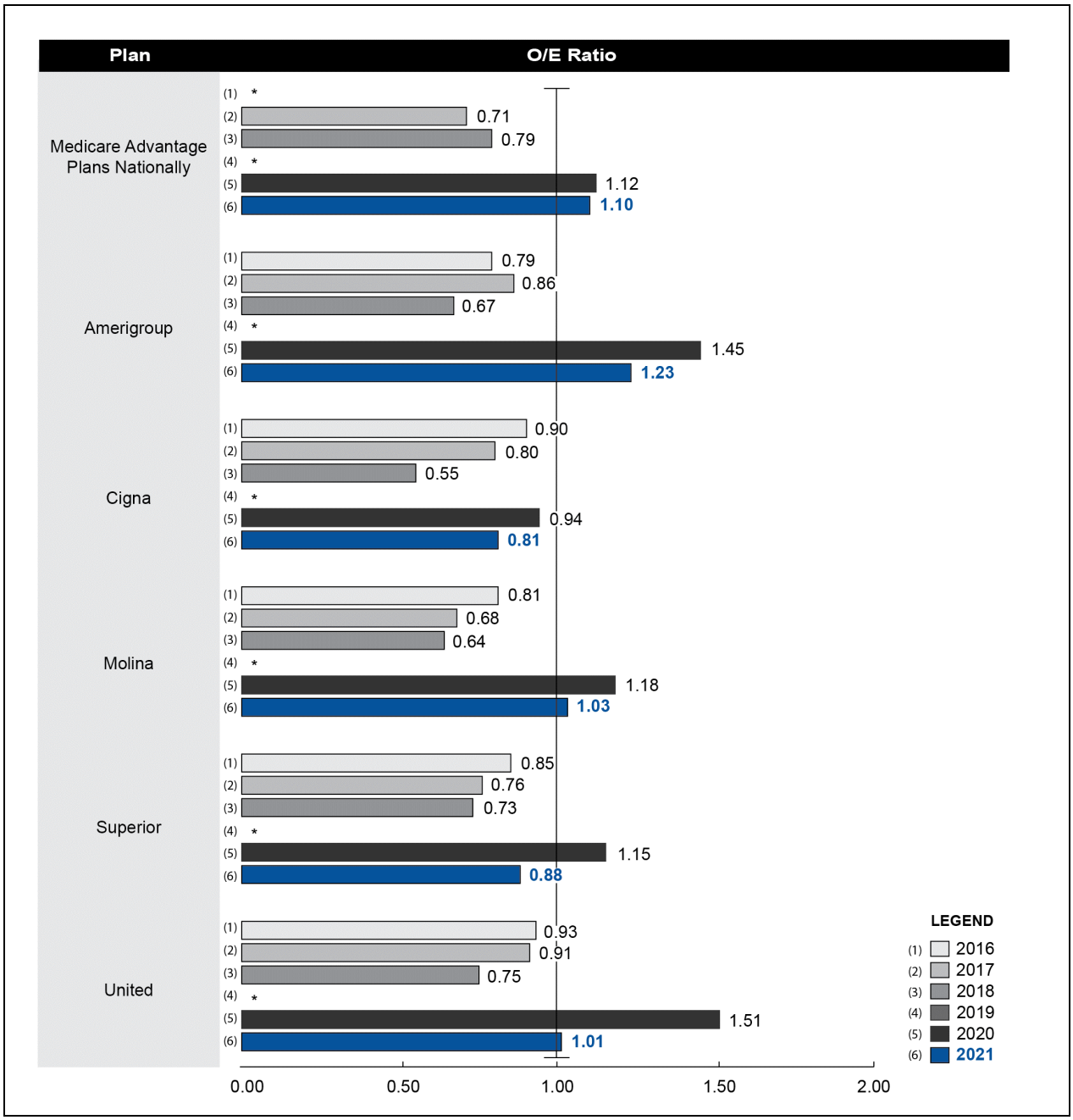


* = data not available; HEDIS = Healthcare Effectiveness Data and Information Set; MMP = Medicare-Medicaid Plan.

NOTES: RTI did not have access to MA plan national HEDIS data for this measure in measurement year 2016. In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to submit HEDIS data covering the 2019 measurement year.

SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

Figure 3-8
Plan all-cause readmissions, ages 65+, 2016–2021: Reported observed-to-expected ratios for Texas Dual Eligible Integrated Care MMPs



* = data not available; HEDIS = Healthcare Effectiveness Data and Information Set; MMP = Medicare-Medicaid Plan.

NOTES: RTI did not have access to Medicare Advantage plan national HEDIS data for this measure in measurement year 2016. In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to submit HEDIS data covering the 2019 measurement year.

SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

SECTION 4

Beneficiary Experience

Beneficiaries expressed overall satisfaction with their MMPs, but individual enrollee interviews suggested that enrollees often did not have a strong relationship with their service coordinator.

Access to specialist care and some LTSS continued to be a challenge for enrollees.

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 the Texas demonstration and provide information on beneficiary protections and data related to grievances, complaints, appeals, and critical incident and abuse reports. For beneficiary experience, we draw on findings from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey,[28] stakeholder interviews, and individual interviews with 20 enrollees conducted in 2022[29] (hereafter, "enrollee interviews"). See ***Appendix A*** for a full description of these data sources.

4.1 Impact of the Demonstration on Beneficiaries

4.1.1 Beneficiary Overall Satisfaction

As shown in ***Figure 4-1***, the percentage of CAHPS respondents who rated their health plan as a 9 or 10 increased overall for four of the five Texas MMPs from 2016 through 2021, with variation among the years.

[28] We did not include data for the CAHPS measure *"Percentage of beneficiaries reporting that, in past 6 months, their personal doctors were usually or always informed about care received from specialists"* because of the lack of data. MMPs either had too few beneficiaries who responded to the question to allow reporting, or the score had low statistical reliability.

[29] In 2022, we conducted individual interviews with enrollees (see ***Appendix A, Data Sources*** for details). Although these interviews were conducted outside the reporting period, because this is the last evaluation report for this demonstration, the data were included to highlight the beneficiary experience with the demonstration.

Figure 4-1
Texas Dual Eligible Integrated Care beneficiary overall satisfaction, 2016–2021: Percentage of beneficiaries rating their health plan as a 9 or 10

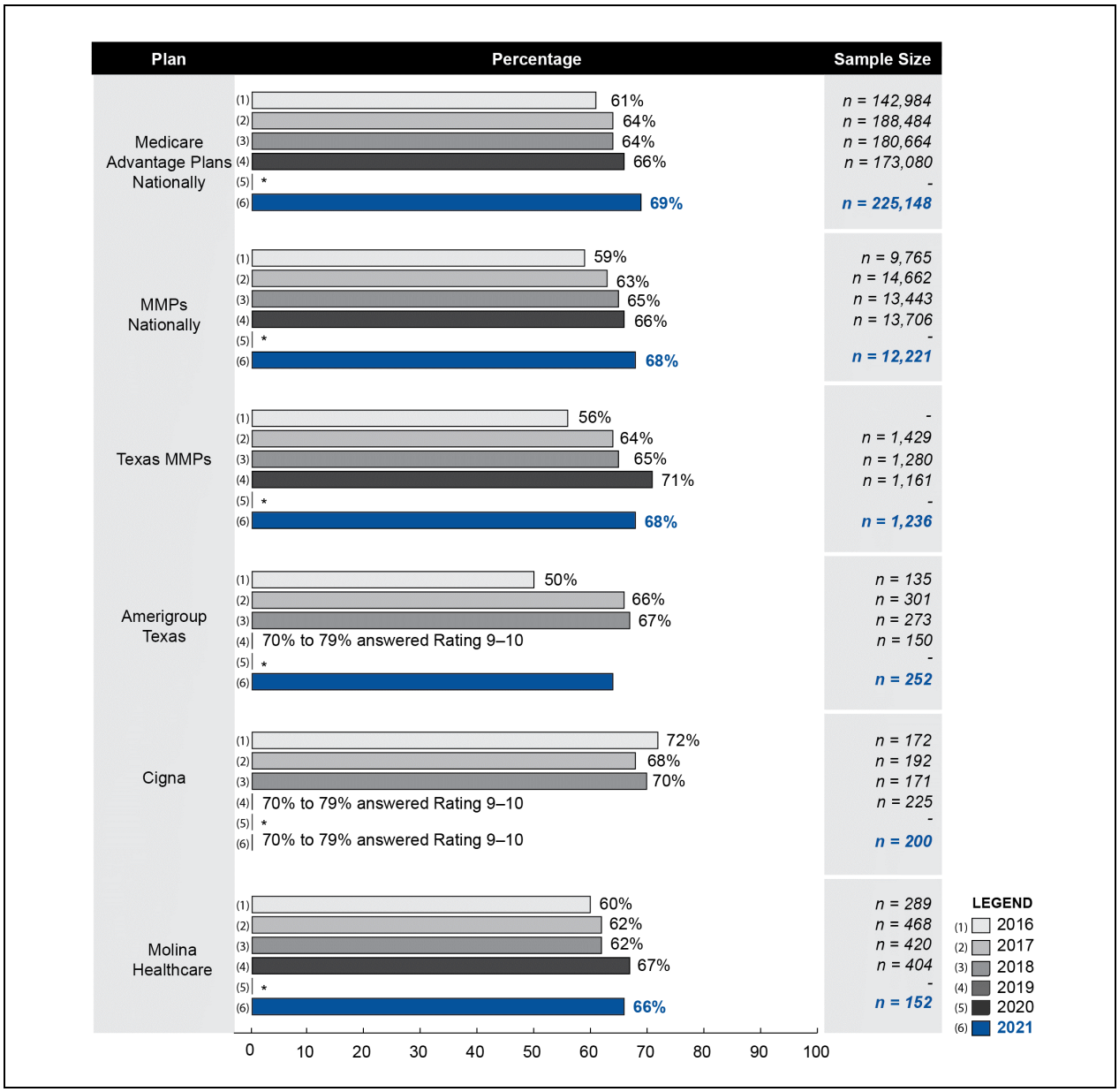


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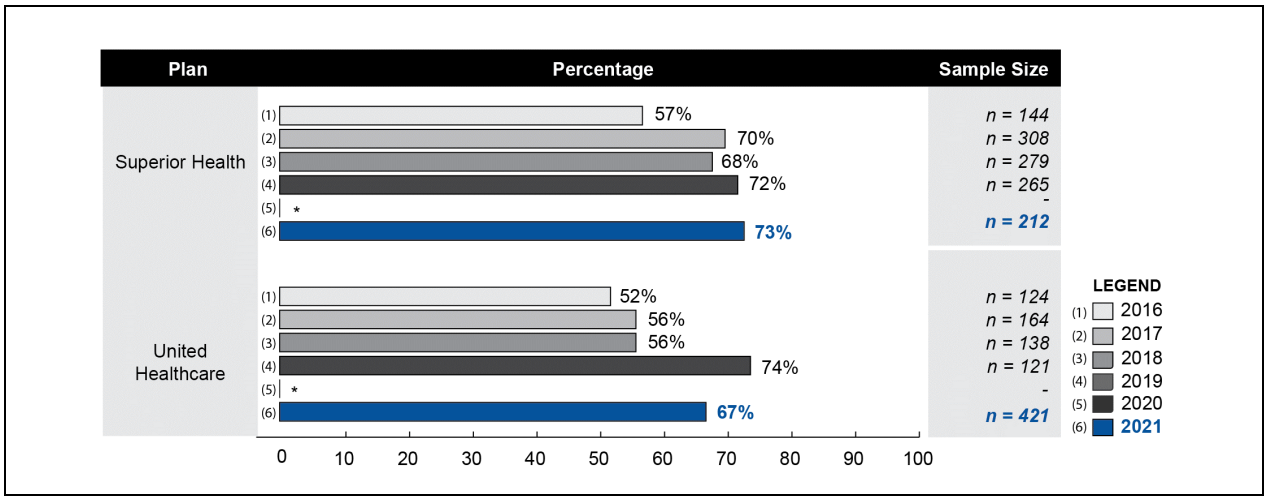
Figure 4-1 (continued)
Texas Dual Eligible Integrated Care beneficiary overall satisfaction, 2016–2021: Percentage of beneficiaries rating their health plan as a 9 or 10



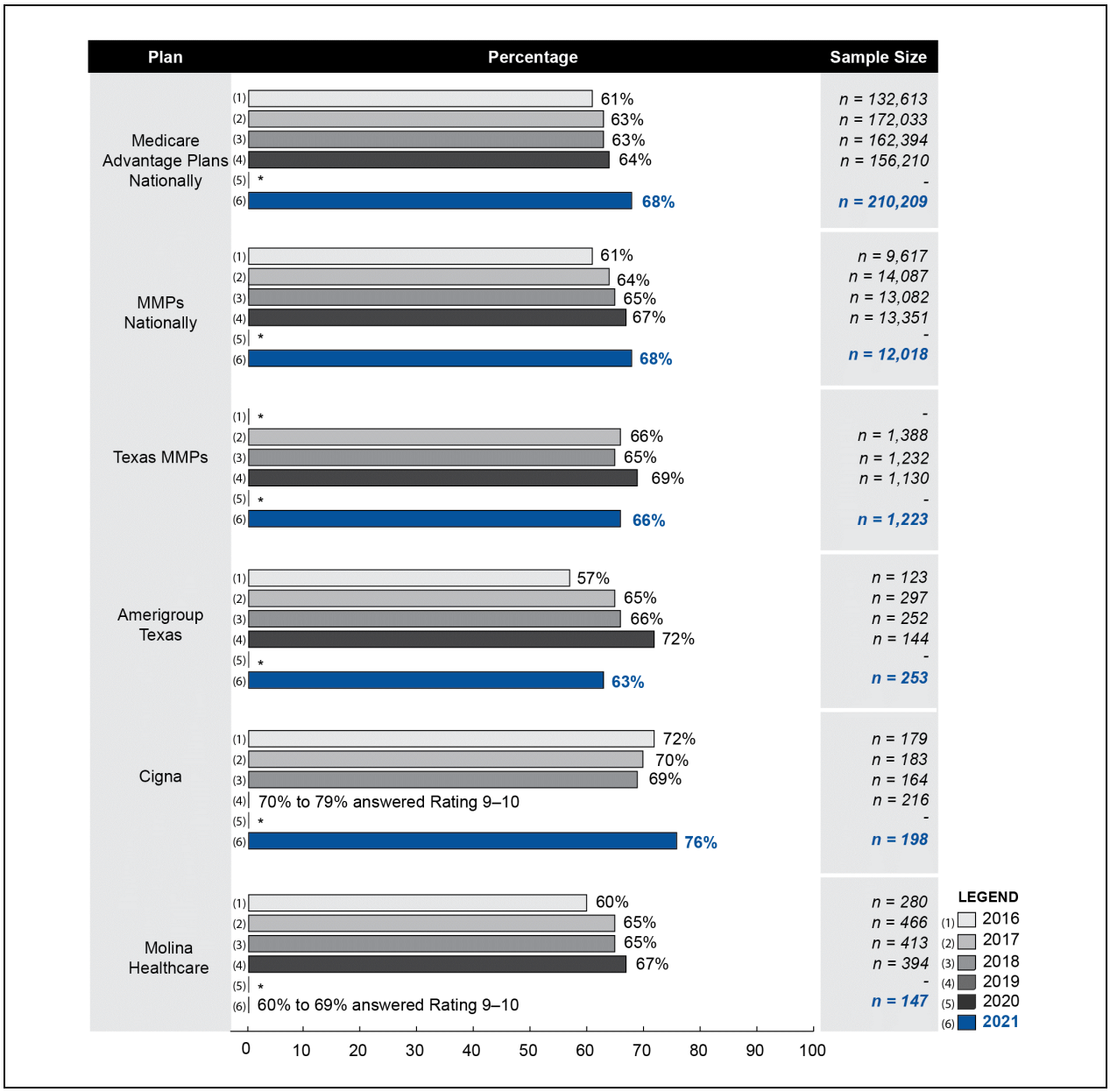
* = data not available; - = sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MMP = Medicare-Medicaid Plan.

NOTES: In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to collect CAHPS data for 2020. Instead of reporting "Suppressed" when too few members provided responses, a range is given, when possible, to provide meaningful information while meeting CMS disclosure requirements. A range is given when the overall number of respondents is greater than or equal to 110 and the measure does not have very low statistical reliability.

SOURCE: CAHPS data for 2016–2021. 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?"

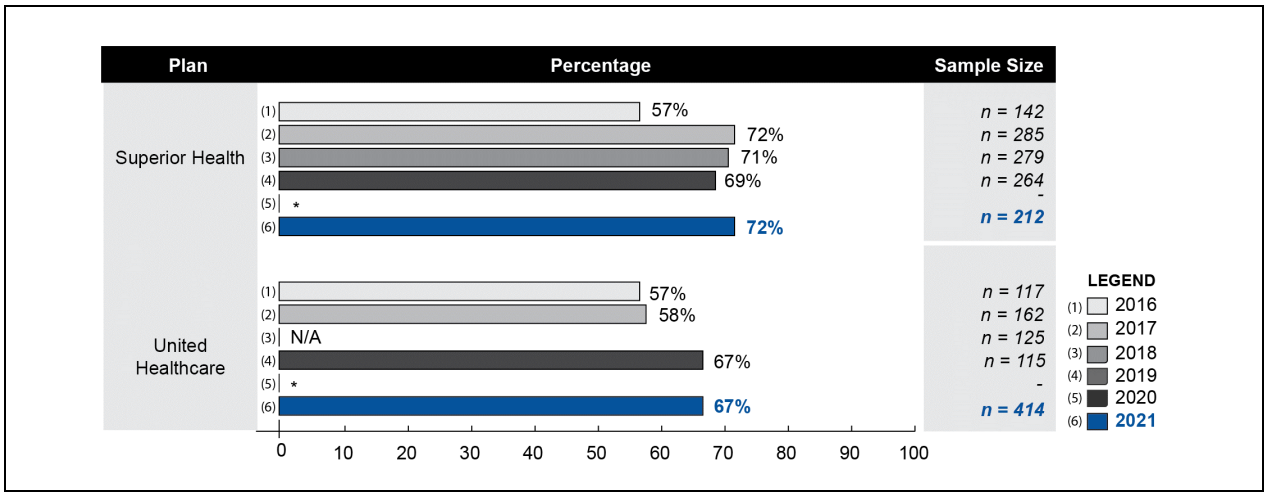
As shown in ***Figure 4-2***, the percentage of beneficiaries who rated their drug plan as a 9 or 10 also increased for four out of five Texas MMPs from 2016 through 2021, although there was some variation among the years for three of these plans.

Figure 4-2
Texas Dual Eligible Integrated Care beneficiary overall satisfaction, 2016–2021: Percentage of beneficiaries rating their prescription drug plan as a 9 or 10



(continued)

Figure 4-2 (continued)
Texas Dual Eligible Integrated Care beneficiary overall satisfaction, 2016–2021: Percentage of beneficiaries rating their prescription drug plan as a 9 or 10



* = data not available; - = sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MMP = Medicare-Medicaid Plan; N/A = either there were too few beneficiaries who responded to the question to allow reporting, or the score had low reliability, or "Suppressed" (i.e., when too few members provided responses; new as of 2019) when the results have very low statistical reliability.

NOTES: In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to collect CAHPS data for 2020. Instead of reporting "Suppressed" when too few members provided responses, a range is given, when possible, to provide meaningful information while meeting CMS disclosure requirements. A range is given when the overall number of respondents is greater than or equal to 110 and the measure does not have very low statistical reliability.

SOURCE: CAHPS data for 2016–2021. 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?"

"Everything is smooth. [My mother] can see the doctor anytime and she can get whatever medicines the doctors prescribe. I don't have any problems with the plan."

— Beneficiary Caregiver Interview Participant, 2022

Consistent with these survey results, 19 of the 20 enrollees (or their caregivers) whom we interviewed rated themselves as satisfied or very satisfied with their MMP. Thirteen enrollees or caregivers rated themselves as very satisfied expressed satisfaction with the services they or their family member received and felt that plan representatives and providers were helpful and treated them well. One person said that she can get the services she needs and that the plan works with her, not against her. Those who were less than very satisfied cited challenges accessing services because providers were out of network or they had trouble finding an in-network provider for a new service or because of decreased home health hours or challenges getting medications covered.

Several of the enrollees interviewed reported that the demonstration had a positive impact on their lives, whereas others reported that their health or quality of life was the same as before entering the demonstration. Some could not recall when they joined their MMP and said they did not notice any differences when they enrolled in the demonstration. No interviewees reported that their health was worse after joining the plan.

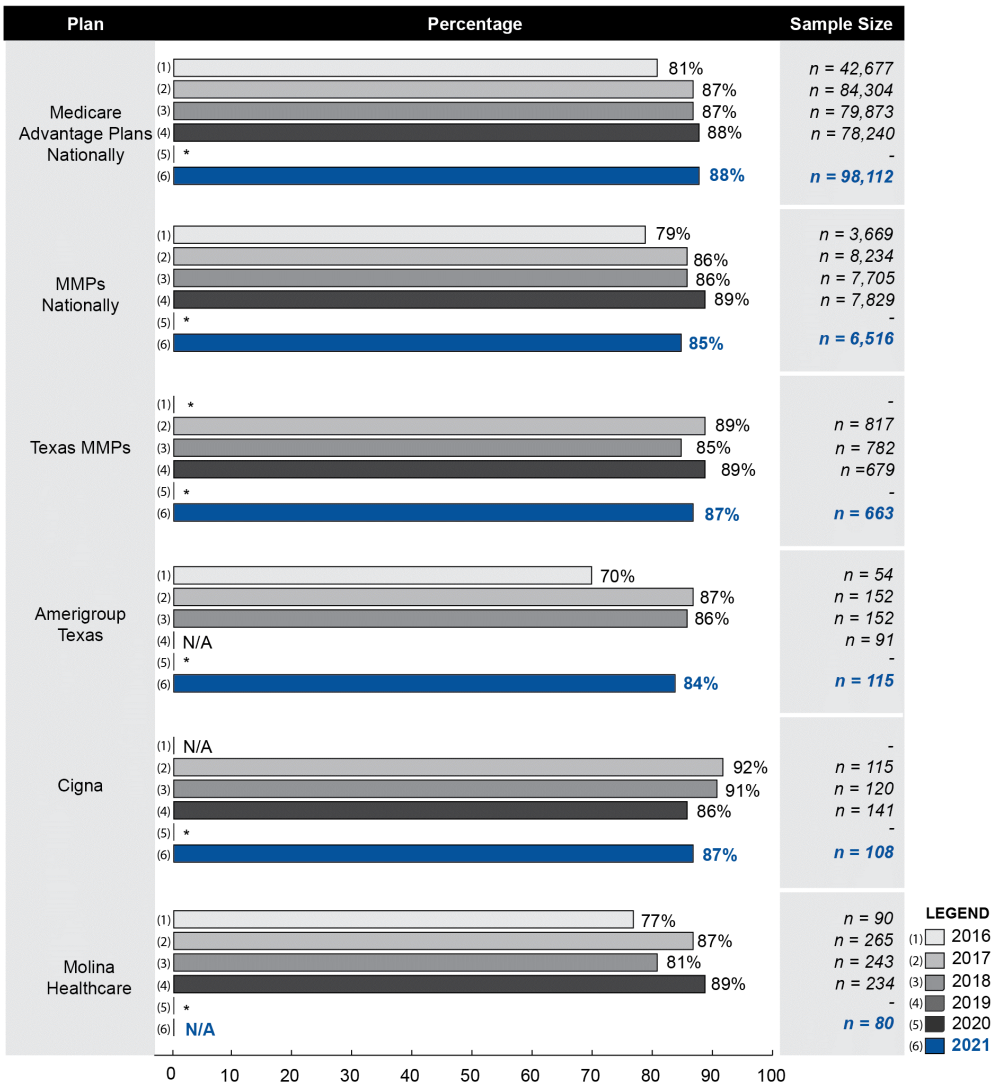
"Previously I wasn't able to get the medication that I needed to treat a condition and through my service coordinator and my doctor I was able to resolve that issue and it's made a world of difference in my day-to-day life."

— Individual Beneficiary Interview Participant, 2022

4.1.2 Beneficiary Experience with Care Coordination

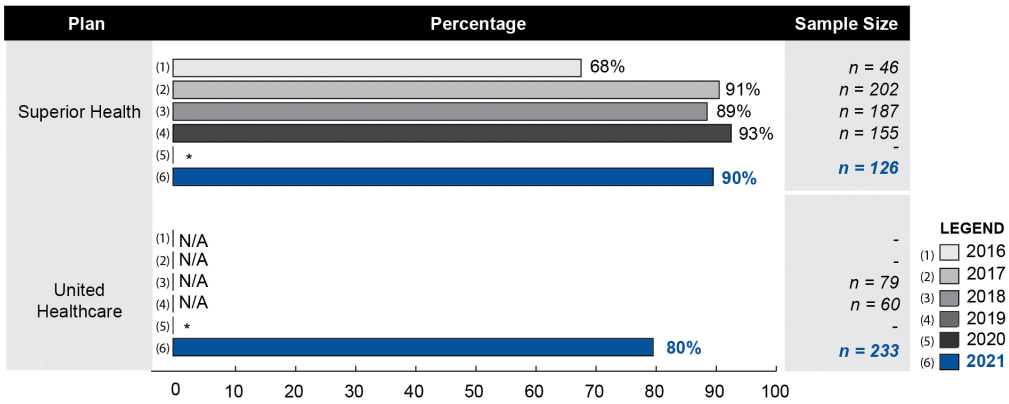
Figure 4-3 shows that, for three of the four MMPs that reported data in more than one year, the percentage of beneficiaries who reported that their health plan usually or always gave them information they needed increased from 2016 to 2021.

Figure 4-3
Texas Dual Eligible Integrated Care beneficiary experience with care coordination, 2016–2021: Percentage of beneficiaries reporting that their health plan usually or always gave them information they needed



(continued)

Figure 4-3 (continued)
Texas Dual Eligible Integrated Care beneficiary experience with care coordination, 2016–2021: Percentage of beneficiaries reporting that their health plan usually or always gave them information they needed



* = data not available; - = sample size data not available; CAHPS = Consumer Assessment of Healthcare Providers and Systems; MMP = Medicare-Medicaid Plan; N/A= either there were too few beneficiaries who responded to the question to allow reporting, or the score had low reliability, or "Suppressed" (i.e., when too few members provided responses; new as of 2019) when the results have very low statistical reliability.
NOTE: In response to the COVID-19 public health emergency, CMS did not require Medicare Advantage plans (including MMPs) to collect CAHPS data for 2020.
SOURCE: CAHPS data for 2016–2021. 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?"

Enrollee interviewees also indicated satisfaction with the assistance provided by MMPs, although not all of those interviewed appeared to have a strong relationship with their service coordinator. Consistent with the findings reported in ***Section 3.3, Service Coordination***, enrollee interviewees often did not know who their service coordinator was. Of the 20 enrollees interviewed, about one-third knew the name and contact information of their service coordinator, and several interviewees reported not knowing their service coordinator or not having a service coordinator at all. Many knew the service coordinator as "someone from my plan who comes and does an assessment a couple times a year." However, many reported calling the MMP's main number or the number on the back of their health insurance card to speak to someone when they needed help and found that the person answering was responsive and supported them. Service coordinators often helped enrollee interviewees with getting durable medical equipment, assistance with personal care needs, and transportation and with finding providers.

Most of the enrollees interviewed were either unsure of whether their providers communicated with one another or did not think they did. Most described speaking one-on-one with their primary care doctor or service coordinator but did not think these individuals or other health care providers spoke to one another. Several of those interviewed felt that they were part of a care team. Many others did not recognize the term care team. Most enrollee interviewees who spoke directly with their providers and service coordinators felt that they had good communication and that the individuals listened to their needs.

"When I needed help at the house, because I live alone, [my care coordinator] helped me get home health services and that helped me out a lot."

— Individual Beneficiary Interview Participant, 2022

4.1.3 Access to Care

The enrollee interviews suggest that some enrollees experience challenges accessing providers. Among those interviewed, several reported having to change providers upon enrolling in the demonstration. For example, one enrollee reported that he did not know he would have to change his primary care physician until after joining the MMP. He called the plan many times before getting a list of covered providers. One caregiver specified that providers in the network could not provide services to persons with special needs. Several enrollees also noted that it was difficult to get the specialty services they needed, such as a dentist or eye doctor, because the providers they previously had were out of the plan's network or they needed a new type of service and struggled to find a provider. Three enrollees discussed situations wherein they received a specialty provider name or list but learned after contacting the provider or scheduling a surgical procedure that the provider was not in the network.

Consistent with these findings, the Ombudsman reported that enrollees had reported challenges with access to specialists, including cardiologists; dermatologists; neurologists; gastroenterologists; and ear, nose, and throat specialists. According to the Ombudsman, in some cases, the shortage was the result of providers choosing not to participate in the MMP rather than a shortage of providers.

"When I was changing primary care physicians I asked for a list of in-network doctors in my area and the doctor I chose did not accept the new plan I'm on. The cardiologist I got referred to didn't accept the plan either."

— Individual Beneficiary Interview Participant, 2022

Although an MMP reported in 2021 that they did not have a shortage of personal attendants in their service area, a beneficiary advocate indicated that attendant shortages were an issue both in rural areas and in the demonstration area overall. The advocate attributed the shortage to low wages and poor Medicaid reimbursement rates and noted that the shortages were exacerbated by the PHE. As reported in the Preliminary Second Evaluation Report, HHSC developed a strategic plan to address the shortage of personal attendants. In addition, the beneficiary advocate cited a "fairly robust" effort among stakeholders to work on the root causes of worker shortages.

The beneficiary advocate also cited the need to address systemic challenges that prevented more investment in home and community-based services (HCBS). STAR+PLUS MCOs are paid a higher capitation rate for enrollees residing in an NF than for those living in their own home or another community-based setting. According to this advocate, MCO representatives told the advocate and other stakeholders that MCOs are more likely to serve persons in NFs because of this incentive.[30] This advocate expressed concern that, as a result, Texas had missed an opportunity to fully leverage managed care to reform the LTSS delivery system and improve the quality of care provided. In addition, because higher rates are dedicated to NF services, MMPs do not have the flexibility of reallocating those resources to increase payment for personal attendants and other HCBS providers. This advocate also noted that, although Texas has an adequate supply of NF beds, it does not have enough assisted living options.

HHSC, CMS, and MMPs all reported that transitioning nonemergency medical transportation to the MMPs in 2021 caused minimal disruption for enrollees. Prior to the transition, HHSC had conducted outreach with numerous advisory committees and hosted two statewide webinars where Medicaid beneficiaries, providers, and others were informed about the changes and were given an opportunity to ask questions. The Ombudsman reported that complaints related to transportation increased slightly in June 2021 and decreased shortly thereafter. One MMP noted that accessing transportation through the MMP simplified access for enrollees and gave service coordinators one more tool for helping enrollees access services.

CMS noted that telehealth had also improved access during the reporting period, attributing improvements in access measures relating to medical appointments, prescriptions, and care to the flexibility offered by telehealth. One MMP made a similar observation, citing improvements in follow-up visits after a hospitalization for mental illness due to increases in telehealth use. About half of the enrollees interviewed reported using telemedicine to talk to providers or service coordinators during the PHE. Despite these benefits, a beneficiary advocate noted that many rural areas in Texas do not have access to broadband, and older adults and persons with low income often do not have the devices needed for participating in telehealth.

4.2 Beneficiary Protections

4.2.1 Grievances, Appeals, Complaints, and Critical Incidents

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. MMPs are required to track and report grievance data.

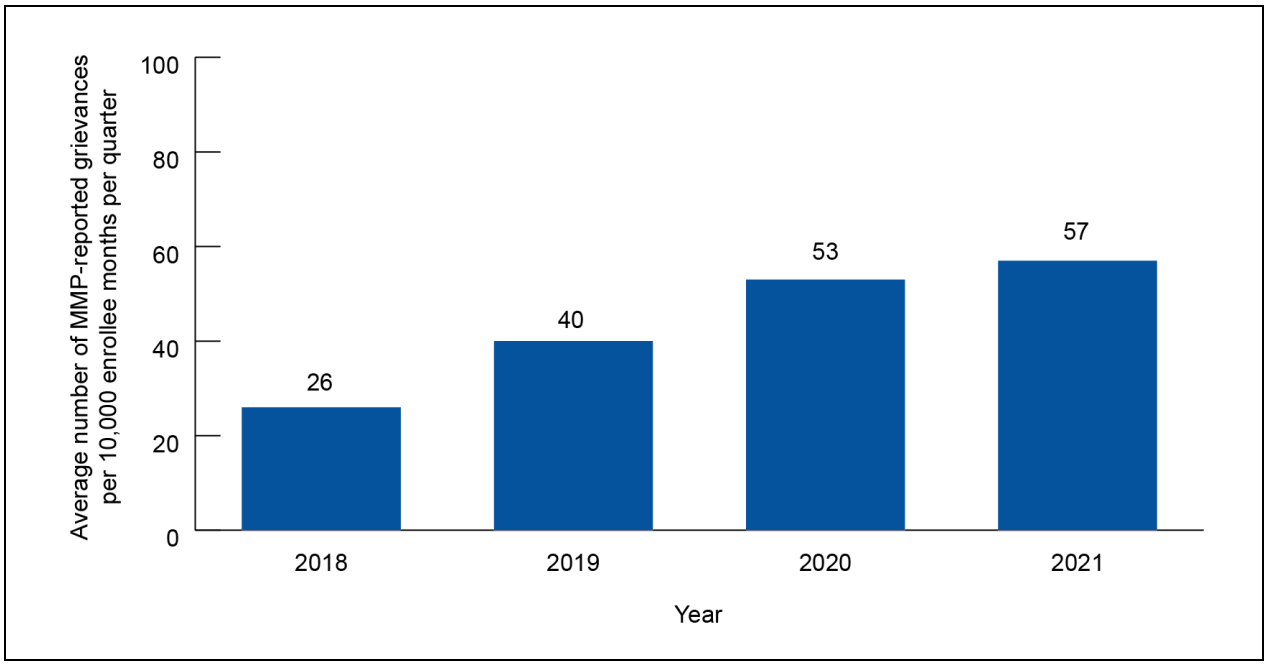
Because of the way plan-reported grievance data were analyzed changed in 2018, we report separate data from two periods (2015 through 2017 and 2018 through 2021). In 2015 through 2017, data were analyzed per 1,000 enrollees per quarter. Beginning in 2018, data were analyzed per 10,000 enrollee months per quarter. From 2015 through 2017 the average number

[30] Because MMPs are also paid a higher capitation rate for NF enrollees than for in-home service recipients, a similar dynamic may exist for the demonstration.

of MMP-reported grievances per 1,000 enrollees per quarter remained very low, ranging from 2 to 4 (data not shown).

In 2018 through 2021, as shown in ***Figure 4-4***, the average number of MMP-reported grievances per 10,000 enrollee months per quarter increased from 26 in 2018 to 57 in 2021.

Figure 4-4
Texas Dual Eligible Integrated Care average number of MMP-reported grievances per 10,000 enrollee months per quarter, 2018–2021

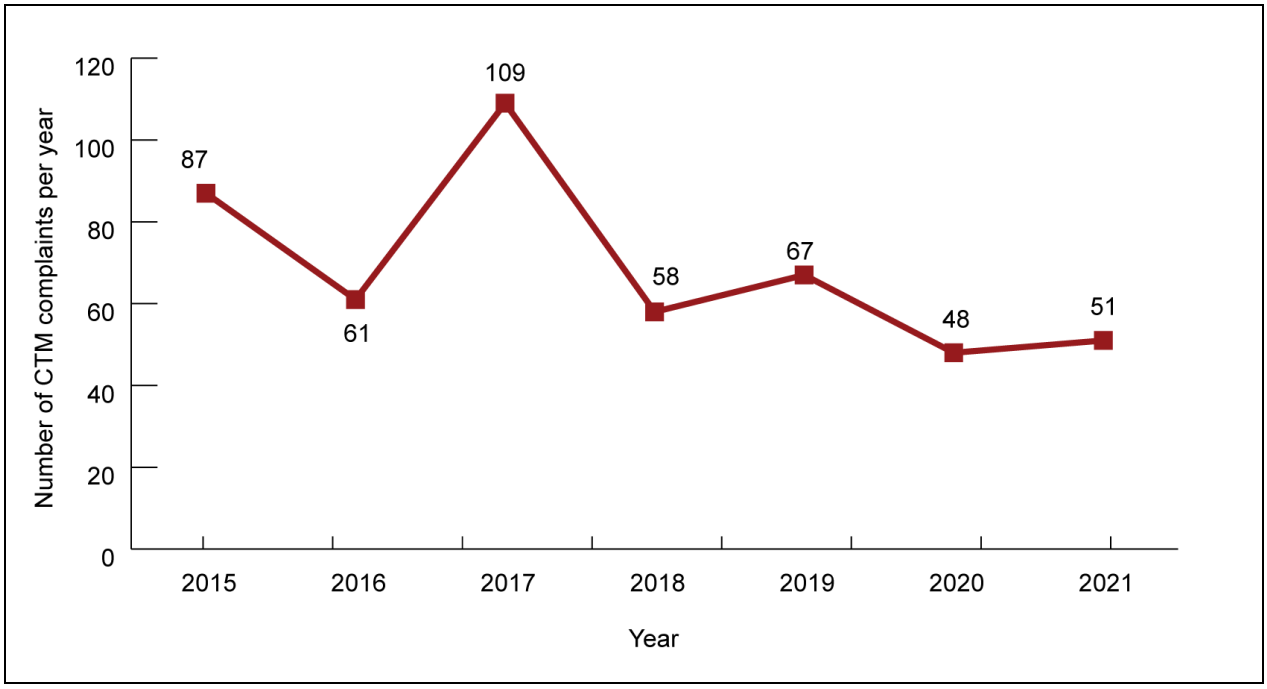


MMP = Medicare-Medicaid Plan.

Figure 4-5 shows total complaints reported to the Complaint Tracking Module (CTM) by HHSC or through 1-800-Medicare in 2015–2021. CTM complaints remained stable over the course of the demonstration. The number of complaints ranged from 48 to 61, except in 2015 and 2017, when they were higher. The highest number of complaints over the course of the demonstration to date were in the enrollment and disenrollment category[31] followed by complaints in the benefits, access, and quality of care category[32].

[31] This category is defined as "Beneficiary is experiencing an enrollment issue that may require reinstatement or enrollment change."
[32] 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."

Figure 4-5
Texas Dual Eligible Integrated Care number of CTM complaints per year, 2015–2021



CTM = Complaint Tracking Module.

As described in the Preliminary Second Evaluation Report, the Ombudsman for HHSC's Medicaid managed care programs is responsible for responding to consumer inquiries and complaints.[33] Between December 1, 2020, and November 30, 2021, the Ombudsman received 137 complaints relating to the demonstration, with access to home health services, balance billing, and authorization issues as the most common complaint categories. As noted earlier in this section, in late 2021, the Ombudsman reported that concerns about access to care extended beyond home health and included access to cardiologists; dermatologists; neurologists; gastroenterologists; and ear, nose, and throat specialists. However, the Ombudsman office believed that, overall, the demonstration improved access to care, and staff reported that they successfully resolved access to care-related complaints in 2021.

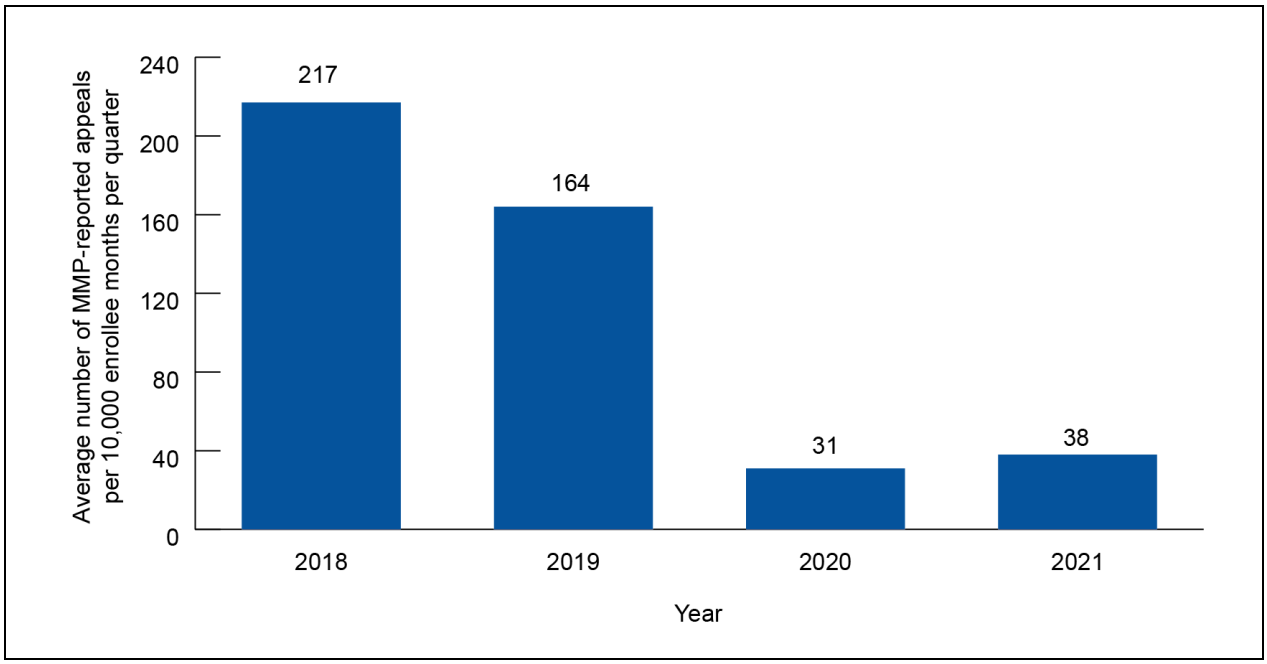
Enrollees also have the right to appeal an MMP's decision to deny, terminate, suspend, or reduce services. The first level of appeal is filed directly with the MMP. If the MMP denies an appeal involving Medicare-only services or a service that could be covered by Medicare or Medicaid (i.e., an "overlap" service), the MMP automatically forwards the appeal to the Medicare Independent Review Entity (IRE) for the second level of appeal.

Because the way that plan-reported appeals data were analyzed changed in 2018, we report separate data from two periods (2015 through 2017 and 2018 through 2021). In 2015 through 2017, data were analyzed per 1,000 enrollees per quarter. Beginning in 2018, data were

[33] The Ombudsman defines *complaint* as "any expression of dissatisfaction by a consumer of a Texas Health and Human Services (HHS) program or service about HHS benefits or services." An *inquiry* is "a request by a consumer for information about HHS programs or services."

analyzed per 10,000 enrollee months per quarter. From 2015 through 2017 the average number of MMP-reported appeals per 1,000 enrollees per quarter remained very low, ranging from 1 to 4 (data not shown). In 2018 through 2021, as shown in ***Figure 4-6***, the average number of MMP-reported appeals per 10,000 enrollee months per quarter decreased noticeably, with a high of 217 in 2018 and a low of 31 in 2020. Fewer appeals may have been filed during this time period if utilization of many services was lower due to the PHE.

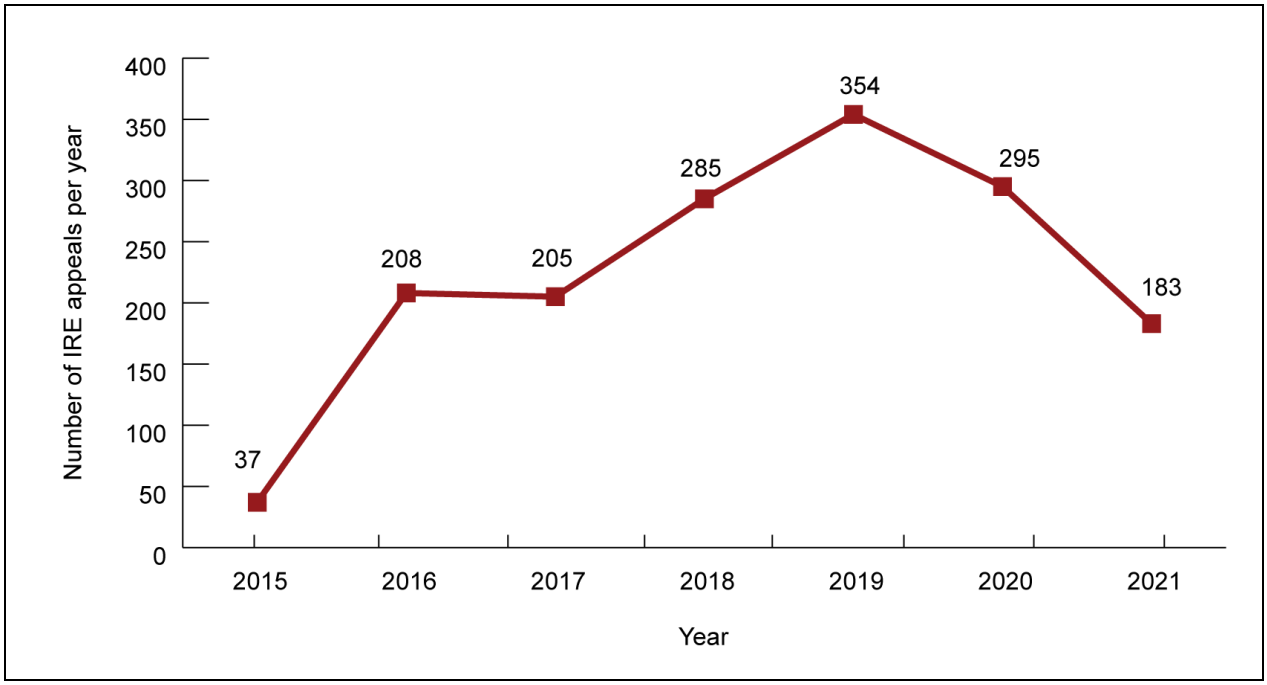
Figure 4-6
Texas Dual Eligible Integrated Care average number of MMP-reported appeals per 10,000 enrollee months per quarter, 2018–2021



MMP = Medicare-Medicaid Plan.

A likely decrease in service utilization during the PHE may also explain a similar trend for MMP-reported appeals reported to the IRE. As shown in ***Figure 4-7***, the number of appeals reported to the IRE per year increased from 37 in 2015 to 354 in 2019 before decreasing to 183 in 2021. Of the 1,567 MMP-reported appeals reported to the IRE in 2015 through 2021, 66 percent of the MMP decisions were upheld, 12 percent were overturned or partially overturned, 22 percent were dismissed, and the remainder (1 percent) were withdrawn. The most common category of appeals referred to the IRE was acute inpatient hospital services.

Figure 4-7
Texas Dual Eligible Integrated Care number of IRE appeals per year, 2015–2021



IRE = Independent Review Entity

MMPs are required to report to CMS the number of critical incidents and abuse reports for enrollees receiving LTSS.[34] From 2015 through 2021, the number of critical incidents and abuse reports remained negligible at 0–1 reports per 1,000 Texas Dual Eligible Integrated Care enrollees per quarter.

[34] A critical incident is any actual or alleged event or situation that creates a significant risk of substantial or serious harm to the physical or mental health, safety, or well-being of a member. Abuse refers to willful use of offensive, abusive, or demeaning language by a caretaker that causes mental anguish; knowing, reckless, or intentional acts or failures to act which cause injury or death to an individual or which places that individual at risk of injury or death; rape or sexual assault; corporal punishment or striking of an individual; unauthorized use or the use of excessive force in the placement of bodily restraints on an individual; and use of bodily or chemical restraints on an individual which is not in compliance with Federal or State laws and administrative regulations. https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/MMPInformationandGuidance/MMPReportingRequirements

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 and from 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 Texas demonstration in demonstration years 1–5 (March 1, 2015–December 31, 2020) on service utilization and quality of care outcomes among Texas demonstration eligible beneficiaries. As in the prior evaluation report, we excluded enrollees from one MMP due to past concerns about the completeness and reliability of the submitted encounter data.

For this analysis, we used an intent-to-treat (ITT) approach that included all FFS Medicare-Medicaid beneficiaries eligible for the demonstration, not just those who enrolled in the MMPs. 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. In the analyses presented in this section, enrolled beneficiaries account for approximately 41 percent of all eligible beneficiaries (including FFS beneficiaries and MMP enrollees in the denominator) in demonstration year 5.[35]

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 and quality of care 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 C*** and ***Appendix D*** for more detail on our comparison group and 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 percentage 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 the outcome in both the demonstration and comparison groups, then the interpretation of the DinD estimate is that the demonstration group 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.

[35] The enrollment percentages reported in this section may be different from what was reported in ***Section 3.2, Eligibility and Enrollment*** because of the timing for completion and submitting the finder file versus the SDRS. Moreover, the sample used in this analysis excludes eligible beneficiaries who enrolled in Medicare Advantage, reducing the size of the denominator, which results in an increase in the percentage of the population enrolled. Thus, the percentage enrolled in this sample is also different from what is reported in ***Section 6, Demonstration Impact on Cost Savings***.

The forest plots (e.g., see ***Figure 5-1***) 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 on these two special populations. We present the demonstration effects separately for the 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 describes only demonstration DinD impact estimates that are statistically significant with 95 percent confidence intervals. Estimates that are not statistically significant at this level are not discussed unless otherwise noted when discussing yearly estimates. We rescaled the monthly and annual DinD estimates to reflect percentage points (for binary outcomes) and frequency per 1,000 beneficiary months (for count outcomes) for ease of interpretation. For a complete list of DinD estimates with 95 and 90 percent confidence intervals, see ***Appendix E***.

This analysis applied the Texas demonstration's Medicaid 1915(c) waiver-based exclusion criterion specified in the three-way contract on the FAI website, which removed 1 to 1.5 percent of monthly observations from the demonstration group each year. The First Evaluation Report and Preliminary Second Evaluation Report did not apply this exclusion due to the lack of available and reliable Medicaid waiver data for all years. The addition of 2 demonstration years resulted in a subsequent removal of approximately 6 to 12 percent of the comparison group and 2 to 4 percent of the demonstration group per year due to the Medicare Advantage exclusion. These additional exclusions had no impact on the direction and significance of previously reported annual impact estimates for service utilization and quality of care outcomes for demonstration years 1 through 3. In general, even with 2 additional years of data, the cumulative impact estimates for service utilization and quality of care presented in this report are similar to those presented in the Preliminary Second Evaluation Report.

Finally, this analysis includes demonstration year 5 (calendar year 2020), when the PHE came into effect. The PHE likely changed service utilization patterns for the demonstration and comparison groups alike. We included the Pandemic Vulnerability Index as a covariate to account for differences between the demonstration and comparison groups in area-level susceptibility to the effects of the PHE.

5.2 Demonstration Impact on Service Utilization Among Eligible Beneficiaries

Overall, the demonstration decreased the monthly probability of any SNF admission by 11.4 percent and decreased the probability of having any long-stay NF use by 10.1 percent, relative to the comparison group. However, the demonstration also increased the probability of having any ED visits in a month by 5.6 percent, relative to the comparison group. There were no demonstration impacts on the probability of any inpatient admission or the number of physician visits.

5.2.1 Cumulative Impact Over Demonstration Years 1–5

The demonstration is intended to increase the use of outpatient care and HCBS, while decreasing inpatient care, ED visits, and long-stay NF use through improvements in access to the full range of medical services, behavioral health services, LTSS, and improvements in quality of care and care coordination.

Table 5-1 shows the cumulative impacts of the demonstration on service utilization. Both the monthly probability of any SNF admission and the probability of having any long-stay NF use decreased more in the demonstration group than in the comparison group, a favorable finding for the demonstration. However, counter to the goals of the demonstration, there also was an increase in the probability of any ED visits, relative to the comparison group. There was no demonstration effect on the probability of any inpatient admission or the number of physician visits.

Table 5-1
Cumulative demonstration impact on select service utilization measures in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Measure	Group	Adjusted mean for predemonstration period	Adjusted mean for demonstration period	Regression-adjusted DinD estimate (95% confidence interval)	Relative difference (%)	*p*-value
Monthly probability of any inpatient admission (%)	Demonstration	4.78	4.17	–0.04 (–0.30, 0.22)	NS	0.7663
	Comparison	5.07	4.47			
Monthly probability of any ED visit (%)	Demonstration	4.90	5.23	0.29* (0.06, 0.52)	5.6	0.0152
	Comparison	5.09	5.13			
Monthly number of physician E&M visits per 1,000 beneficiaries	Demonstration	1246.20	1240.46	–29.66 (–76.02, 16.70)	NS	0.2099
	Comparison	1169.35	1192.26			
Monthly probability of any SNF admission (%)	Demonstration	1.68	1.21	–0.17* (–0.33, –0.01)	–11.4	0.0320
	Comparison	1.83	1.52			
Annual probability of any long-stay NF use (%)	Demonstration	20.60	15.83	–1.82*** (–2.77, –0.87)	–10.1	0.0002
	Comparison	21.00	17.97			

*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. Green and red color-coded shading indicates where the direction of the DinD estimate was favorable or unfavorable; green indicates favorable, and red indicates unfavorable.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data, and Minimum Data Set data.

ED Visits

- Although the monthly probability of any ED visit increased in both the demonstration and comparison groups, the increase was larger for the demonstration group. Therefore, the cumulative effect of the demonstration on the monthly probability of any ED visits was an increase of 0.29 percentage points, relative to the comparison group. Compared to the monthly average predicted probability of any ED visit during the demonstration period among the comparison group, this impact represents a 5.6 percent increase in the probability of any ED visit in the demonstration group.
  - The demonstration's cumulative impact on ED visits is similar to the impact reported in the Preliminary Second Evaluation Report. As described in ***Section 3.3, Service Coordination***, the CMT identified concerns related to MMP care plans and service coordinators' performance in conducting follow-up contact after initiation of a care plan. Moreover, State officials indicated that providers rarely participated in integrated care team meetings. To the extent that establishing a care plan is central to service coordination across providers, these challenges may have forestalled any reductions in ED visits among demonstration eligible beneficiaries.

SNF Admissions

- The decrease in the probability of any SNF admission was larger among the demonstration group than among the comparison group. Thus, the cumulative effect of the demonstration was a decrease in the monthly probability of any SNF admission by 0.17 percentage points, relative to the comparison group. That change translates to the probability of any SNF admission in the demonstration group being 11.4 percent lower than the predicted monthly probability among the comparison group during the demonstration period.
  - The decrease in SNF admissions is consistent with cumulative impact estimates from the Preliminary Second Evaluation Report and aligns with the goals of the demonstration. One potential explanation may be ongoing delays in authorization of SNF services early in the demonstration arising from challenges in the NF payment process (see ***Section 2.2, Overview of Integrated Delivery System*** in the First Evaluation Report), as reported by provider representatives. Additionally, the DinD estimate is likely driven by an initial decrease in SNF use observed from the predemonstration period to the first demonstration year, as the overall trend in SNF use in the demonstration group was stable from demonstration years 2 through 4, though there was an increase observed in demonstration year 5 (see ***Table E-4*** in ***Appendix E***). The unadjusted increase observed in demonstration year 5 may be related to broader service utilization changes related to the PHE.

Long-Stay NF Admissions

- The probability of any long-stay NF admissions decreased by 1.82 percentage points more in the demonstration group than in the comparison group, which translates to a 10.1 percent decrease in the probability of any long-stay NF admissions among the

demonstration group relative to the predicted annual probability during the demonstration period among the comparison group (see ***Table 5-1***).

- The demonstration's favorable cumulative impact on long-stay NF admissions corresponds with the findings in the Preliminary Secondary Evaluation Report. The decrease in long-stay 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 annual probability of any long-stay NF use decreased faster in the demonstration group than in the comparison group.

These results may be impacted by the service use and health characteristics of the demonstration-enrolled population. The ITT evaluation design mitigates selection bias due to voluntary enrollment in the demonstration. However, if the demonstration enrolls beneficiaries who have lower service utilization rates and lower mortality than beneficiaries who are eligible but not enrolled, then such favorable selection may impact the likelihood of observing any favorable demonstration impacts on these measures. This is because the initial pattern of service utilization would be lower, and thus there would be less room for further reduction, than among higher-risk beneficiaries. To determine whether these characteristics are evident in the demonstration-enrolled group, we conducted the following supplemental analyses:

- A cohort analysis comparing predemonstration utilization outcome trends among beneficiaries who were enrolled at any point during demonstration year 1 with those among beneficiaries who were eligible but never enrolled in demonstration year 1.
- A cross-sectional analysis of mortality rates among the enrolled, eligible but not enrolled, and the comparison group during the entire study period.

Findings from these supplemental analyses are included in ***Appendix G*** and indicate that the demonstration year 1 enrolled cohort had lower rates of inpatient admissions, ED visits, and SNF admissions during the predemonstration period than the cohort that was eligible but never enrolled in demonstration year 1. Similarly, enrolled beneficiaries had lower rates of mortality during the demonstration period than the eligible but not enrolled group. These findings provide some evidence of favorable selection among enrolled beneficiaries, and differences in relative trends from predemonstration year 2 to demonstration year 1 may help to explain null findings on inpatient utilization, but not necessarily increases in emergency department use or decreases in SNF use (see ***Section G.1.1, Pre-enrollment Cohort Analysis*** in ***Appendix G***).

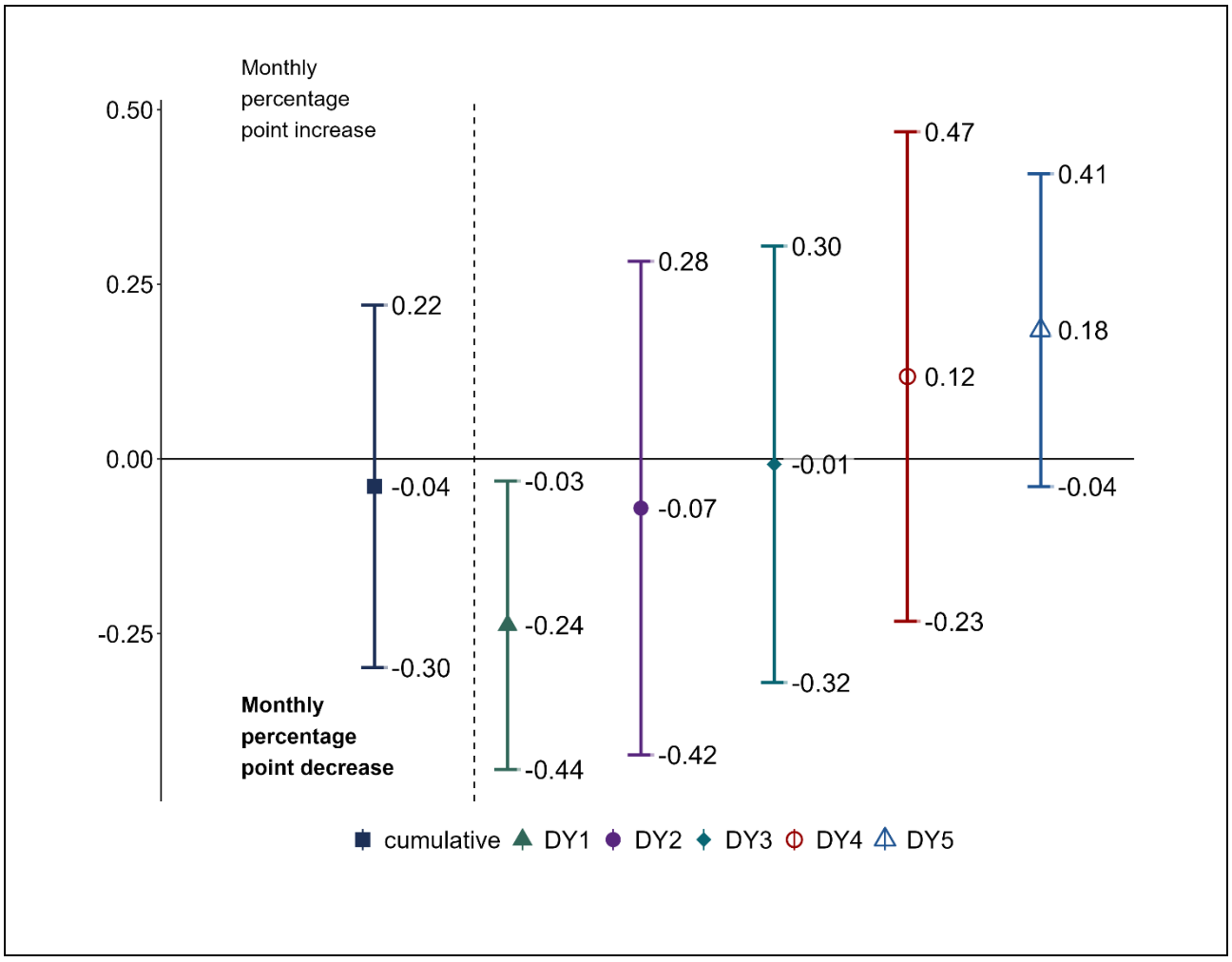
5.2.2 Demonstration Impact in Each Demonstration Year

Figures 5-1 through ***5-5*** 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 included as points of comparison. These annual impact estimates indicate that the Texas demonstration decreased the probability of any monthly SNF admission and the probability of any long-stay NF use in 4 of 5 demonstration years, relative to the comparison group. There are annual increases in the monthly probability of ED visits in 4 of 5 demonstration years. Although point estimates are increasing year-over-year, the annual impact estimates for the monthly probability of any inpatient admission are not statistically significant in 4 of 5

demonstration years. Similarly, the annual impact estimates for the number of physician visits are not statistically significant in any of the demonstration years.

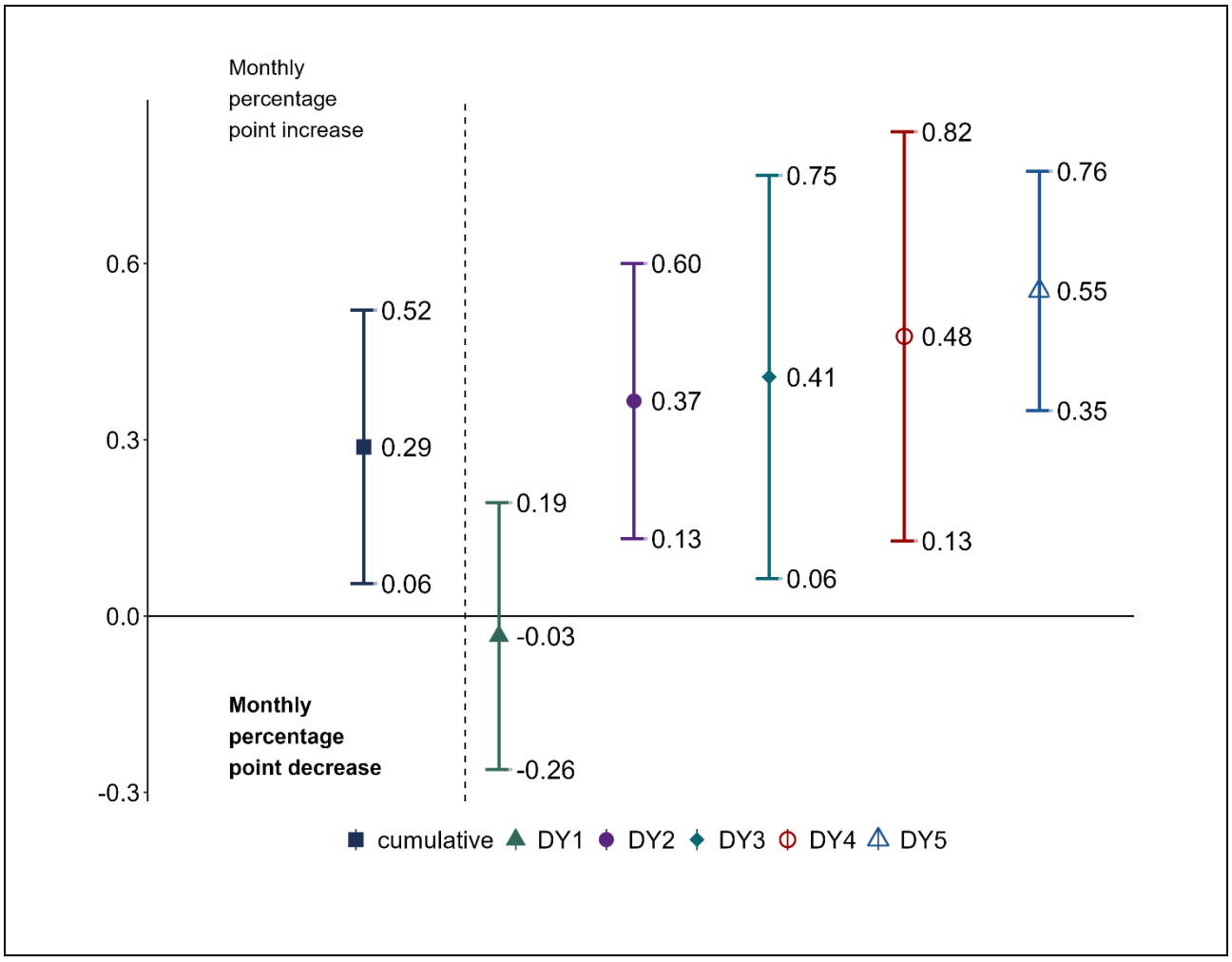
- The Texas demonstration decreased the probability of any monthly SNF admission in demonstration years 1 through 4 when compared with the comparison group, but the impact estimate was not statistically significant in demonstration year 5 (see ***Figure 5-4***).
  - The annual estimates for the probability of any monthly SNF admission are similar to the cumulative estimates for this outcome. As previously noted, these findings may be the result of delays in authorizing SNF service use.
- Except in demonstration year 1, the Texas demonstration decreased the probability of any long-stay NF use, when compared with the comparison group, in all demonstration years (see ***Figure 5-5***).
  - These favorable annual estimates are consistent with the cumulative impact estimate reported above.
- The probability of any ED use was not statistically significant in demonstration year 1 but increased in demonstration years 2 through 5, relative to the comparison group (see ***Figure 5-2***). The magnitude of the impact estimate grew larger and more unfavorable over time.
  - Despite service coordination efforts to promote access to primary care and forestall ED use, the demonstration was not successful in decreasing the probability of ED visits. As described in ***Section 3.3, Service Coordination***, inconsistent implementation of completed care plans may have contributed to this finding.

Figure 5-1
Cumulative and annual demonstration effects on inpatient admissions in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



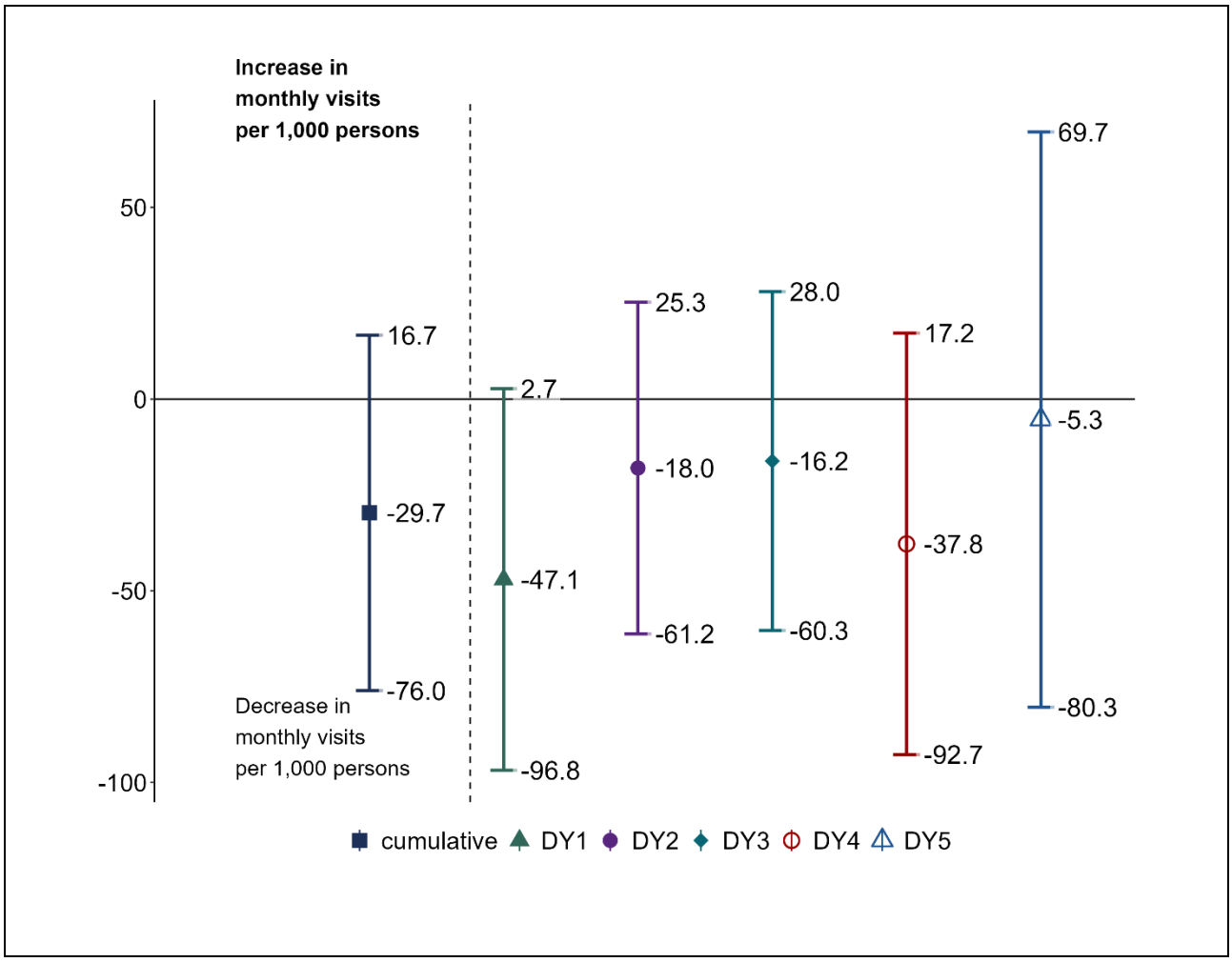
DY = demonstration year
NOTES: 95 percent confidence intervals are show. The expected direction of effect if a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-2
Cumulative and annual demonstration effects on ED visits in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



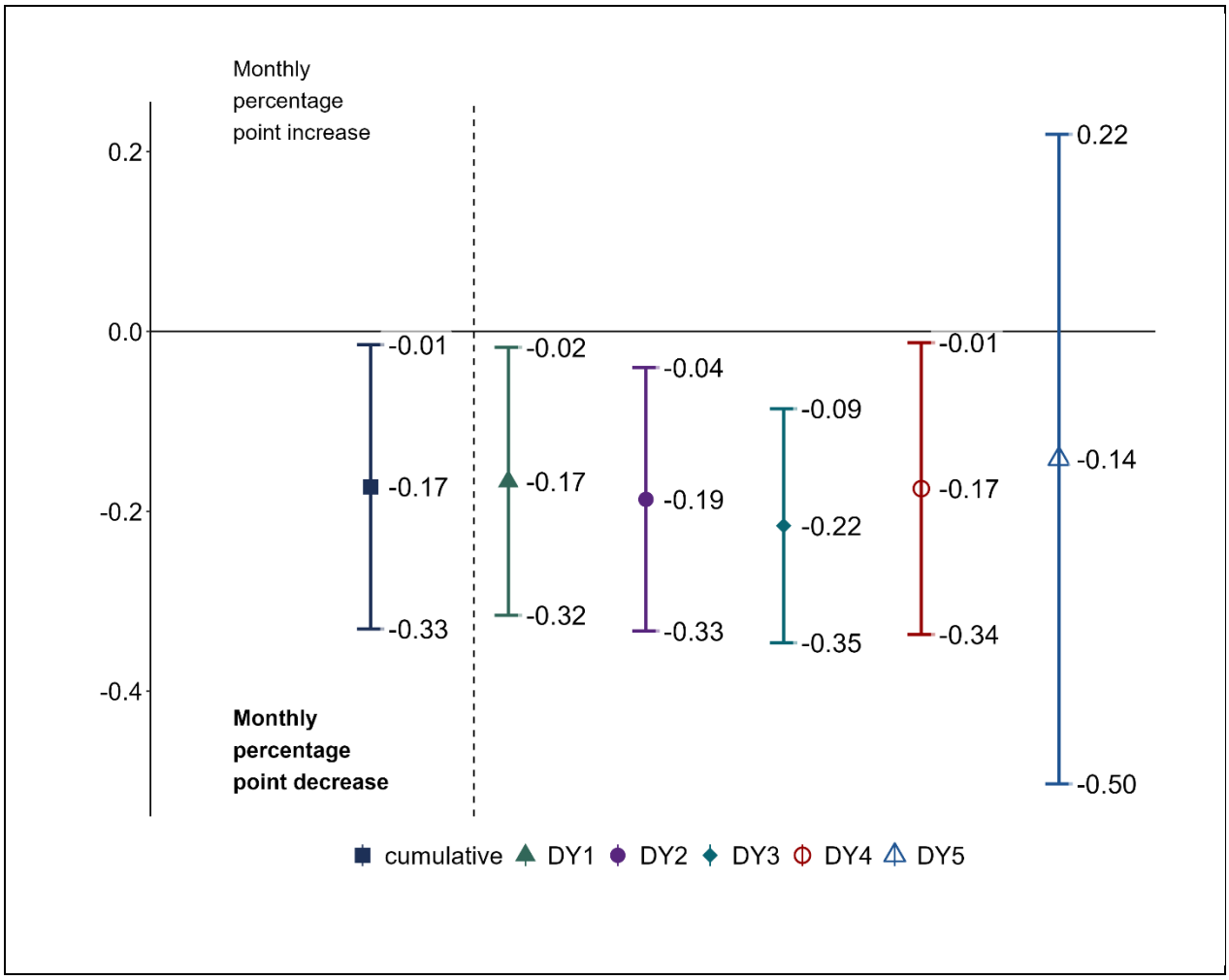
DY = demonstration year; ED = emergency department.
NOTES: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-3
Cumulative and annual demonstration effects on physician E&M visits in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



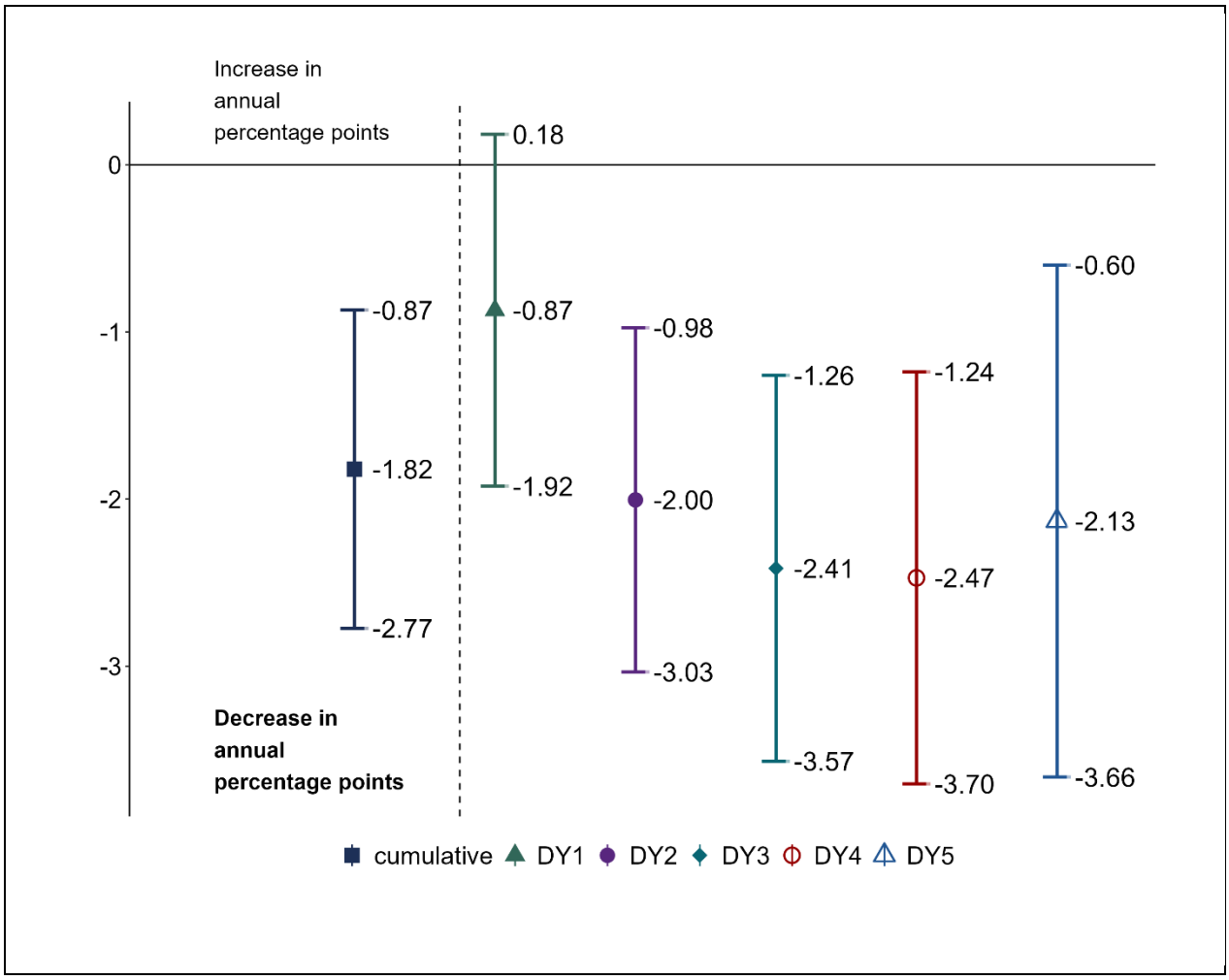
DY = demonstration year; E&M = evaluation and management.
NOTES: 95 percent confidence intervals are shown. The expected direction of effect is an increase.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-4
Cumulative and annual demonstration effects on SNF admissions in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



DY = demonstration year; SNF = skilled nursing facility
NOTES: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-5
Cumulative and annual demonstration effects on long-stay NF use in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



DY = demonstration year; NF = nursing facility
NOTES: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Minimum Data Set data.

5.3 Demonstration Impact on Quality of Care Among Eligible Beneficiaries

The demonstration resulted in an 8.8 percent increase in the monthly number of preventable ED visits and a 3.7 percent increase in the number of all-cause 30-day readmissions, relative to the comparison group.

5.3.1 Cumulative Impact Over Demonstration Years 1–5

The Texas demonstration is expected to improve quality of care as a result of care coordination and increased access to needed services. However, there was no cumulative impact consistent with these goals over the first 5 years of the demonstration, as evaluated by several

common measures of medical quality of care. ***Table 5-2*** illustrates the cumulative impact and adjusted means for these measures.

Table 5-2
Cumulative demonstration impact on select quality of care measures in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Measure	Group	Adjusted mean for predemonstration period	Adjusted mean for demonstration period	Regression-adjusted DinD estimate (95% confidence interval)	Relative difference (%)	*p*-value
Monthly number of preventable ED visits per 1,000 beneficiaries	Demonstration	26.11	29.67	2.51*** (1.18, 3.84)	8.8	0.0002
	Comparison	27.46	28.38			
Monthly probability of any ACSC admission, overall (%)	Demonstration	0.84	0.78	–0.00 (–0.07, 0.06)	NS	0.8950
	Comparison	0.94	0.88			
Monthly probability of any ACSC admission, chronic (%)	Demonstration	0.53	0.55	0.01 (–0.04, 0.06)	NS	0.6480
	Comparison	0.61	0.61			
Probability of 30-day follow-up after mental health discharge (%)	Demonstration	29.82	26.35	2.45 (–1.27, 6.17)	NS	0.1970
	Comparison	36.27	30.08			
Number of all-cause 30-day readmissions per 1,000 discharges	Demonstration	273.58	266.08	9.88* (0.05, 19.70)	3.7	0.0488
	Comparison	288.43	269.94			

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$
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. Red color-coded shading indicates where the direction of the DinD estimate was unfavorable.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Preventable ED Visits

- The Texas demonstration resulted in a 2.51 visit increase in the monthly number of preventable ED visits per 1,000 beneficiaries, relative to the comparison group. The average monthly number of preventable ED visits increased among both the demonstration and comparison groups, but the increase was larger among demonstration group. Relative to the predicted average monthly number of preventable ED visits during the demonstration period among the comparison group, this impact represents an 8.8 percent increase in the number of preventable ED visits among the demonstration group.

  - This finding is consistent with the cumulative impact estimate for preventable ED visits in the Preliminary Second Evaluation Report. The increase in the monthly average number of preventable ED visits in the demonstration group appears to have been driven by the annual trends observed in both the demonstration-enrolled and non-enrolled populations. For example, the monthly number of preventable ED visits per 1,000 beneficiaries increased from 23.8 to 26.6 among the enrolled population and from 30.5 to 32.7 among the eligible non-enrolled population, from demonstration years 1 through 4.

All-Cause 30-Day Readmissions

- Although the average number of all-cause 30-day readmissions decreased in both the comparison group and the demonstration group, the decrease was smaller in the demonstration group. Thus, the cumulative effect of the demonstration was an increase of 9.88 in the number of all-cause 30-day readmissions per 1,000 discharges relative to the comparison group. That change translates to a 3.7 percent increase among the demonstration group relative to the predicted annual number of readmissions among the comparison group during the demonstration period.
  - The cumulative estimate is driven by the annual demonstration effects observed in demonstration years 4 and 5 (see ***Table E1*** in ***Appendix E***).

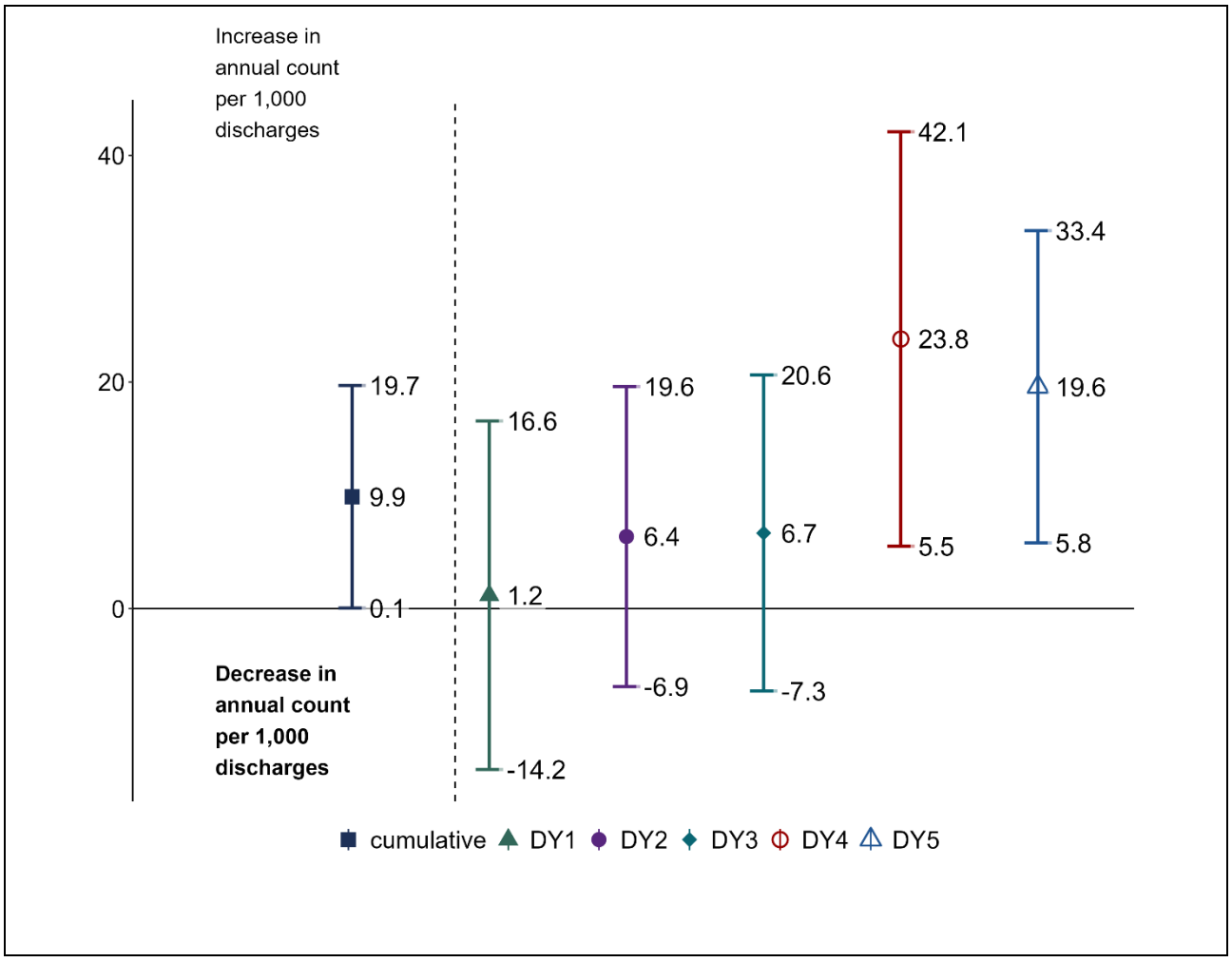
5.3.2 Demonstration Impact in Each Demonstration Year

Figures 5-6 through ***5-10*** show the demonstration's annual effects on 30-day readmission, preventable ED visits, ACSC admissions (overall), ACSC admissions (chronic), and 30-day follow-up post mental health discharge, with the cumulative impact also shown as points of comparison. These annual impact estimates indicate that the Texas demonstration increased the number of 30-day readmissions in demonstration years 4 and 5 and increased the number of preventable ED visits in demonstration years 2 through 5.

- The demonstration increased the number of 30-day readmissions in demonstration years 4 and 5 by 23.8 and 19.6 readmissions per 1,000 discharges per year, respectively, relative to the comparison group. The impact estimates for readmissions for demonstrations years 1 through 3 were not statistically significant (see ***Figure 5-6***).
  - Despite reports from MMP officials indicating some improvements in provider participation in care coordination and coordinating discharge planning with hospitals (see ***Section 3.3, Service Coordination*** in the Preliminary Second Evaluation Report), later demonstration years show greater increases in 30-day readmission in the demonstration group than in the comparison group. ***Appendix E, Table E-5*** shows the risk-adjusted 30-day readmission rate in the demonstration group increased incrementally from the predemonstration period through the demonstration period, while remaining relatively stable in the comparison group.

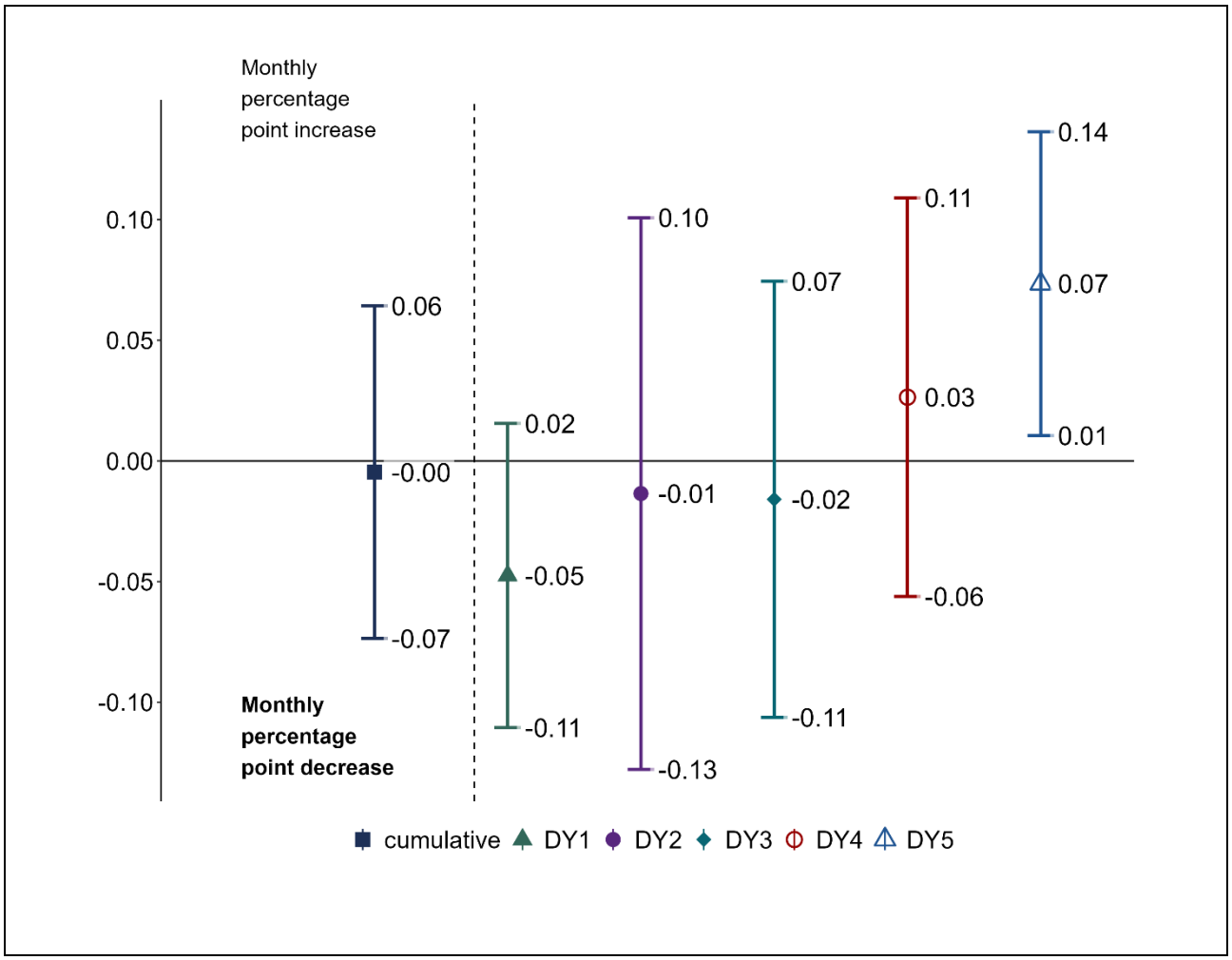
- The demonstration was associated with a 0.07 and 0.10 percentage point increase in both overall and chronic ACSC admissions, respectively, relative to the comparison group during demonstration year 5.
  - Implementation challenges described in ***Section 3.3, Service Coordination*** in the Preliminary Second Evaluation Report, and in ***Section 3.3, Service Coordination*** of this report may have been exacerbated by the PHE during 2020. Even so, there were decreases in the monthly percent of beneficiaries with any overall or chronic ACSC admissions in both the comparison and demonstration groups from demonstration year 4 to demonstration year 5 (See ***Appendix E, Table E-5***). However, the comparison group had a steeper decrease in admissions from the predemonstration period to demonstration year 5 than the demonstration group.
- The demonstration increased the monthly average number of preventable ED visits in demonstration years 2 through 5, relative to the comparison group. The annual impact estimates grew larger—and in a more unfavorable direction—over time (see ***Figure 5-9***).
  - Increases in the number of preventable ED visits beginning in demonstration year 2 may in part be explained by implementation challenges such as service coordinator recruitment and challenges in reaching new enrollees within 90 days of enrollment (see ***Section 3.3, Service Coordination*** in the Preliminary Second Evaluation Report) or inconsistent communication between service coordinators, providers, and members, as noted in ***Section 3.3, Service Coordination*** of this report. These issues may have limited the demonstration's capacity to manage and coordinate care in a way that forestalls ED visits.

Figure 5-6
Cumulative and annual demonstration effects on 30-day readmissions in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



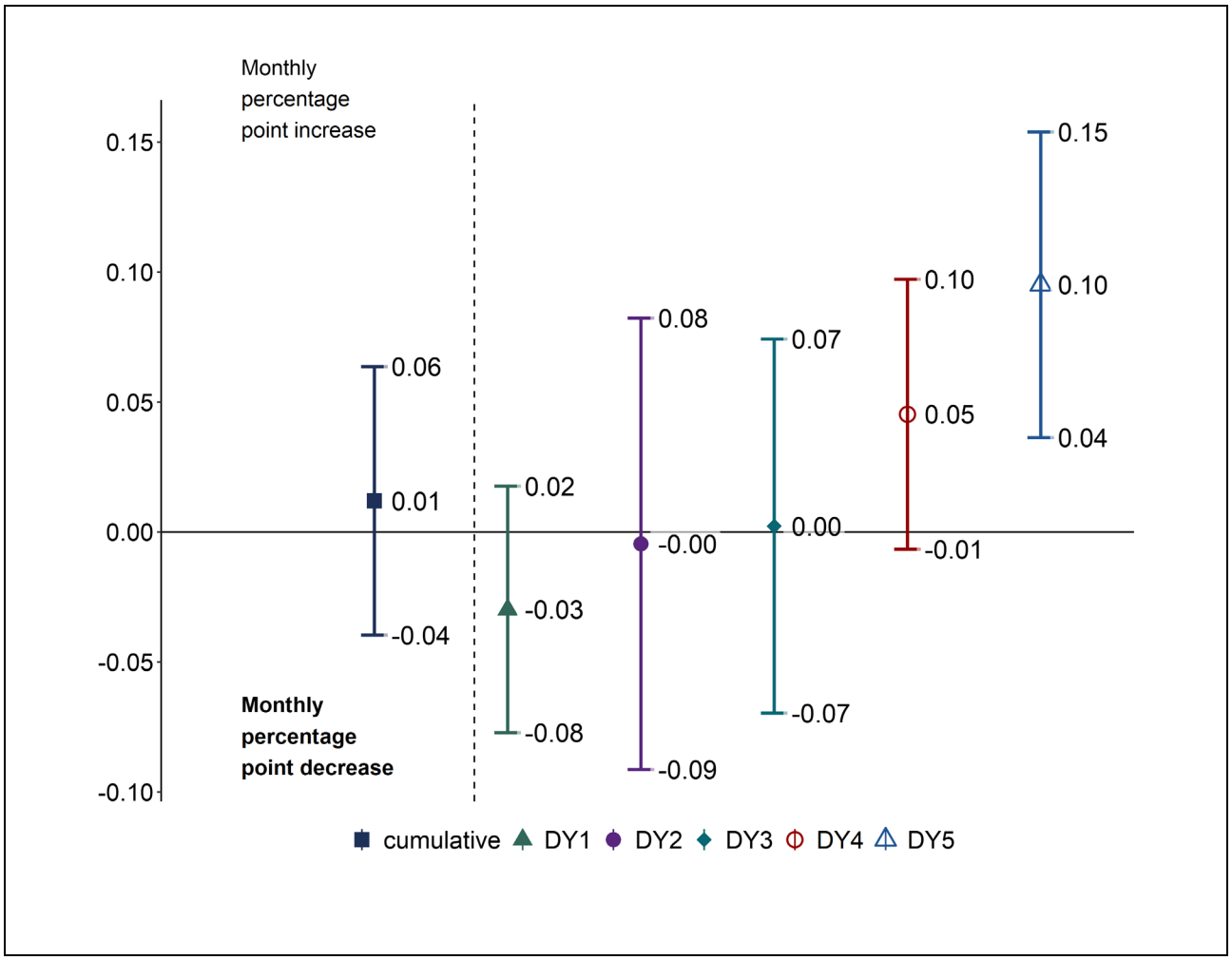
DY = demonstration year
NOTE: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data

Figure 5-7
Cumulative and annual demonstration effects on ACSC admissions (overall) in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



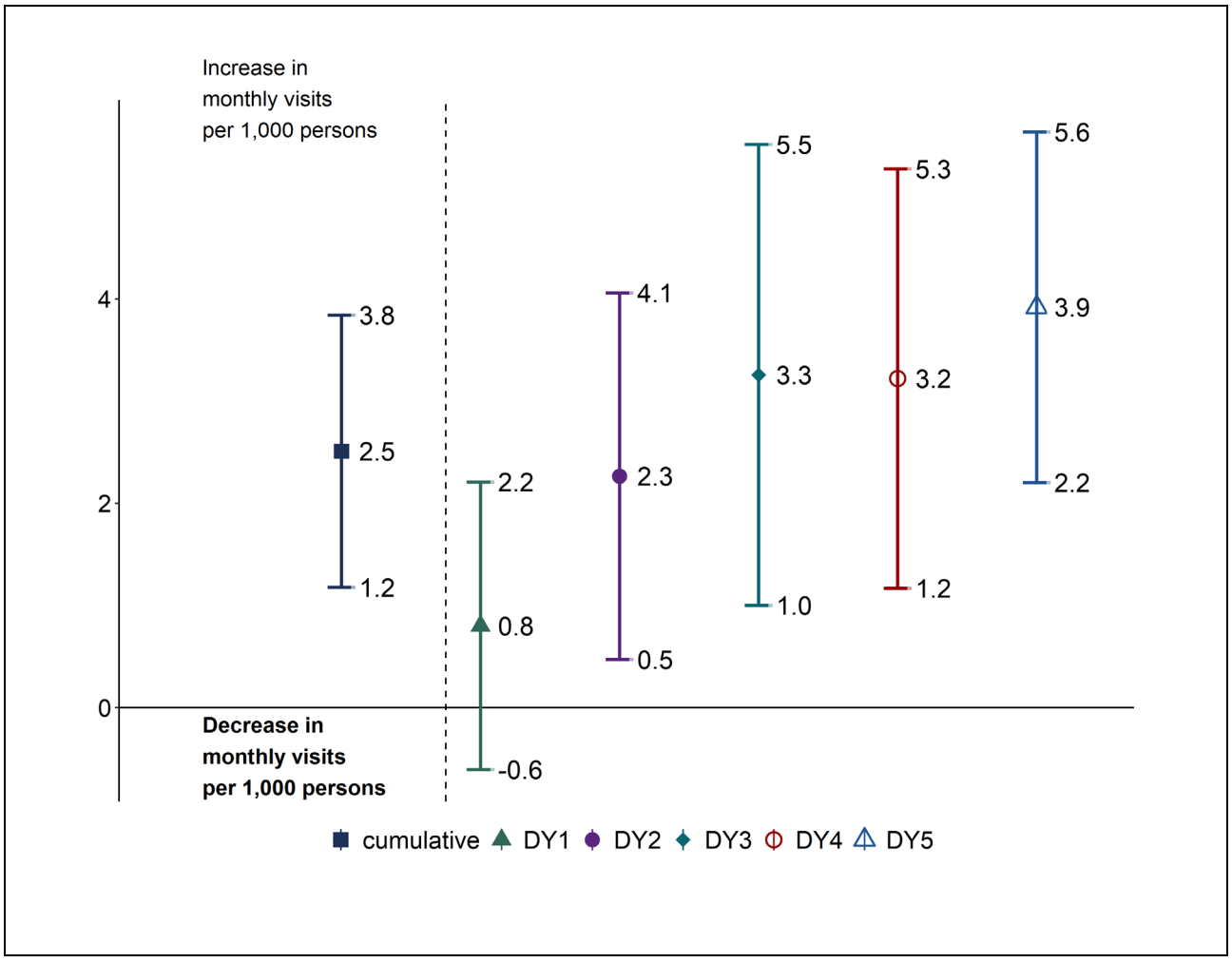
ACSC = ambulatory care sensitive condition; DY = demonstration year
NOTE: 95 percent confidence intervals are shown. The expected direction of effect is a decrease
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-8
Cumulative and annual demonstration effects on ACSC admissions (chronic) in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



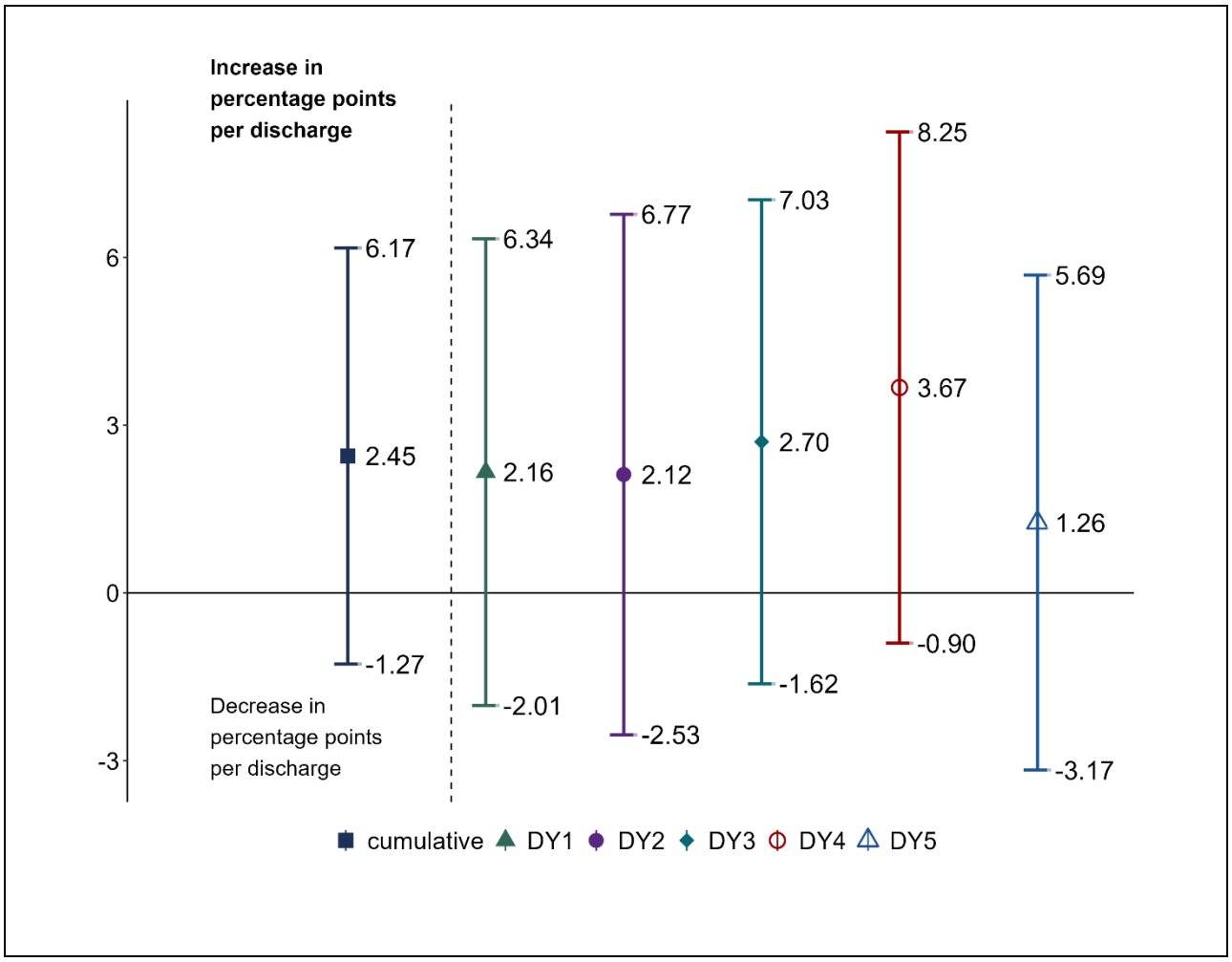
ACSC = ambulatory care sensitive condition; DY = demonstration year.
NOTE: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-9
Cumulative and annual demonstration effects on preventable ED visits in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



DY = demonstration year; ED = emergency department.
NOTE: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

Figure 5-10
Cumulative and annual demonstration effects on 30-day follow-up post mental health discharge in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



DY = demonstration year.
NOTE: 95 percent confidence intervals are shown. The expected direction of effect is a decrease.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

See ***Tables E-4*** through ***E-8*** in ***Appendix E***, 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

The demonstration impact among those using LTSS was not different from that among the non-LTSS population.

The demonstration effect of those with an SPMI was a greater increase in the probability of any inpatient admission and in the number of preventable ED visits, relative to the demonstration effect for those without an SPMI.

Among the key goals of the demonstration are to improve quality of care and to lower spending for those with LTSS use and those with SPMI. Care coordination by the MMPs integrates medical care, behavioral health, and LTSS. The demonstration is expected to particularly impact service utilization and quality of care among eligible beneficiaries with LTSS needs or who have an SPMI (see group definitions in ***Appendix D***). However, the demonstration impact among those using LTSS was not different from that among the non-LTSS population, although the demonstration impacts were less favorable for beneficiaries with SPMI than for those without SPMI (see ***Appendix E, Tables E-2*** and ***E-3***).

In addition to these populations of focus, other subpopulations examined included those who were enrolled and those who were eligible but not enrolled (non-enrollees). See ***Tables E-7*** and ***E-8*** in ***Appendix E*** for unadjusted descriptive statistics for demonstration enrollees and non-enrollees.

Additionally, further analyses were conducted to examine unadjusted service utilization results by racial and ethnic groups among the eligible population for select utilization measures: inpatient admissions, ED visits (without subsequent inpatient admission), physician evaluation and management (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 10.2 percent of the demonstration eligible population in demonstration year 5 had any LTSS use. The demonstration did not have statistically significant differential impacts on service utilization or quality for those with LTSS use relative to those with no LTSS use (see ***Table 5-3***).

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

Table 5-3
Cumulative demonstration effect on service utilization and quality of care measures, beneficiaries with LTSS use versus those without LTSS use in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Measure	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Service Utilization Measures						
Monthly probability of any inpatient admission (%)	LTSS	0.09	NS	0.6970	–0.36, 0.54	0.01
	Non-LTSS	0.08	NS	0.3152	–0.07, 0.22	
Monthly probability of any ED visit (%)	LTSS	0.27	NS	0.2782	–0.21, 0.74	–0.06
	Non-LTSS	0.32	6.9	0.0075	0.09, 0.56	
Monthly number of physician E&M visits per 1,000 beneficiaries	LTSS	1.13	NS	0.9887	–154.86, 157.12	–42.32
	Non-LTSS	43.45	5.7	0.0037	14.11, 72.79	
Monthly probability of any SNF admission (%)	LTSS	–0.06	NS	0.7759	–0.44, 0.33	–0.07
	Non-LTSS	0.02	5.0	0.0004	0.01, 0.03	
Quality of Care Measures						
Monthly number of preventable ED visits per 1,000 beneficiaries	LTSS	2.04	NS	0.2905	–1.75, 5.83	–0.33
	Non-LTSS	2.37	8.5	0.0025	0.83, 3.91	
Monthly probability of any ACSC admission, overall (%)	LTSS	0.03	NS	0.7077	–0.11, 0.17	0.00
	Non-LTSS	0.03	NS	0.3091	–0.02, 0.08	
Monthly probability of any ACSC admission, chronic (%)	LTSS	0.00	NS	0.9118	–0.07, 0.08	–0.02
	Non-LTSS	0.02	NS	0.3337	–0.02, 0.07	
Probability of 30-day follow-up after mental health discharge (%)	LTSS	4.08	NS	0.3415	–4.33, 12.49	1.42
	Non-LTSS	2.66	NS	0.2178	–1.57, 6.89	
Number of all-cause 30-day readmissions per 1,000 discharges	LTSS	2.39	NS	0.7938	–15.54, 20.32	–4.41
	Non-LTSS	6.80	NS	0.2388	–4.51, 18.10	

*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.

5.4.2 Beneficiaries with Serious and Persistent Mental Illness

As indicated in ***Table D-1*** in ***Appendix D***, about 40.6 percent of the demonstration eligible population in demonstration year 5 had an SPMI. On two measures, the demonstration impacted those with SPMI differently than it did those without SPMI (see ***Table* 5-4**). The

demonstration effect on the probability of any monthly inpatient admission was 0.24 percentage points higher among those with SPMI than among those without SPMI. Similarly, the demonstration effect on the number of preventable ED visits was higher by 2.00 visits per 1,000 beneficiaries among those with SPMI than among the non-SPMI population.

Similar to the findings from the Preliminary Second Evaluation Report, these findings show that some outcomes were less favorable for beneficiaries with SPMI than for non-SPMI beneficiaries and may in part be explained by care coordination challenges described in ***Section 3.3, Service Coordination***. Care management may be more complex for beneficiaries with an SPMI than for those without an SPMI; thus, care coordination may have been uniquely challenging for this population. See ***Table E-3*** in ***Appendix E*** for estimates of the demonstration effect for beneficiaries with SPMI and those without SPMI in each demonstration year.

Table 5-4
Cumulative demonstration effect on service utilization and quality of care measures, beneficiaries with SPMI versus those without SPMI in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Measure	Special population	Demonstration effect relative to comparison group	Relative difference (%)	p-value	95% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Service Utilization Measures						
Monthly probability of any inpatient admission (%)	SPMI	0.13	NS	0.4398	–0.20, 0.46	0.24*
	Non-SPMI	–0.11	NS	0.1577	–0.26, 0.04	
Monthly probability of any ED visit (%)	SPMI	0.44	6.2	0.0027	0.15, 0.72	0.20
	Non-SPMI	0.23	6.0	0.0228	0.03, 0.43	
Monthly number of physician E&M visits per 1,000 beneficiaries	SPMI	–47.00	NS	0.2282	–123.46, 29.45	–39.34
	Non-SPMI	–7.66	NS	0.6451	–40.27, 24.94	
Monthly probability of any SNF admission (%)	SPMI	–0.20	NS	0.1058	–0.45, 0.04	–0.09
	Non-SPMI	–0.11	–14.3	0.0046	–0.19, –0.03	
Quality of Care Measures						
Monthly number of preventable ED visits per 1,000 beneficiaries	SPMI	3.83	10.1	0.0002	1.83, 5.83	2.00*
	Non-SPMI	1.83	8.5	0.0001	0.89, 2.76	
Monthly probability of any ACSC admission, overall (%)	SPMI	0.02	NS	0.7058	–0.09, 0.14	0.03
	Non-SPMI	–0.01	NS	0.5964	–0.06, 0.03	

(continued)

Table 5-4 (continued)
Cumulative demonstration effect on service utilization and quality of care measures, beneficiaries with SPMI versus those without SPMI in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Measure	Special population	Demonstration effect relative to comparison group	Relative difference (%)	p-value	95% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Monthly probability of any ACSC admission, chronic (%)	SPMI	0.03	NS	0.4548	–0.05, 0.10	0.02
	Non-SPMI	0.01	NS	0.8080	–0.04, 0.05	
Number of all-cause 30-day readmissions per 1,000 discharges	SPMI	16.96	5.5	0.0184	2.86, 31.07	15.47
	Non-SPMI	1.49	NS	0.8111	–10.76, 13.74	

*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 SPMI; the difference-in-differences estimate is reported in ***Table 5-2***.
SOURCE: RTI International analysis of Medicare fee-for-service claims and encounter data.

SECTION 6

Demonstration Impact on Cost Savings

The demonstration had no impact on Medicare expenditures over the first 5 demonstration years.

Similarly, the demonstration had no impact on Medicaid expenditures over the first 5 demonstration years.

6.1 Methods Overview

As part of the capitated financial alignment model, Texas, CMS, and MMPs entered into a three-way contract to provide services to MMP enrollees. The MMPs receive three separate, risk-adjusted prospective capitated payments. The first two payments are from the Medicare program (for Medicare Parts A and B, Medicare Part D), and the third comes from the State (for Medicaid services). To develop a Medicare Parts A/B capitated rate for the MMPs, CMS combined the Medicare FFS Standardized County Rates and the Medicare Advantage projected payment rates. Each component contributed to the final rate proportionally to the target population that would be enrolled in each program absent the demonstration.[36] CMS adjusts the Medicare component for each enrollee using CMS's hierarchical risk adjustment model to account for differences in the characteristics of enrollees. Additionally, CMS applies aggregate saving percentages to the Medicare Parts A and B rates and the State applies the same savings percentages to the Medicaid rates. For further information on the rate development and risk adjustment process, see the Memorandum of Understanding and the three-way contract on the FAI website.[37]

This section presents both the Medicare Parts A and B cost savings analysis and the Medicaid cost savings analysis for demonstration years 1 through 5 (March 2015 through December 2020).

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 among the demonstration eligible population, and mimics the real-world implementation of the demonstration. For this analysis, enrolled beneficiaries account for approximately 26 percent of all eligible beneficiaries (including FFS beneficiaries, MMP enrollees, and MA enrollees in the denominator) in demonstration year 5.[38] The remaining 74 percent of those in the demonstration group are beneficiaries who are eligible for an MMP but are not enrolled (non-enrollees). Descriptive

[36] Joint Rate Setting Process for the FAI's Capitated Model (cms.gov)

[37] For the MOU, see https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/TXMOU.pdf; for the three-way contract (original), see https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/TXContract08012017.pdf.

[38] The enrollment percentages reported in this section may be different from what was reported in ***Section 3.2, Eligibility and Enrollment*** because of the timing for completion and submitting the finder file versus the SDRS; and they may be different from those reported in ***Section 5, Demonstration Impact on Service Utilization and Quality of Care*** because of the inclusion of beneficiaries enrolled in Medicare Advantage.

results for the entire eligible population are provided in ***Tables F-4*** through ***F-13*** in ***Appendix F***. Results from a separate analysis, using a more restricted definition of MMP enrollees and their comparison group counterparts, are included in ***Table F-16*** in ***Appendix F***.

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. The comparison group methodology is similar to the service utilization analyses (see ***Appendix C*** for details), but also includes eligible beneficiaries enrolled in MA.

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-2*** in ***Appendix F*** summarizes each adjustment and the application of the adjustments to FFS expenditures or to the capitation rate.

6.2 Demonstration Impact on Medicare Parts A and B Costs

Table 6-1 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 period. The adjusted mean monthly expenditures increased in both the demonstration and comparison groups. The cumulative DinD estimate of $0.88 per member per month (PMPM), a relative difference between the demonstration and comparison groups of 0.06 percent, was not statistically significant ($p = 0.9873$). These results indicate that the Texas demonstration had no cumulative impact on Medicare Parts A and B costs relative to the comparison group.

Table 6-1
Cumulative demonstration impact on monthly Medicare Parts A and B costs in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Group	Adjusted mean for predemonstration period ($)	Adjusted mean for demonstration period ($)	Adjusted coefficient DinD ($)	Relative difference (%)	*p*-value
Demonstration	1,503.54	1,597.90	0.88	0.06	0.9873
Comparison	1,459.19	1,549.92			

DinD = difference-in-differences.
SOURCE: RTI analysis of Medicare claims.

In addition, we estimated the effect of the demonstration in each demonstration year. As shown in ***Figure 6-1***, there was no demonstration effect on Medicare Parts A and B costs in any demonstration years included in the analysis. 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.

The Medicare analysis and magnitude of the results in this report are slightly different from those presented in the Preliminary Second Evaluation Report, although in both reports, the

conclusion is the same, and there is no significant impact of the demonstration on Medicare costs. This is due to two changes in the analysis that make the results more accurate.

First, we were able to adjust the MMP payments to account for the large experience rebate payments from the MMPs back to the Medicare program. This adjustment decreased the MMP payments in demonstration year 1 through demonstration year 3, relative to what was observed in the Preliminary Second Evaluation Report.

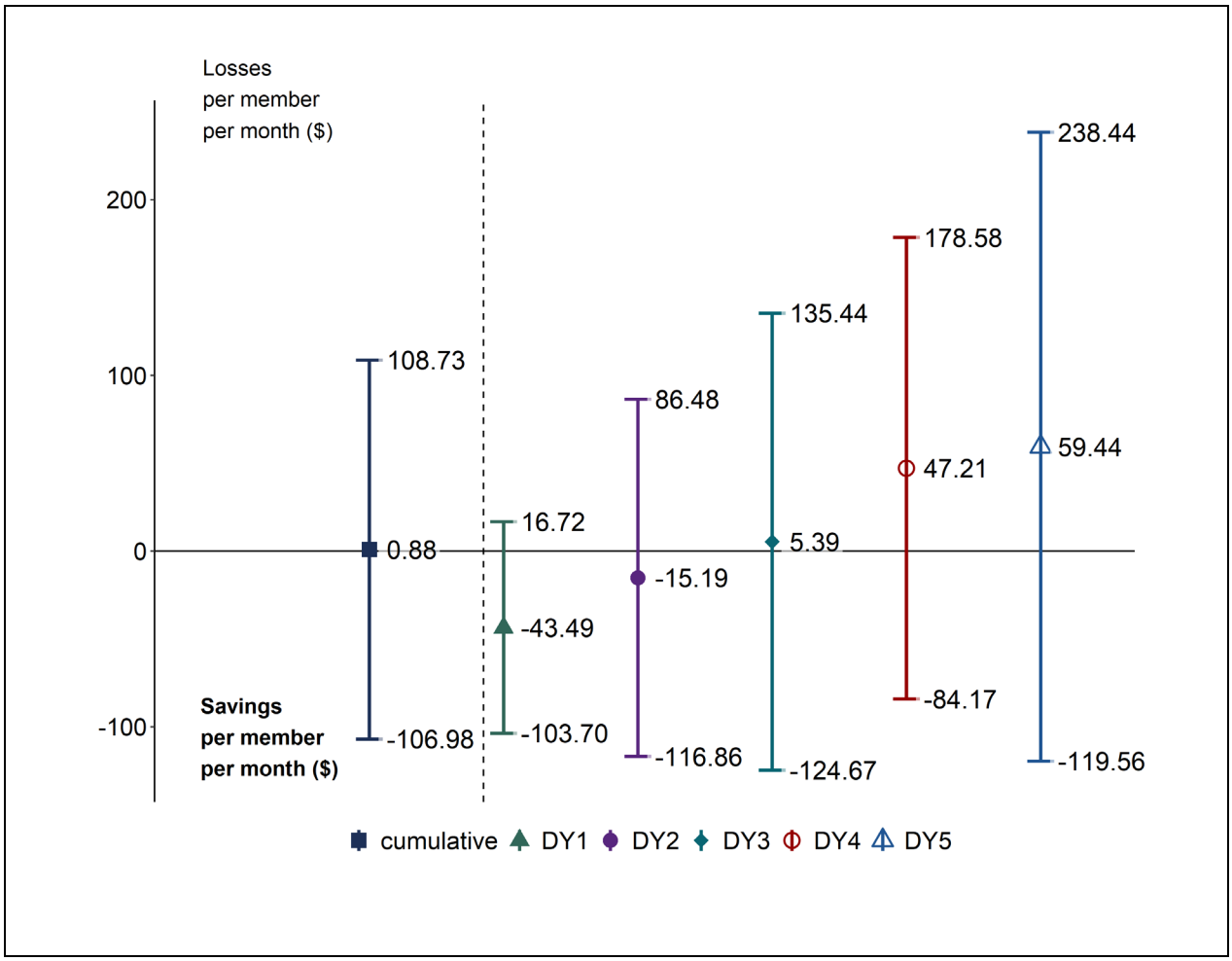
Second, in the current report, we were able to use the Medicaid MAX and TAF enrollment and eligibility files to identify and remove beneficiary-month observations from the demonstration group that were not eligible for the FAI due to participation in other Medicaid waivers. These exclusions resulted in removing approximately 1 percent of monthly observations in the demonstration group during the baseline period, and less than 1 percent during the demonstration period who were otherwise eligible for the demonstration.[39] See ***Appendix C*** for greater detail on these exclusions. In this way, the sample more accurately reflects the demonstration eligible population than the one reported in the Preliminary Second Evaluation Report.

To better understand these results, we conducted additional descriptive analyses. The details of these analyses, along with an interpretation and discussion of the results, are provided in ***Appendix G***. In the first analysis we compared MMP rates with the expected FFS expenditures that would have otherwise occurred for the enrolled population, in demonstration years 1 and 5. The extent to which the MMP capitated payment rates are set higher or lower than what CMS would have paid under traditional FFS Medicare could affect the impact estimates. Overall, we found that MMP rates are higher than enrollees' anticipated FFS experience in both demonstration year 1 and demonstration year 5 (see ***Tables G-4*** and ***G-5*** in ***Appendix G***). In addition, the PHE in 2020, which in general reduced Medicare utilization and expenditures, could be a contributor to this difference between the RTI normalized FFS rate (which reflects actual 2020 utilization and expenditures) and the MMP rates in demonstration year 5, which reflect historical and projected costs and therefore is not based on 2020 program experience.

We also conducted an analysis of spending and HCC characteristics during the predemonstration period. We found that enrollees had lower costs and were healthier than those who were demonstration eligible but never enrolled (see ***Figures G-4*** and ***G-5*** in ***Appendix G***).

[39] We applied Medicaid waiver exclusions to the demonstration group only because 1915(c) waiver programs in the comparison group states do not necessarily target a similar population. Applying these exclusions to the demonstration group only avoids additional biases caused by removing Medicaid waiver enrollees from the comparison group as well.

Figure 6-1
Cumulative and annual demonstration effects on monthly Medicare Parts A and B costs in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



DY = demonstration year.
NOTE: 95 percent confidence intervals are shown. "Losses"/"**Savings"** indicated increased/decreased costs for eligible beneficiaries in the demonstration group, relative to the comparison group.
SOURCE: RTI analysis of Medicare claims.

6.3 Demonstration Impact on Medicaid Costs

Table 6-2 shows the magnitude of the DinD estimate of the cumulative demonstration impact on Medicaid costs, both in absolute dollar amount and relative to the adjusted mean expenditure level in the comparison group during the demonstration period. The comparison group for the Medicaid cost analysis is a within-State comparison group and only includes beneficiaries from Texas. A Texas-only comparison group serves as a better comparison group for the demonstration eligible population, due to a significant change in the Texas Medicaid program that occurred at the end of the predemonstration period: a transition to managed care for LTSS. The multi-State comparison group costs were not parallel to the demonstration group costs in the predemonstration period, but the Texas-only comparison group did have parallel costs. Medicaid-specific propensity weights balance the characteristics of the demonstration

group and the comparison group (see ***Section C.6*** in ***Appendix C***). The adjusted mean monthly expenditure increased from the predemonstration period to the demonstration period in both the demonstration group and comparison group. The cumulative DinD estimate of $20.01 PMPM, which amounts to a relative difference of 1.44 percent of the adjusted mean expenditure for the comparison group during the demonstration period, is not statistically significant ($p = 0.5127$). This finding suggests that, overall, the Texas demonstration had no effect on Medicaid costs relative to the comparison group.

Table 6-2
Cumulative demonstration effect on Medicaid costs for eligible beneficiaries in Texas demonstration years 1–5, March 1, 2015–December 31, 2020

Group	Adjusted mean for predemonstration period ($)	Adjusted mean for demonstration period ($)	Adjusted coefficient DinD ($)	Relative difference (%)	*p*-value
Demonstration	1,097.43	1,230.82	20.01	1.44	0.5127
Comparison	1,260.81	1,389.59			

DinD = difference-in-differences.
NOTE: Comparison group only includes Texas.
SOURCE: RTI analysis of Medicaid claims.

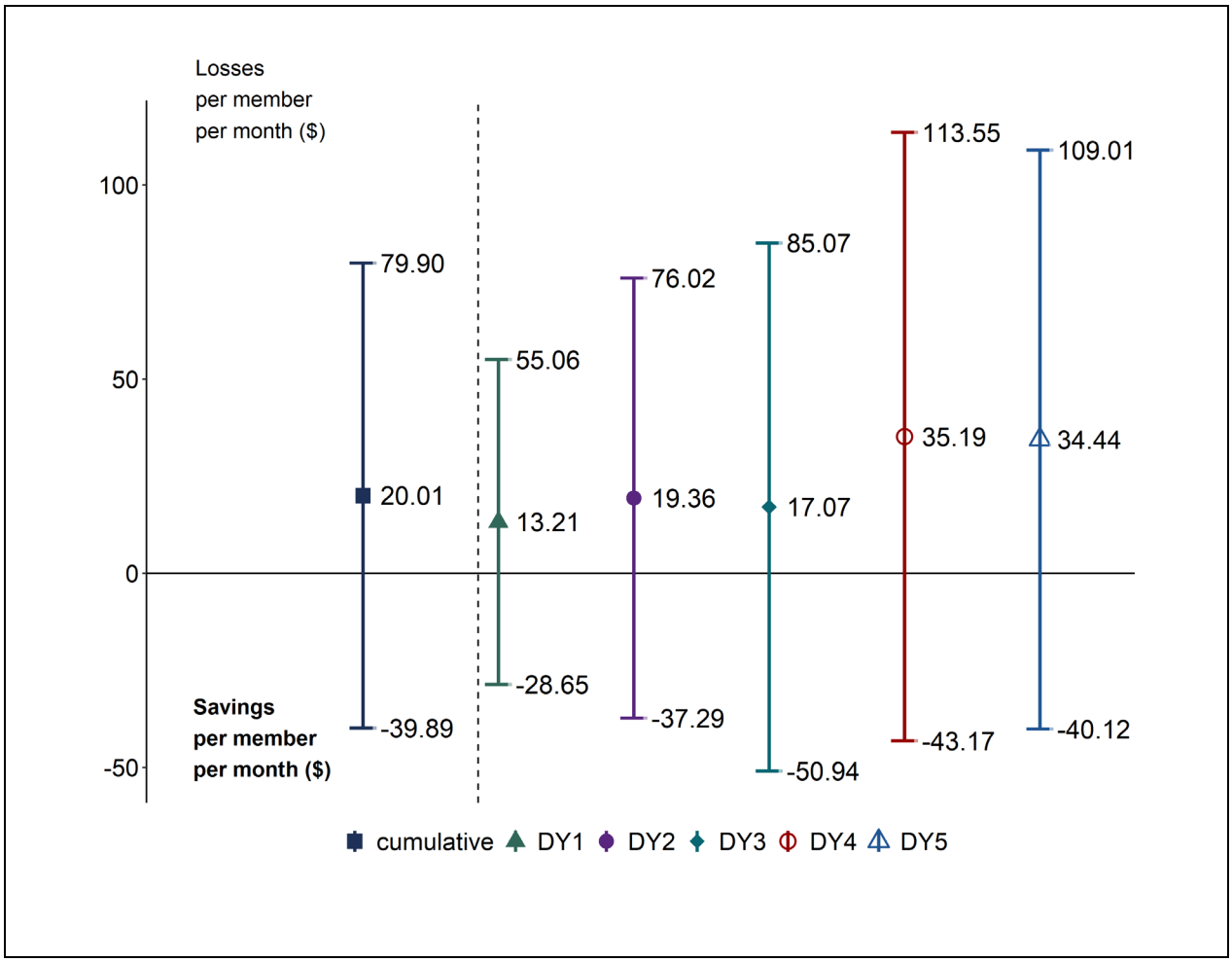
In addition, we estimated the effect of the demonstration in each of the 5 demonstration years included. As shown in ***Figure 6-2***, the demonstration did not have a statistically significant effect in any demonstration years (as shown by all the confidence intervals crossing $0), indicating no impact of the demonstration on Medicaid costs relative to the comparison group in any demonstration years. The coefficients in each of the 5 demonstration years were small in magnitude and varied from $13.21 PMPM to $35.19 PMPM. These estimates rely on the ITT analytic framework, exclude Medicaid prescription drug costs, and rely upon the completeness and the correctness of the Medicaid cost data included in the Transformed Medicaid Statistical Information System (T-MSIS).

The Medicaid analysis and results in this report are somewhat different from those presented in the Preliminary Second Evaluation Report, where the impact was negative (indicating savings) and statistically significant. As previously described, the demonstration group used in this report more accurately reflects the exclusion criteria for the demonstration. The individuals excluded in the predemonstration period had higher-than-average Medicaid costs. Once they were removed, the predemonstration Medicaid costs for the remaining demonstration group were lower than before, resulting in our current estimate of statistically nonsignificant cost increases.

However, large experience rebate payments from the MMPs to the State are not incorporated into this analysis of Medicaid costs, unlike the Medicare cost analysis, which adjusted the Medicare PMPMs for the experience rebates paid back to the Medicare program. These experience rebate payments were not reported in the T-MSIS data and therefore are not included in the results reported in ***Figure 6-2***; we do not have access to data on comparable payments made to managed care plans among the comparison group or the eligible but not enrolled portion of the demonstration group. However, as a sensitivity analysis, we estimated the

DinD analysis with PMPMs that incorporated the experience rebate payments paid to the State. Although the magnitude of the cumulative effect was lower ($10.14 versus $20.01), the overall impact remained statistically nonsignificant (see ***Section F.6*** in ***Appendix F*** for additional details).

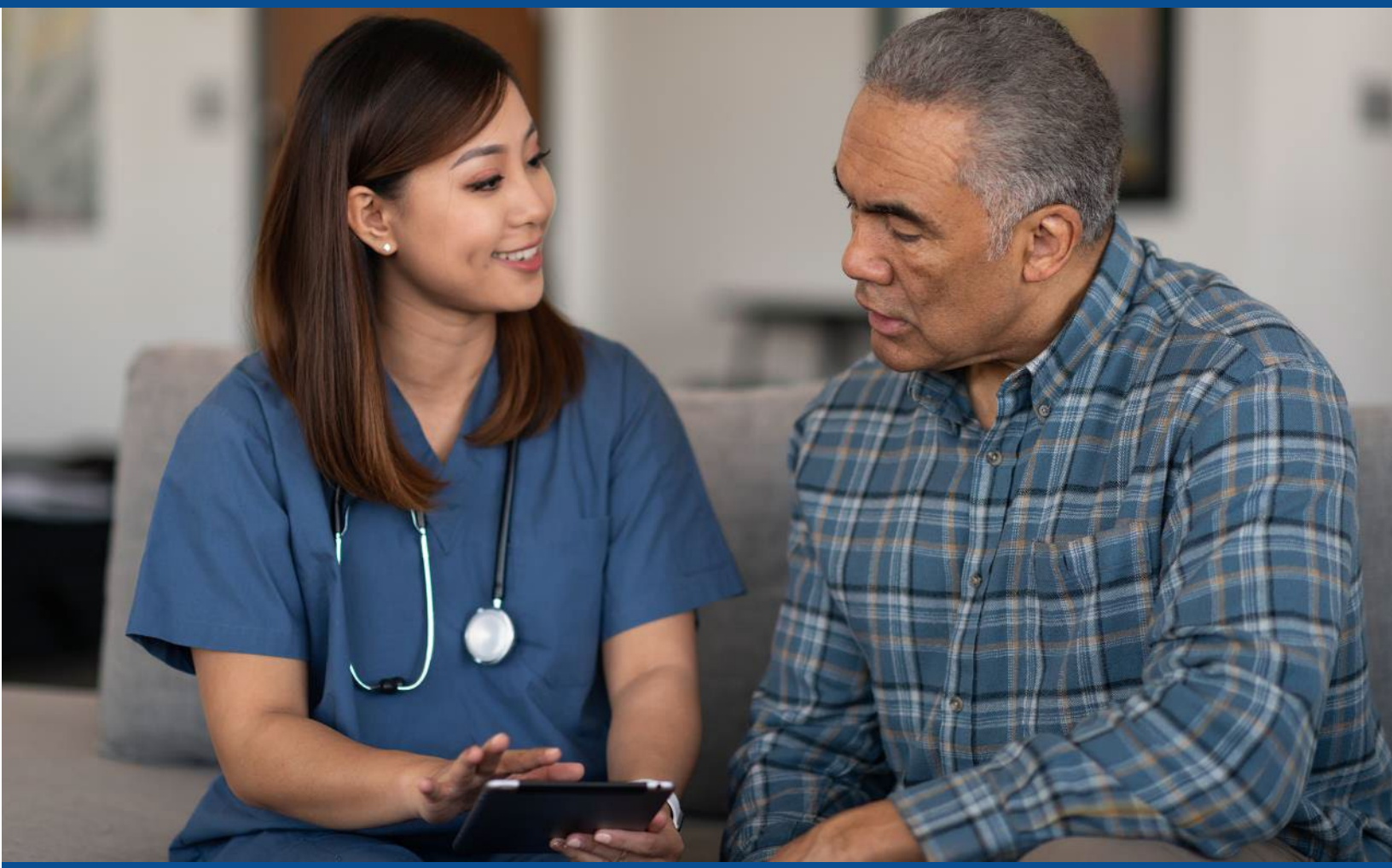
Figure 6-2
Cumulative and annual demonstration effects on monthly Medicaid costs in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020



DY = demonstration year.
NOTE: 95 percent confidence intervals are shown. "Losses"/"**Savings"** indicated increased/decreased costs for eligible beneficiaries in the demonstration group, relative to the comparison group.
SOURCE: RTI analysis of Medicare claims.

SECTION 7

Conclusions



7.1 Implementation Successes, Challenges, and Lessons Learned

Over the course of the demonstration, the State took several major steps to develop and improve its system for managing its Medicaid managed care programs, including the Dual Eligible Integrated Care demonstration under the FAI. For example, following a comprehensive reorganization, the State implemented systems for improved managed care monitoring by streamlining processes and implementing greater consistency in performance measurement. For example, HHSC began implementing the collection of beneficiary-level data to monitor access to attendant care and service coordination across its Medicaid managed care programs. It also continued to push MCOs, including MMPs, to realign payment incentives across its Medicaid program through its value-based payment initiative and launched several initiatives focused on improving access to care, including expanding access to attendant services and telehealth.

At the same time, the demonstration encountered several barriers that undermined the demonstration's ability to achieve its core goals. Despite the CMT's earlier efforts to improve the quality of service coordination, stakeholders continued to cite challenges. The CMT found that care plans were not sufficiently person-centered. HHSC reported that enrollees and their primary care providers rarely participated in integrated care team meetings, and service coordinators did not adequately monitor the care plan implementation or comply with the requirement to meet with enrollees twice annually. A provider representative said that service coordinators did not communicate with LTSS providers. A beneficiary advocate felt that the demonstration had not lived up to its promise because the State had not articulated consistent standards for what service coordinators were required to do. HHSC's efforts to better monitor the quality of the service coordination reflected its recognition of the importance of service coordination in improving beneficiary outcomes.

We also heard from a beneficiary advocate about another potential barrier to achieving the demonstration's goals—STAR+PLUS MCOs and MMPs were paid higher reimbursement rates for enrollees residing in NFs than for those living in other settings. However, the service utilization findings show a significant decrease in short- and long-stay admissions relative to the comparison group (see ***Section 5, Demonstration Impact on Service Utilization and Quality of Care***).

HHSC cited several implementation challenges. In the early phases of the demonstration, HHCS encountered major challenges associated with integrating the Medicare and Medicaid enrollment data and processes and with the process of streamlining the submission of encounter data. In these cases, integrating systems was initially challenging and labor intensive, but over time, those issues were resolved. HHSC emphasized the value of investing time in communicating and developing relationships with CMS and the MMPs as an important lesson learned.

HHSC identified the resource intensity associated with coordinating program operations and policy across the State, CMS, and MMPs as another major challenge. For example, amending the three-way contract had involved the long process of resolving policy differences, with HHSC, CMS, and MMPs all having a role in reviewing and approving changes. Coordinating program operations across the State, CMS, and MMPs also slowed the process of

finalizing rates and Medicare and Medicaid revenue to then finalize experience rebates. For HHSC, the challenges of resolving policy discrepancies between the State and CMS may have reflected differences in the State's interest in creating consistency and efficiency across the State's Medicaid managed care programs, whereas the Federal government has an interest in consistency with Medicare policy and procedures.

HHSC noted that managing the demonstration, particularly in the context of the PHE, and managing the challenges associated with integration and coordination were important successes. In addition, HHSC cited certain design features as successes. For providers, HHSC cited the value of streamlined billing that allows providers to submit Medicare and Medicaid claims to one health plan. For enrollees, HHSC cited the value of having one service coordinator to coordinate both Medicare and Medicaid services for enrollees. CMS cited the demonstration's success at responding to challenges related to the PHE.

Based on a comparison between the original demonstration design and the demonstration features as implemented, the Texas Dual Eligible Integrated Care demonstration was implemented with fidelity to the core elements of its original design, including the eligibility criteria, the scope of covered services,[40] the care model, and the payment methodology (see ***Section 2.1, Changes in Demonstration Design***).[41] The demonstration was originally scheduled to end at the end of December 2018 but was ultimately extended through the end of December 2023.[42] Five MMPs participated in the demonstration through 2021; one of the five dropped out at the end of that year.

Although the demonstration was implemented with fidelity to the design, the reach of the demonstration (percentage of dually eligible beneficiaries enrolled) was less than HHSC and MMPs desired, with only about a quarter of those eligible enrolled. Several factors may have contributed to this, including the 2-year delay in implementing monthly passive enrollment, the 40 percent of eligible beneficiaries who chose to permanently opt-out of the demonstration, and the concern some eligible beneficiaries had of losing their service providers.

The dose of the demonstration (the percentage of enrollees who could not be reached by the MMP) changed over the course of the demonstration. Once monthly passive enrollment was implemented in 2017, about a quarter of enrollees were categorized as unable-to-reach, and therefore did not receive service coordination. In 2020, and at the onset of the PHE, that number increased to about a third, with limited access to enrollees residing in NFs likely contributing to this increase.

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[40] Non-medical transportation was "carved in" to the MMP benefit plan effective June 1, 2021. This change was made across all of the Medicaid managed care programs.

[41] During the PHE, the demonstration design was temporarily modified. For example, Medicaid eligibility was extended for the duration of the PHE and the care model was modified to permit telephonic assessments and service coordination.

[42] In 2022, as part of the contract year 2023 Medicare Advantage and Part D rulemaking process, capitated model states were given an opportunity to extend their demonstrations (no later than December 31, 2025) to convert their MMPs into integrated Dual Eligible Special Needs Plans, contingent upon submitting to CMS a transition plan by October 1, 2022. As of September 2023, CMS and the State were negotiating an extension through either December 31, 2024 or December 31, 2025.

HHSC had not decided on its future plans for integrating care for dually eligible beneficiaries at the time of this report. However, HHSC said it would like to build upon certain features of the MMP model, such as streamlined billing for providers and service coordination for enrollees.

7.2 Demonstration Impact on Service Utilization and Costs

Over the course of the demonstration, there were mixed impacts on several service utilization and quality of care measures among Texas demonstration eligible beneficiaries relative to the comparison group. Specifically, the demonstration was associated with favorable decreases in the probabilities of any SNF admission and any long-stay NF use relative to the comparison group. On the other hand, demonstration eligible beneficiaries experienced unfavorable increases in all-cause 30-day readmissions, ED visits, and preventable ED visits relative to the comparison group. The demonstration did not impact inpatient admissions, ACSC admission (overall and chronic), 30-day follow-up after mental health discharge, or physician E&M visits.

Despite the previously described implementation successes, several limitations may have mitigated the demonstration's impact on service utilization and quality of care measures. As described in ***Section 3.3, Service Coordination***, the CMT identified concerns related to MMP care plans and care coordinators' performance in conducting follow-up contact after initiating a care plan. Moreover, the State indicated that providers rarely participated in integrated care team meetings. To the extent that establishing a care plan is central to service coordination across providers, these challenges may have forestalled any reductions in ED visits among demonstration eligible beneficiaries. The cumulative increase in all-cause 30-day readmissions is driven by increases during demonstration years 4 and 5, although the explanation for these year-specific increases is unclear (see ***Section 5.2.2, Demonstration Impact in Each Demonstration Year***). The favorable impacts on SNF admissions may be due in part to challenges in the NF payment processes that led to ongoing delays in authorization of SNF services early in the demonstration (see ***Section 2.2, Overview of Integrated Delivery System*** in the First Evaluation Report). Additionally, the DinD estimate is likely driven by an initial decrease in SNF use observed from the predemonstration period to the first demonstration year, as the overall trend in SNF use among in the demonstration group was stable from demonstration years 2 through 4 (see ***Section 5.2.2, Demonstration Impact in Each Demonstration Year***). Finally, the PHE in demonstration year 5 may have influenced these results, but the patterns of service utilization observed during demonstration year 5 were similar between the demonstration and comparison groups.

Beneficiaries with SPMI comprised roughly 40.6 percent of the demonstration eligible population in demonstration year 5, and with respect to two outcomes, the demonstration impacted these beneficiaries more negatively than those without SPMI. Specifically, the demonstration was associated with an increased probability of any inpatient admission and an increased number of preventable ED visits for those with SPMI relative to the demonstration effect for those without SPMI. These findings may in part be explained by service coordination challenges described in ***Section 3.3, Service Coordination***. Care management for beneficiaries with an SPMI may be more complex than those without an SPMI and thus uniquely challenging for those population as a result.

The cumulative cost analysis found no statistically significant impact on Medicare spending over the 5 demonstration years. The analysis of individual demonstration years also found no statistically significant impact on Medicare spending during any of the 5 demonstration years. The Medicare cost outcomes were adjusted to account for significant experience rebates paid back to the Medicare program in the first 3 demonstration years; by reducing the PMPMs during the first 3 demonstration years, this adjustment reduced the magnitude of the cumulative impact. The cost analyses consider the 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 directly linked to actual service utilization.

Similarly, the cumulative cost analysis found no statistically significant impact on Medicaid spending over the 5 demonstration years, or on any of the individual demonstration years. The main Medicaid cost analysis focused on Medicaid expenditures reported in the Medicaid claims data. In the sensitivity analysis that adjusted the enrollee PMPMs to account for the large Medicaid experience rebate payments from the MMPs to the State (see ***Table F-28*** in ***Appendix F***), the impact on Medicaid spending, while smaller in magnitude, was still an increase but was not statistically significant. An assumption as part of the ITT study design is that enrollment in the demonstration will be large enough to statistically observe a change in the monthly average PMPM, relative to the comparison group. In Texas, enrollment was only approximately 26 percent of the eligible demonstration population, so any potential savings might not be large enough to observe when averaged across the entire demonstration eligible population. Moreover, ***Figure G–4*** in ***Appendix G*** shows that demonstration enrollees were less sick than the eligible non-enrolled group, which resulted in lower monthly spending for the enrolled population from the predemonstration to the demonstration periods (see ***Figure G-5*** in ***Appendix G***). With a healthier enrolled population using fewer services, it may be more difficult to achieve savings through care management.

7.3 Summary

The core design elements of the Texas Dual Eligible Integrated Care demonstration—including the eligibility criteria, covered services, care model, and payment methodology—has remained consistent since the demonstration began in 2015. Demonstration enrollees accounted for just under a quarter of eligible Medicare-Medicaid beneficiaries, limiting the reach of the demonstration. The impact of the demonstration was further limited by the level of enrollee engagement—over the course of the demonstration, MMPs were unable to engage about a quarter of their new enrollees in the assessment and person-centered planning process, with enrollee engagement further reduced during the PHE.

The effectiveness of the demonstration appears to have been further limited by weak service coordination, as evidenced by poor enrollee engagement, a lack of person-centeredness and enrollee participation in the planning process, service coordinators and providers not coordinating or communicating well, and poor follow-up on service plan implementation. Some of these challenges were identified early in the demonstration, prompting the CMT to conduct several quality improvement activities. These efforts were supplemented by HHSC's overall quality assurance strategy for the STAR+PLUS program. In addition, early in the demonstration, HHSC undertook a major reorganization and launched several reform initiatives aimed at

streamlining and improving the quality of its oversight for all of its Medicaid managed care programs. In spite of these efforts, the quality of the service coordination continued to fall short of the expectations of CMT, providers, and beneficiary representatives. Findings from individual enrollee interviews substantiate these concerns, indicating that enrollees often did not have a strong relationship with their service coordinator. The uneven quality of service coordination may also help to explain the MMPs' uneven performance on quality of care and beneficiary satisfaction measures.

These challenges may have contributed to mixed impacts on service utilization and quality of care measures. The demonstration was associated with favorable decreases in the probability of SNF admissions and long-stay NF use; however, these findings may have been driven, in part, by delays in authorization of SNF services that occurred early in the demonstration and persisted through demonstration year 2. Challenges in establishing relationships with enrollees and developing care plans may have mitigated the demonstration's impact on some of these measures, for example, mitigating efforts to decrease 30-day readmissions, ED visits, and preventable ED visits.

The demonstration had no impact on Medicare or Medicaid expenditures over the first 5 demonstration years, relative to the comparison group. Factors other than demonstration effectiveness, such as the MMP capitation rate and the limited MMP enrollment, may have contributed to the lack of savings.

Although HHSC had not finalized a plan for transitioning the Texas Dual Eligible Integrated Care demonstration to a FIDE-SNP model, its choices will be informed by its experience under the demonstration. HHSC values the benefits of an integrated model for both beneficiaries and providers and aims to continue its efforts to improve service coordination over the remainder of the demonstration. In addition, although HHSC found it challenging to coordinate policy decisions and processes across MMPs and CMS, it values its success at jointly managing the demonstration, and the infrastructure and expertise it has developed for integrating Medicare and Medicaid systems and processes.

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Appendix A

Data Sources

We used the following data sources to prepare this report.

Key informant interviews. The RTI evaluation team conducted virtual site visits in Texas in late 2021. The team interviewed the following individuals: MMP, State and CMS officials; the Ombudsman; a beneficiary advocate; and a provider advocate. To monitor demonstration progress, the RTI evaluation team engaged in periodic phone conversations with the Texas Health and Human Services Commission (HHSC) and CMS. These might have included discussions about new policy clarifications designed to improve plan performance, quality improvement work group activities, and contract management team actions.

Beneficiary interviews. RTI conducted 15 individual interviews with beneficiaries enrolled (or their caregivers) in the Texas Dual Eligible Integrated Care demonstration. The interviews took place between December 2022 and January 2023. Six of the 15 interviews were conducted in Spanish. Among the English-speaking interviews, eight were with beneficiaries enrolled in the Texas Dual Eligible Integrated Care Demonstration and one was with a caregiver. Three Spanish-speaking interviews were with beneficiaries and three were with caregivers.

Surveys. Medicare requires all Medicare Advantage (MA) plans, including Medicare-Medicaid 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 the 2015 through 2021 survey questions. We did not include data for the CAHPS measure *"Percentage of beneficiaries reporting that in past 6 months their personal doctors were usually or always informed about care received from specialists"* because of the lack of data. MMPs either had too few beneficiaries who responded to the question to allow reporting, or the score had low statistical reliability. In response to the PHE, CMS did not require MA plans, including MMPs, to collect CAHPS data for 2020. 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.

Demonstration data. The RTI evaluation team reviewed data provided quarterly by Texas through the State Data Reporting System (SDRS). These reports include eligibility, enrollment, opt-out, and disenrollment data; and information reported by Texas 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 Medicare-Medicaid Plans and submitted to CMS' implementation contractor, NORC.[43,44] Data reported to NORC include core quality measures that all Medicare-Medicaid Plans are required to report, as well as State-specific measures that Texas Dual Eligible Integrated Care demonstration plans are required to report. Due to reporting

[43] Data are reported for 2014-2021.
[44] The technical specifications for reporting requirements are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements.

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[45]; and other publicly available materials on the Texas Dual Eligible Integrated Care demonstration webpage[46] and other pages in the HHSC website.[47]

Complaints and appeals data. Complaint (also referred to as grievance) data are from three separate sources: (1) complaints from beneficiaries reported by Medicare-Medicaid Plans to HHSC, and reported separately to CMS' implementation contractor, NORC[48], through Core Measure 4.2; (2) complaints received by HHSC or 1-800-Medicare and entered into the CMS electronic Complaint Tracking Module (CTM); and (3) qualitative data obtained by RTI on complaints. Appeals data are generated by MMPs and reported to HHSC and NORC, for Core Measure 4.2, and to the Medicare Independent Review Entity (IRE). This report also includes critical incidents and abuse data reported by Texas MMPs to HHSC and CMS' implementation contractor, NORC.

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. Due to the PHE, in 2020 MA plans, including MMPs, were not required to report results for the 2019 measurement year.

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.

Medicaid service data on use of long-term services and supports (LTSS), behavioral health, and other Medicaid-reimbursed services were either not available or not usable in current form for the demonstration period and therefore are not included in this report.

Medicare and Medicaid Cost data. Two primary data sources were used to support the savings analyses, capitation payments and fee-for-service (FFS) Medicare claims. Medicare capitation payments paid to Texas MMPs 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

[45] https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/FinancialModelstoSupportStatesEffortsinCareCoordination.html
[46] https://www.hhs.texas.gov/services/health/medicaid-chip/medicaid-chip-programs-services/dual-eligible-integrated-care-demonstration-project
[47] https://www.hhs.texas.gov/
[48] The technical specifications for reporting requirements are in the Medicare-Medicaid Capitated Financial Alignment Model Core Reporting Requirements document.

the system at the time of the data pull (December 2021). Quality withholds were applied to the capitation payments (quality withholds are not reflected in the MARx data), as well as quality withhold repayments and risk corridor payments or recoupments based on data provided by CMS. Capitation payments and FFS Medicare claims were used to calculate expenditures for all comparison group beneficiaries, demonstration beneficiaries in the predemonstration period, and demonstration eligible beneficiaries who were not enrolled during the demonstration period. FFS claims included all Medicare Parts A and B services. For a comprehensive list of adjustments please refer to ***Table F-1*** in ***Appendix F***.

Medicaid research identifiable files were used to calculate total Medicaid FFS and Medicaid Managed Care payments among demonstration and comparison group eligible beneficiaries in Texas. The source of Medicaid claims data for calendar years 2013–2014 (which includes the first 22 months of the predemonstration period) was the Medicaid Statistical Information Statistics (MSIS) Medicaid Analytic eXtract (MAX). The source for the Medicaid claims data for calendar years 2015–2020 (which includes the last 2 months of the predemonstration period and all 5 demonstration years) was the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF).

Appendix B

Texas Dual Eligible Integrated Care MMP Performance on Select HEDIS Quality Measures for 2016–2021

Tables B-1a and B-1b provide 2016 through 2021 HEDIS performance data for Texas Dual Eligible Integrated Care 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 2016 and 2021.

Amerigroup improved performance over time on measures for adult BMI assessment and outpatient visits per 1,000 members.

Cigna improved performance over time on adult BMI assessment.

Molina improved performance over time on outpatient visits per 1,000 members, but worsened performance over time on adult BMI assessment.

Superior improved performance over time on measures for effective acute phase treatment (within antidepressant medication management), advance care planning (a Care for Older Adults submeasure), and outpatient visits per 1,000 members.

United improved performance over time on measures for adult BMI assessment and emergency department visits per 1,000 members.

Table B-1a
Texas Dual Eligible Integrated Care MMP performance on select HEDIS quality measures for 2016–2021[1] by MMP

Measure	National MA Plan Mean	Amerigroup					Cigna					Molina				
	2021	2016	2017	2018	2020	2021	2016	2017	2018	2020	2021	2016	2017	2018	2020	2021
Adults' access to preventive/ ambulatory health services	94.2	83.3	84.9	85.5	83.1	84.1	89.7	89.6	91.1	91.8	90.2	86.0	88.5	87.9	87.0	87.1
Adult BMI assessment[2]	N/A	69.4 G	82.2 G	93.7 G	—	—	88.3 G	95.1 G	96.4 G	—	—	94.9 R	93.4 R	92.0 R	—	—
Blood pressure control[3]	70.1	N/A	67.9	67.2	54.0	57.2	45.3	75.9	79.8	67.9	65.0	49.9	48.4	57.9	57.4	64.7
Breast cancer screening	68.3	49.0	47.5	49.4	46.4	46.1	66.2	75.4	74.5	67.3	62.7	66.7	59.1	59.2	57.1	52.8
Colorectal cancer screening	68.6	37.0	44.3	49.2	49.2	44.3	65.5	69.6	73.5	64.7	66.9	63.4	51.3	54.5	50.4	50.4
Disease modifying anti-rheumatic drug therapy in rheumatoid arthritis[4]	N/A	73.6	67.1	64.7	70.6	—	71.4	82.9	N/A	76.7	—	54.1	62.2	60.0	66.4	—
Follow-up after hospitalization for mental illness (30 days)[5]	48.7	52.3	51.6	52.5	48.4	53.8	N/A	N/A	N/A	N/A	N/A	54.3	62.7	65.2	69.5	58.5
Antidepressant medication management																
Effective acute phase treatment[6]	79.5	71.1	72.1	70.0	82.5	88.6	67.2	61.1	74.0	75.3	75.8	60.8	68.5	71.2	75.2	74.4
Effective continuation phase treatment[7]	64.5	52.7	54.0	50.7	69.4	84.9	45.7	38.9	49.0	53.5	52.6	42.4	49.1	49.1	55.2	61.3
Care for older adults																
Advance care planning	N/A	20.8	45.3	47.0	21.4	21.9	46.7	60.6	63.8	57.9	63.0	42.2	61.6	48.9	59.1	63.3
Medication review	N/A	13.9	66.9	72.3	69.1	67.6	72.0	81.3	82.5	80.8	81.5	61.2	74.2	63.0	74.7	77.1
Functional status assessment	N/A	27.7	64.2	69.3	29.9	37.0	57.4	76.2	79.8	58.9	63.5	54.3	67.9	61.1	55.0	65.9
Pain assessment	N/A	29.5	77.1	78.1	73.7	75.2	68.1	81.5	82.7	75.4	77.9	66.9	76.4	66.9	76.2	77.1
Comprehensive diabetes care																
Received Hemoglobin A1c (HbA1c) testing	93.7	85.0	90.5	88.6	88.8	87.6	95.7	95.6	95.1	95.4	97.1	88.9	90.3	91.0	87.1	90.0
Poor control of HbA1c level (>9.0%) (higher is worse)	24.1	56.0	29.0	37.2	35.0	42.3	41.0	24.1	22.5	30.9	24.8	47.2	46.5	47.2	50.6	38.2
Good control of HbA1c level (<8.0%)	66.0	35.4	59.1	53.0	55.0	48.2	45.8	59.3	59.7	58.4	62.0	44.6	44.8	43.3	43.3	53.5
Received eye exam (retinal)	70.7	50.5	58.4	55.7	55.0	57.7	78.7	80.6	83.8	79.6	79.6	63.6	64.0	69.6	61.3	63.5

(continued)

Table B-1a (continued)
Texas Dual Eligible Integrated Care MMP performance on select HEDIS quality measures for 2016–2021[1] by MMP

Measure	National MA Plan Mean	Amerigroup					Cigna					Molina				
	2021	2016	2017	2018	2020	2021	2016	2017	2018	2020	2021	2016	2017	2018	2020	2021
Comprehensive diabetes care (continued)																
Received medical attention for nephropathy	94.9	93.3	93.7	90.5	93.7	90.9	98.9	98.2	98.4	97.3	98.8	95.6	97.3	93.9	91.5	93.2
Blood pressure control (<140/90 mm Hg)	67.4	28.9	64.5	56.9	52.3	47.2	64.2	71.0	80.0	70.6	69.8	58.5	56.7	57.4	51.8	62.3
Initiation and engagement of alcohol and other drug (AOD) dependence treatment																
Initiation of AOD treatment[8]	33.7	41.3	35.5	34.5	34.9	36.5	N/A	14.3	19.3	12.0	16.2	54.1	47.9	42.9	27.7	35.6
Engagement of AOD treatment[9]	5.4	6.0	7.4	4.6	6.1	4.7	N/A	2.9	1.8	2.7	0.0	6.2	4.8	6.6	2.7	3.5
Plan all-cause readmissions (Observed-to-expected ratio[10])																
Age 18-64	1.07	0.81	0.86	0.76	1.73	1.20	0.73	0.75	0.56	0.84	1.25	0.85	0.82	0.76	1.03	1.03
Age 65+	1.10	0.79	0.86	0.67	1.45	1.23	0.90	0.80	0.55	0.94	0.81	0.81	0.68	0.64	1.18	1.03
Ambulatory care (per 1,000 members[11])																
Outpatient visits	N/A	7,940.4 G	9,078.6 G	9,426.0 G	—	—	10,501.4	10,185.0	10,732.2	—	—	11,443.8 G	12,426.5 G	12,591.4 G	—	—
Emergency department visits (higher is worse)	N/A	696.8	760.9	732.3	—	—	444.1	440.5	534.4	—	—	652.7	695.1	681.7	—	—

(continued)

Table B-1a (continued)
Texas Dual Eligible Integrated Care MMP performance on select HEDIS quality measures for 2016–2021[1] by MMP

— = not available, where the plan did not provide HEDIS data for this measure; AOD = alcohol and other drug; BMI = body mass index; 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 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.

[1] In response to the COVID-19 Public Health Emergency, CMS did not require Medicare plans (including MMPs) to submit HEDIS data covering the 2019 measurement year. Therefore, we omitted a column for the 2019 measurement year.

[2] Adult BMI assessment was retired from HEDIS in 2020. Therefore, MMPs did not provide HEDIS data for this measure for measurement years 2020 and 2021.

[3] The following criteria were used to determine adequate blood pressure control: less than 140/90 mm Hg for members 18–59 years of age; diagnosis of diabetes and <140/90 mm Hg for members 60–85 years of age; no diagnosis of diabetes and <150/90 mm Hg for members 60–85 years of age.

[4] Disease modifying anti-rheumatic drug therapy in rheumatoid arthritis measure was retired from HEDIS in 2021. Therefore, MMPs did not provide HEDIS data for this measure for the 2021 measurement year.

[5] NCQA implemented a significant specification change with HEDIS 2017, disallowing same-day follow-up visits. National benchmarks fell from HEDIS 2017 to HEDIS 2018.

[6] Represents the percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).

[7] Represents the percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

[8] 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.

[9] 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.

[10] 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.

[11] Measures for Outpatient visits and Emergency department visits (both within Ambulatory Care per 1,000 members) were retired from HEDIS in 2019. Therefore, MMPs did not provide HEDIS data for these measures for measurement years 2020 and 2021.

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 RTI Aggregate Evaluation Plan.

SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

Table B-1b
Texas Dual Eligible Integrated Care MMP performance on select HEDIS quality measures for 2016–2021[1] by MMP

Measure	National MA Plan mean	Superior					United				
	2021	2016	2017	2018	2020	2021	2016	2017	2018	2020	2021
Adults' access to preventive/ambulatory health services	94.2	87.8	89.5	90.7	89.1	88.7	82.9	82.9	84.0	81.5	82.1
Adult BMI assessment[2]	N/A	93.4	89.2	94.8	—	—	75.9 G	80.8 G	92.2 G	—	—
Blood pressure control[3]	70.1	52.6	55.9	64.7	61.1	55.7	37.5	34.1	57.2	48.2	54.5
Breast cancer screening	68.3	58.8	60.4	59.2	58.3	53.1	49.2	46.1	46.2	45.4	42.8
Colorectal cancer screening	68.6	53.9	47.4	57.9	58.6	49.9	49.2	38.4	47.7	41.4	42.6
Disease modifying anti-rheumatic drug therapy in rheumatoid arthritis[4]	N/A	73.6	72.3	74.2	73.3	—	61.9	69.2	N/A	N/A	—
Follow-up after hospitalization for mental illness (30 days)[5]	48.7	57.0	45.2	59.8	67.6	52.6	81.3	50.0	47.0	49.6	48.8
Antidepressant medication management											
Effective acute phase treatment[6]	79.5	61.8 G	64.2 G	65.7 G	71.0 G	74.5 G	79.6	65.7	67.5	79.6	72.5
Effective continuation phase treatment[7]	64.5	46.8	48.3	47.5	53.4	55.3	70.9	50.0	56.9	65.5	60.0
Care for older adults											
Advance care planning	N/A	33.3 G	38.2 G	46.5 G	72.8 G	75.4 G	28.2	25.6	39.2	38.2	47.5
Medication review	N/A	72.8	78.8	90.8	92.2	85.6	59.9	48.9	61.1	65.5	60.1
Functional status assessment	N/A	87.6	87.4	87.4	85.2	79.3	45.5	32.9	44.3	44.8	48.7
Pain assessment	N/A	89.5	88.8	88.3	89.3	84.2	61.3	53.3	69.6	67.9	64.7

(continued)

Table B-1b (continued)
Texas Dual Eligible Integrated Care MMP performance on select HEDIS quality measures for 2016–2021[1] by MMP

Measure	National MA Plan mean	Superior					United				
	2021	2016	2017	2018	2020	2021	2016	2016	2017	2018	2020
Comprehensive diabetes care											
Received Hemoglobin A1c (HbA1c) testing	93.7	89.5	93.2	90.0	88.3	89.5	88.1	85.9	90.0	84.7	87.1
Poor control of HbA1c level (>9.0%) (higher is worse)	24.1	43.3	47.9	43.3	50.4	47.5	45.7	39.9	33.3	35.3	47.0
Good control of HbA1c level (<8.0%)	66.0	44.3	43.3	46.5	41.1	43.3	44.3	52.3	54.7	54.7	45.0
Received eye exam (retinal)	70.7	63.5	67.6	72.5	63.5	61.3	55.7	48.9	42.8	51.6	45.3
Received medical attention for nephropathy	94.9	95.4	97.3	96.1	93.8	92.6	93.9	93.9	94.7	91.2	93.4
Blood pressure control (<140/90 mm Hg)	67.4	55.7	62.5	64.0	59.1	51.6	34.6	36.3	55.5	56.2	50.6
Initiation and engagement of alcohol and other drug (AOD) dependence treatment											
Initiation of AOD treatment[8]	33.7	42.0	38.9	39.5	31.7	34.8	54.4	47.9	40.5	46.2	46.9
Engagement of AOD treatment[9]	5.4	4.6	4.1	4.2	1.7	4.0	10.4	2.9	6.0	6.4	3.7
Plan all-cause readmissions (Observed-to-expected ratio[10])											
Age 18-64	1.07	0.96	0.90	0.84	1.02	1.04	0.89	0.96	0.85	1.24	1.15
Age 65+	1.10	0.85	0.76	0.73	1.15	0.88	0.93	0.91	0.75	1.51	1.01
Ambulatory care (per 1,000 members[11])											
Outpatient visits	N/A	8,863.3 G	10,312.7 G	11,148.7 G	—	—	6,487.3	7,979.9	7,853.7	—	—
Emergency department visits (higher is worse)	N/A	766.6	781.6	762.9	—	—	772.5 G	734.3 G	661.1G	—	—

(continued)

Table B-1b (continued)
Texas Dual Eligible Integrated Care MMP performance on select HEDIS quality measures for 2016–2021 by MMP

— = not available, where the plan did not provide HEDIS data for this measure; AOD = alcohol and other drug; BMI = body mass index; 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 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.

[1] In response to the COVID-19 Public Health Emergency, CMS did not require Medicare plans (including MMPs) to submit HEDIS data covering the 2019 measurement year. Therefore, we omitted a column for the 2019 measurement year.

[2] Adult BMI assessment was retired from HEDIS in 2020. Therefore, MMPs did not provide HEDIS data for this measure for measurement years 2020 and 2021.

[3] The following criteria were used to determine adequate blood pressure control: less than 140/90 mm Hg for members 18–59 years of age; diagnosis of diabetes and <140/90 mm Hg for members 60–85 years of age; no diagnosis of diabetes and <150/90 mm Hg for members 60–85 years of age.

[4] Disease modifying anti-rheumatic drug therapy in rheumatoid arthritis measure was retired from HEDIS in 2021. Therefore, MMPs did not provide HEDIS data for this measure for the 2021 measurement year.

[5] NCQA implemented a significant specification change with HEDIS 2017, disallowing same-day follow-up visits. National benchmarks fell from HEDIS 2017 to HEDIS 2018.

[6] Represents the percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).

[7] Represents the percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

[8] 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.

[9] 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.

[10] 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.

[11] Measures for Outpatient visits and Emergency department visits (both within Ambulatory Care per 1,000 members) were retired from HEDIS in 2019. Therefore, MMPs did not provide HEDIS data for these measures for measurement years 2020 and 2021.

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 RTI Aggregate Evaluation Plan.

SOURCE: RTI analysis of 2016 through 2021 HEDIS measures.

Appendix C

Comparison Group Methodology for Texas Demonstration Years 4 and 5

This appendix presents the comparison group selection and assessment results for the Financial Alignment Initiative (FAI) demonstration in Texas.

This appendix describes the comparison group identification methodology for the fourth and fifth performance years of the Texas demonstration (January 1, 2019–December 31, 2020). Results for the fourth demonstration year are nearly identical to those for the fifth demonstration year and are omitted to conserve space. The Preliminary Second Evaluation Report for the first three demonstration years of the Texas demonstration was publicly released in June 2022. Because eligible beneficiaries are identified separately for each time period, comparison group selection and assessment are conducted for each demonstration year. Nonetheless, there have not been any major changes in the comparison group methodology since the previous evaluation report.

C.1 Demonstration and Comparison Group Characteristics

The Texas demonstration area consists of 6 counties in 5 Metropolitan Statistical Areas (MSAs): El Paso; San Antonio-New Braunfels; McAllen-Edinburg-Mission; Dallas-Fort Worth-Arlington; and Houston-The Woodlands-Sugar Land. The comparison area for the Medicare cost savings and utilization analyses consists of 92 counties in 25 MSAs across six States (Illinois, Kentucky, New Jersey, Pennsylvania, Wisconsin, and Texas itself). The pool of comparison States was limited to those with timely submission of Medicaid data to CMS. These geographic areas have not changed since the First Evaluation Report.

Beneficiaries who are ineligible for the demonstration include those younger than 21, enrolled in PACE or CMS Independence at Home, with Medicare as a secondary payor, not enrolled in Medicare Part A and Part B, or residing in an intermediate care facility. 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. Additionally, this analysis incorporates Medicaid-specific exclusion criteria using the Medicaid MAX and TAF enrollment and eligibility files. We excluded beneficiaries enrolled in Medicaid 1915(c) waivers including Community Living Assistance and Support Services, Deaf Blind with Multiple Disabilities Program, Home and Community-Based Services (HCBS), and Texas Home Living Program. We excluded these beneficiaries from the demonstration group only because 1915(c) waiver programs in the comparison group States do not necessarily target a similar population. Finally, the Texas demonstration had a demonstration inclusion criterion stipulating that beneficiaries with a physical or mental disability and who qualified for Supplemental Security Income benefits were eligible for the demonstration.

Dually eligible Medicare Advantage enrollees are eligible and may opt-in to the Texas demonstration. This report includes the Medicare Advantage population in the cost savings analysis, described in ***Appendix F***. However, due to concerns of the completeness and accuracy of Medicare Advantage encounter data for years prior to 2016, RTI excluded the Medicare Advantage 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 Medicare Advantage during the study period and included in the cost savings analysis but excluded from the service use analysis. The prevalence of beneficiaries ever enrolled in Medicare Advantage ranges from 57.7 to 69.0 percent in the demonstration group and from 42.4 to 52.5 percent in the comparison group across the study period.

Table C-1
Number and percentage of beneficiaries in the Texas demonstration and comparison groups 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	DY 4	DY 5
Demonstration							
Initial count of beneficiaries	173,257	175,213	180,284	166,322	166,020	166,772	166,462
Count of beneficiaries with Medicare Advantage	100,111	105,846	116,869	111,502	113,479	114,871	113,988
Percentage of beneficiaries with Medicare Advantage	57.8%	60.4%	64.8%	67.0%	68.4%	68.9%	68.5%
Comparison							
Initial count of beneficiaries	328,635	334,023	382,175	346,499	347,768	343,229	344,736
Count of beneficiaries with Medicare Advantage	140,268	151,159	183,066	175,612	180,965	180,278	178,772
Percentage of beneficiaries with Medicare Advantage	42.7%	45.3%	47.9%	50.7%	52.0%	52.5%	51.9%

DY = demonstration year.

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 remained relatively stable over the 2 predemonstration years and 5 demonstration years, ranging between 165,222 and 179,761 beneficiaries per year. The number of beneficiaries in the comparison group ranged between 326,624 and 379,137 over the predemonstration and demonstration years.

C.2 Propensity Score Estimates

RTI's methodology examines initial differences between the demonstration and comparison groups in each analysis period to produce propensity scores, a rating of how likely a beneficiary is to be part of the demonstration group based on certain characteristics. Weights are calculated based on these scores and applied to the data to improve comparability between the two groups. Comparability is evaluated in terms of individual beneficiary characteristics and the overall distributions of propensity scores.

A propensity score (PS) is the predicted probability that a beneficiary is a member of the demonstration group conditional on a set of observed variables. Our propensity score models include a combination of beneficiary-level and region-level characteristics measured at the ZIP code (ZIP Code Tabulation Area) level.

The logistic regression coefficients and z-values for the covariates included in the propensity model for Texas demonstration year 5 are shown in ***Table C-2***, and the magnitude of the group differences for all variables prior to propensity score weighting is shown in ***Table C-3***. The largest relative differences are that demonstration participants were more likely to be Hispanic, less likely to have disability as the original reason for entitlement, less likely to be participating in other Medicare shared savings programs (abbreviated as other MDM) and had a greater share of months of non-MMP MA plan enrollment in demonstration year 5 than beneficiaries in the comparison group. In addition, there are ZIP code-level group differences associated with rates of marriage, households with members younger than 18 years or older than 60 years, and adults with a college education, as well as differences associated with distances to the nearest hospital and the nearest nursing facility (NF). These differences are very similar to those that exist in prior demonstration years.

C.3 Propensity Score Overlap

The distributions of propensity scores by group for demonstration year 5 are shown in ***Figure C-1*** before and after propensity score weighting. Estimated scores for the demonstration and comparison group topped out at around 0.99. Predicted probabilities for the unweighted comparison group (dashed line) are concentrated in the range from 0.05 to 0.25. Inverse probability of treatment weighting pulls the distribution of weighted comparison group propensity scores (dotted line) very close to that of the demonstration group (solid line).

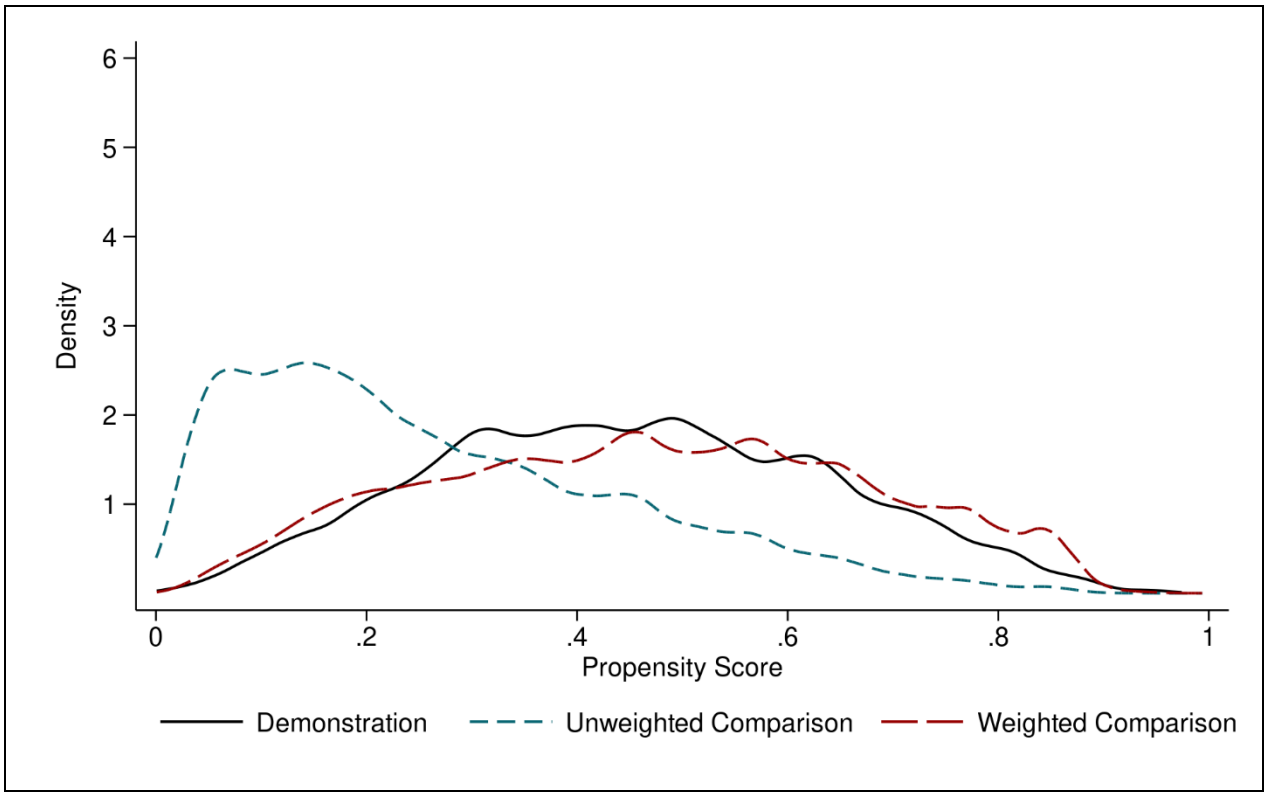
Any beneficiaries who have estimated propensity scores below the smallest estimated value in the demonstration group are removed from the comparison group. This resulted in the removal of only 13 and 4 beneficiaries from the comparison group in demonstration years 4 and 5, respectively.

Table C-2
Logistic regression estimates for Texas propensity score models in demonstration year 5, January 1, 2020–December 31, 2020

Characteristic	Demonstration Year 5		
	Coef.	Standard error	z-score
Age (years)	0.003	0.000	9.69
Died during year (0/1)	−0.142	0.014	−10.19
Female (0/1)	0.071	0.007	10.20
Black (0/1)	0.259	0.009	28.83
Hispanic (0/1)	0.469	0.009	51.32
Disability as original reason for entitlement (0/1)	−0.394	0.010	−39.46
ESRD (0/1)	0.356	0.019	18.63
Share of months eligible during year	0.142	0.016	9.04
Share of months Medicare Advantage plan enrollment during year	0.024	0.008	3.22
HCC risk score	0.094	0.004	24.15
Other MDM participation (0/1)	−1.071	0.012	−89.90
% of population living in married household	0.003	0.000	7.38
% of households w/member >= 60 yrs.	−0.046	0.000	−93.81
% of households w/member < 18 yrs.	0.049	0.000	108.62
% of adults with college education	−0.031	0.000	−84.69
Distance to nearest hospital (mi.)	−0.017	0.001	−12.34
Distance to nearest nursing facility (mi.)	−0.090	0.002	−45.95
Intercept	−0.201	0.040	−5.00

ESRD = end-stage renal disease; HCC = Hierarchical Condition Category; MDM = Master Data Management

Figure C-1
Distribution of beneficiary-level propensity scores in the Texas demonstration and comparison groups, weighted and unweighted, January 1, 2020–December 31, 2020



C.4 Group Comparability

Covariate balance refers to the extent to which the characteristics used in the propensity score 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
Texas dually eligible beneficiary covariate means by group before and after weighting by propensity score—demonstration year 5: January 1, 2020–December 31, 2020

Characteristic	Demonstration group mean	Comparison group mean	PS-weighted comparison group mean	Unweighted standardized difference	Weighted standardized difference
Age (years)	69.045	66.418	69.276	0.161	0.015
Died during year (%)	8.226	9.342	8.034	0.039	0.007
Female (%)	62.577	61.360	62.667	0.025	0.002
Black (%)	22.637	18.237	23.031	0.109	0.009
Hispanic (%)	22.657	11.735	25.121	0.293	0.058
Disability as original reason for entitlement (%)	32.061	43.200	31.032	0.231	0.022
ESRD (%)	3.748	2.645	3.965	0.063	0.011
Share of months eligible during year	0.890	0.874	0.892	0.064	0.008
Share of months Medicare Advantage plan enrollment during year	0.486	0.379	0.504	0.228	0.039
HCC score	1.262	1.199	1.262	0.072	0.000
Other MDM participation (%)	7.223	20.150	7.099	0.383	0.005
% of population living in married household	63.042	68.465	61.388	0.435	0.132
% of households w/member >= 60	35.055	39.102	34.793	0.478	0.035
% of households w/member < 18	39.467	33.644	39.790	0.640	0.034
% of adults with college education	20.506	27.986	20.170	0.501	0.025
Distance to nearest hospital (mi.)	4.647	5.554	4.260	0.228	0.119
Distance to nearest nursing facility (mi.)	3.321	4.016	3.198	0.243	0.052

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

The group means and standardized differences for all beneficiary characteristics are shown for demonstration year 5 in ***Table C-3***. The column of unweighted standardized differences indicates that several of these variables were not balanced prior to weighting. Twelve variables had unweighted standardized differences exceeding 0.10 in absolute value: age, percent Black, percent Hispanic, percent with disability as original reason for entitlement, share of months enrolled in a non-MMP MA plan during the year, percent participating in other Medicare shared savings programs (abbreviated as other MDM), percent of population living in a married household, percent of household with a member younger than 18 years or older than 60 years, percent of adults with a college education, and the distances (in miles) to the nearest hospital and NF.

The results of propensity score weighting for Texas demonstration year 5 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 of the covariates in our model: percent of population living in a married household and distance to the nearest hospital. We found very similar results for demonstration year 4.

C.5 Enrollee-only Results

We also applied our weighting methodology to the demonstration's enrollee-only population (approximately 41 percent of the eligible demonstration population) to produce weights for use in the impact analyses on cost savings among the demonstration enrollee 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 5-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 5-year demonstration period and the 2-year predemonstration period.

As was the case among all eligible beneficiaries, the unweighted values of several covariates differed substantially between the demonstration and comparison group among enrollees in each predemonstration and demonstration year. After weighting, the standardized differences of all covariates 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 two adaptations to the methodology used to produce weights for all eligible beneficiaries. The first is the explicit exclusion of beneficiaries who were ever enrolled in a Medicare Advantage plan. Due to concerns of the completeness and accuracy of Medicare Advantage encounter data for years prior to 2016, RTI excluded the Medicare Advantage population from the service utilization analysis. The second difference is the exclusion of beneficiaries who were ever enrolled in an MMP for which complete or valid encounter data is not available. The resulting demonstration group sample ranged between 40,904 and 63,625 beneficiaries each year, and the comparison group sample ranged between 162,925 and 199,093 beneficiaries each year.

Despite a difference in sample sizes, the results of the weighting analysis were similar to those for demonstration eligible beneficiaries and for demonstration enrollees. While 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 were reduced to less than 0.10 in absolute value after score weighting.

C.7 Weights for Medicaid Cost Analyses

A fourth set of weights was produced specifically for the analyses of Medicaid costs, with one main change to the methodology used to produce weights for all eligible beneficiaries. The comparison group sample for Medicaid cost analyses is comprised only of the subset of beneficiaries enrolled in Texas Medicaid. As described in ***Section F.5*** in ***Appendix F*** of the

Preliminary Second Evaluation Report, Texas implemented a managed care model for LTSS at the end of the predemonstration period, which impacts observed costs for the demonstration group and for members of the comparison group enrolled in Texas Medicaid. Relatedly, including all States in the comparison group results in a violation of the parallel trends assumption for the Medicaid spending outcome. As a result, we excluded beneficiaries with Medicaid enrollment in Illinois, Kentucky, New Jersey, Pennsylvania, and Wisconsin. This exclusion reduced the size of the comparison group to between 107,581 and 123,328 beneficiaries each year.

The unweighted standardized differences of several covariates differed substantially between the demonstration and comparison group in each predemonstration and demonstration year. After weighting, the standardized differences were reduced to less than 0.10 in absolute value for all but one covariate, distance to nearest NF, for which the standardized difference was just above the threshold at 0.12.

C.8 Summary

The Texas demonstration and comparison groups were initially distinguished by differences in six individual-level covariates as well as six area-level variables. However, propensity score weighting successfully reduced discrepancies below the generally accepted threshold for standardized differences for all but two covariates. As a result, the weighted Texas groups are adequately balanced with respect to 15 of the 17 variables we consider for comparability. Further analysis of the enrollee sample, the service utilization sample, and the Medicaid sample 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 International is using an intent-to-treat (ITT) approach for the quantitative analyses conducted for the evaluation, comparing the eligible population under each State demonstration with a similar population that is not affected by the demonstration (i.e., a comparison group). We use a quasi-experimental 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.

ITT refers to an evaluation design in which all dually eligible beneficiaries 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. Given the design of the demonstration, some eligible beneficiaries enroll in the demonstration to receive the interventions while others do not enroll, even though they are eligible. The relative proportion of the enrolled versus the eligible but not enrolled beneficiaries varies across the demonstration States. Impact estimates resulting from an ITT analysis—which includes the entire eligible population in the demonstration group and its comparison group counterpart—best approximate what might occur given a real-world implementation of the demonstration, accounting for the variability in voluntary enrollment across different States. A limitation to this approach is that if total enrollment in the demonstration is low, observable impacts for the enrolled population may be more difficult to observe.

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 C***. This analysis also includes the application of the demonstration's 1915(c) wavier exclusion criteria, identified in the three-way contract on the FAI website.[49] The Preliminary Second Evaluation Report did not include this exclusion due concerns with the availability and reliability of Medicaid eligibility data for all years.

Medicare Advantage enrollees are eligible and may opt-in to the Texas demonstration. This report includes the Medicare Advantage population in the cost savings analysis, described in ***Appendix F***. However, due to concerns with the completeness and accuracy of Medicare Advantage encounter data for years prior to 2016, RTI excluded demonstration eligible beneficiaries with any Medicare Advantage enrollment from the service utilization analysis.

[49] For the three-way contract, please see https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/Downloads/TXContract08012017.pdf

Therefore, the service utilization analysis includes only beneficiaries enrolled in Medicare fee-for-service or in an MMP throughout the study period. The prevalence of beneficiaries with any month of Medicare Advantage during a year, prior to exclusion, ranges from 57.7 to 69.0 percent in the demonstration group, and 42.4 to 52.5 percent in the comparison group during the predemonstration and demonstration periods (see ***Table C-1*** in ***Appendix C***).

D.1.3 Data

We used several sources of data to conduct this analysis. First, we used State-provided quarterly finder files containing identifying information on all demonstration eligible beneficiaries in the demonstration period. Second, we obtained administrative data on beneficiary demographic, enrollment, and service use characteristics from CMS data systems for both demonstration and comparison group members. Third, we merged this administrative data with Medicare claims data on utilization and costs of Medicare services, MMP Medicare and Medicaid encounter data, as well as the Minimum Data Set (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 serious and persistent mental illness (SPMI); demonstration enrollees; and groups by 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.
- ***LTSS.*** A demonstration eligible beneficiary with any use of institutional or HCBS during the observation year.
- ***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 (March 1, 2013, to February 28, 2015) and for the 5 demonstration years (March 1, 2015, to December 31, 2020) for both the demonstration and comparison groups.

The PHE began in 2020 and may have influenced beneficiary access to, and use of, services differently depending on where the beneficiary resides, and how the pandemic spread through their community. To control for the influence of the PHE on service utilization outcomes, we included the Pandemic Vulnerability Index (PVI) (Marvel et al., 2021). The PVI is

a continuous county-based measure that incorporates current infection rates, testing and vaccination rates, and health and environmental factors to create an overall regression-adjusted risk score.

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.

This section also includes descriptive results presented for six groups: all demonstration eligible beneficiaries in the FAI State, its comparison group, all MMP enrollees, all non-MMP enrollees, demonstration eligible beneficiaries with any LTSS use, and demonstration eligible beneficiaries with an SPMI.

LTSS users tended to be older than other groups, with 53 percent of LTSS users aged 75 or older. White beneficiaries comprised approximately 40 to 52 percent of each group, while Black and Hispanic beneficiaries each comprised about 20 percent. Across all groups, close to two-thirds of beneficiaries were female, did not have disability as the primary reason for Medicare entitlement (approximately 60 to 71 percent), and did not have end-stage renal disease (about 92 percent).

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 1.06 and 1.42 among all groups except LTSS users in the demonstration group, for which the average HCC score was 2.10.There were some differences in area- and market-level characteristics. Those who were in the comparison group resided in counties with higher Medicaid spending per dually eligible beneficiary ($16,878.99 versus $11,925.97 in the demonstration group) and lower population density (773.06 persons per square mile. vs. 1862.06 persons per square mile in the demonstration group). Other area- and market-level characteristics were broadly comparable.

Table D-1
Characteristics of eligible beneficiaries in Texas in demonstration year 5 by group

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	42,057	165,952	17,160	24,897	4,276	17,078
Demographic characteristics						
Age						
0 to 64	29.04	28.91	30.71	27.89	25.68	35.14
65 to 74	32.99	32.56	38.26	29.35	21.21	29.76
75 and older	37.97	38.53	31.03	42.76	53.11	35.10
Female						
No	38.93	38.46	42.60	36.39	33.51	34.83
Yes	61.07	61.54	57.40	63.61	66.49	65.17
Race/ethnicity						
White	40.28	43.36	39.47	40.84	51.66	47.44
African American	20.56	20.95	20.29	20.74	21.35	22.51
Hispanic	19.69	21.70	22.79	17.56	18.90	18.04
Asian	7.63	4.91	4.31	9.92	5.61	3.65
Other	11.84	9.09	13.14	10.95	2.48	8.36
Disability as reason for original Medicare entitlement						
No	69.57	70.67	67.45	71.03	60.22	60.89
Yes	30.43	29.33	32.55	28.97	39.78	39.11
ESRD status						
No	92.10	91.61	95.30	89.90	92.77	91.59
Yes	7.90	8.39	4.70	10.10	7.23	8.41
MSA						
No	0.00	0.00	0.00	0.00	0.00	0.00
Yes	100.00	100.00	100.00	100.00	100.00	100.00

(continued)

Table D-1 (continued)
Characteristics of eligible beneficiaries in Texas in demonstration year 5 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	81.28	81.28	99.47	68.75	76.17	80.25
Yes	18.72	18.72	0.53	31.25	23.83	19.75
HCC score	1.22	1.23	1.06	1.33	2.10	1.42
Market characteristics						
Medicare spending per dually eligible beneficiary, ages 19+ ($)	21,704.17	19,116.69	21,583.19	21,787.56	21,645.02	21,640.63
MA penetration rate	0.33	0.22	0.34	0.33	0.32	0.33
Medicaid-to-Medicare fee index (FFS)	0.65	0.59	0.65	0.65	0.65	0.65
Medicaid spending per dually eligible beneficiary, ages 19+ ($)	11,925.97	16,878.99	11,844.55	11,982.09	12,223.10	12,064.35
Fraction of dually eligible beneficiaries using NF, ages 65+	0.87	0.79	0.86	0.87	0.87	0.87
Fraction of dually eligible beneficiaries using HCBS, ages 65+	0.04	0.07	0.05	0.03	0.03	0.04
Fraction of dually eligible beneficiaries using personal care, ages 19+	0.01	0.01	0.01	0.01	0.01	0.01
Fraction of dually eligible beneficiaries with Medicaid managed care, ages 19+	0.54	0.44	0.53	0.55	0.52	0.54
Population per square mile, all ages	1,862.06	773.06	1,802.44	1,903.16	1,789.78	1,848.60
Patient care physicians per 1,000 population	0.58	0.69	0.58	0.58	0.57	0.58

(continued)

Table D-1 (continued)
Characteristics of eligible beneficiaries in Texas in demonstration year 5 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 population living in married households	64.26	63.01	63.84	64.55	64.41	64.12
% of adults with college education	21.78	21.23	21.01	22.31	22.36	21.95
% of adults with self-care limitations	3.83	3.41	3.85	3.82	4.07	3.90
% of adults unemployed	6.46	6.70	6.56	6.38	6.31	6.41
% of household with individuals younger than 18	39.87	40.53	40.00	39.77	39.62	39.47
% of household with individuals older than 60	34.61	34.24	34.71	34.54	34.90	34.70
Distance to nearest hospital	4.65	4.40	4.75	4.57	4.75	4.65
Distance to nearest nursing facility	3.40	3.38	3.41	3.40	3.53	3.41
Pandemic Vulnerability Index	0.54	0.52	0.54	0.54	0.54	0.54

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.

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 (SNF) stays, hospice use, primary care, 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, ambulatory care sensitive condition (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 NF case mix and acuity levels.

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

The rate of new long-stay NF admissions per 1,000 eligible beneficiaries is calculated as the number of NF admissions for whom there is no record of NF use in the 100 days prior to the current admission and who subsequently stay in the NF for 101 days or more. Individuals are included in this measure only if their NF admission occurred after their first month of demonstration eligibility.

The percentage of long-stay NF users is calculated as the number of individuals who have stayed in an NF for 101 days or more, 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.

Functional status and low level of care need are determined by the Resource Utilization Groups Version IV (RUG-IV). Residents with low care need are defined as those who did not require physical assistance in any of the four late-loss activities of daily living 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 probability of any inpatient admission	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.	We used the CLM_ACTV_CARE_FROM_DT to calculate the number of admissions occurring within the month. • Created a 0–1 indicator for the presence of at least one admission in the month.
Monthly probability of any ED visit	The monthly probability of having any ED visit that occurred during the month that did not result in an inpatient admission.	• Identified any claim with a revenue center code = 0450, 0451, 0452, 0456, 0459, or 0981 AND not followed by an inpatient admission. • Created a 0–1 indicator for the presence of at least one ED claim in the month.
Monthly number of physician E&M visits per 1,000 beneficiaries	The count of any E&M visit within the month, multiplied by 1,000, where the visit occurred in the outpatient or office setting, NF, domiciliary, rest home, or custodial care setting, a federally qualified health center or a rural health center.	• Identified physician office visits on either any physician claim line, federally qualified health center claim line, or rural health center claim line: – Office or Other Outpatient = 99201–99205 or 99211–99215 – Nursing Facility Services = 99304–99310, 99315, 99316, or 99318 – Domiciliary, Rest Home, or Custodial Care Services = 99324–99328, 99334–99337 or 99339-99340 – Home Services = 99341-99345 or 99347–99350 – Initial Medicare Visit = G0402 – Annual Wellness Visit = G0438, G0439 • Calculated the total number of physician office visits that occurred in the month.
Monthly probability of any SNF admissions	The monthly probability of having any SNF admission within the month.	• Identified any SNF claims with a clam type code = 4018, 4021, or 4028. • Created a 0-1 indicator for the presence of at least one *admission* in the month using CLM_ACTV_CARE_FROM_DT.

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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
Annual probability of any long-stay NF use	The annual probability of residing in an NF for 101 days or more during the year.	• Long-stay use is defined as a stay in an NF for 101 days or more as of a beneficiary's last quarter of demonstration eligibility and is derived from the Minimum Data Set (MDS).
30-day all-cause risk-standardized readmission	The rate of risk-standardized readmission, defined as the percentage of enrollees who were readmitted within 30 days following a hospital discharge, and the number of risk-standardized readmissions that occur 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 and during the 30-day follow-up period. $\frac{\left(\frac{\sum_{ig} x_{ig}}{\sum_{ig} n_{ig}} * C\right)}{Prob_g} * 100$ Numerator: • C = the national average of 30-day readmission rate, 0.238. • x_{ig} = the total number of readmissions for individual *i* in group *g*. • n_{ig} = the total number of hospital admissions for individual i in group g. Denominator: $Prob_g$ = the annual average adjusted probability of readmission for individuals in group *g*. Multiply by 100 to get the final measure score.
Number of all-cause 30-day readmissions per 1,000 discharges	The annual count of the number of readmissions per beneficiary period, multiplied by 1,000.	Among beneficiaries with any index inpatient admission, defined above, a readmission is defined as the having any inpatient admission within 30-days of the index discharge date
Monthly number of preventable ED visits per 1,000 beneficiaries	A continuous variable of weighted ED visits that occur during the month, multiplied by 1,000.	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.[1] 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.

(continued)

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
Probability of 30-day follow-up after mental health discharge (NQF #576)	The monthly probability of any follow-up visits within 30-days post-hospitalization for a mental illness.	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: • Visit with a mental health practitioner AND SPMI diagnosis • Visit to a behavioral health care facility • Visit to a non-behavioral health care facility with a diagnosis of mental illness Denominator: Discharges for an acute inpatient setting (including acute-care psychiatric facilities) for treatment of SPMI AND no readmission within 30 days. Beneficiaries are included only if eligible during both the month of the discharge and the 30-day follow-up period.
Monthly probability of any ACSC admission—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 PQIs 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.
Monthly probability of any ACSC admission—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 PQIs 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.

(continued)

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 and positive tests, and per eligible beneficiary per month.	Numerator: Demonstration eligible Medicare-Medicaid beneficiaries whose screening for clinical depression using an age-appropriate standardized tool: • Received a depression screening, tested positive and had a follow-up plan is identified by CLM_LINE_HCPCS_CD = 'G8431.' • Received a depression screening, tested positive and follow-up plan not required is identified by CLM_LINE_HCPCS_CD = 'G8510.' • Received a depression screening, tested positive and not eligible for follow-up plan is identified by CLM_LINE_HCPCS_CD = 'G8940.' • Received a depression screening, tested positive, no follow-up plan and reason not documented is identified by CLM_LINE_HCPCS_CD = 'G8511.' Denominator: All demonstration eligible Medicare-Medicaid beneficiaries.

[1] Definition derived from the Wagner School of Public Service, available at https://wagner.nyu.edu/faculty/billings/nyued-background.
ACSC = ambulatory care sensitive condition; AHRQ = Agency for Healthcare Research and Quality; ED = emergency department; E&M = evaluation and management; NF = nursing facility; PQI = Prevention Quality Indicator; SNF = skilled nursing facility; SPMI = serious and persistent mental illness.

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., a user month is month 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 one beneficiary may have.

Specifically, the utilization measures were calculated as the aggregate sum of the unit of measurement (counts, admissions, etc.) 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 C***. ***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-3 displays the average adjusted probabilities for the overall eligible population used for defining the 30-day all-cause risk-standardized readmission measure.

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

Demonstration group	Average adjusted probability of readmission
Predemonstration year 1	
Texas	0.2323
Comparison	0.2144
Predemonstration year 2	
Texas	0.2314
Comparison	0.2139
Demonstration year 1	
Texas	0.2241
Comparison	0.2123
Demonstration year 2	
Texas	0.2096
Comparison	0.2018
Demonstration year 3	
Texas	0.2093
Comparison	0.2000
Demonstration year 4	
Texas	0.2084
Comparison	0.2013
Demonstration year 5	
Texas	0.2086
Comparison	0.1996

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

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

where *PostYear* is an indicator of whether the observation is post the demonstration start, *Demonstration* is an indicator of whether the beneficiary was in the demonstration group, and *PostYear * Demonstration* is an interaction term. *Demographics* and *Market* represent vectors of beneficiary and market characteristics, respectively.

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

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

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

This equation differs from the previous one in that separate DinD coefficients are estimated for each year. Under this specification, the coefficients $\beta_{3\text{-}k}$ would reflect the impact of the demonstration in each respective year, whereas the previous equation reflects the impact of the entire demonstration period. 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 modeled at a beneficiary-period level. Both the annual probability of any long-stay nursing home visit and the annual number of readmissions are estimated at a beneficiary-period level. This approach requires the use of an additional control variable (i.e., logged number of index discharges) 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 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 test the difference in the demonstration effect for each estimate. Annual triple-DinD results are shown in ***Tables E-2*** and ***E-3*** in ***Appendix E***.

The adjusted means tables presented for the full demonstration eligible population in the report provide both DinD results as well as 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. To do this, 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:

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 percent change of the DinD estimate compared to an average mean value for the comparison group in the entire demonstration period. The relative percent 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 in Texas
(n = 17,488,038 person months)

Independent variables	Coefficient	Standard error	z-value	*p*-value
Post period	−0.1395	0.0126	−11.05	<0.001
Demonstration group	−0.0661	0.0210	−3.14	0.002
Interaction of post period x demonstration group	−0.0099	0.0331	−0.30	0.765
Age (continuous)	0.0056	0.0008	7.02	<0.001
Female	−0.0211	0.0125	−1.68	0.093
Black	0.0833	0.0181	4.60	<0.001
Hispanic	−0.1469	0.0238	−6.19	<0.001
Asian	−0.4259	0.0238	−17.86	<0.001
Other race/ethnicity	−0.2515	0.0326	−7.70	<0.001
Disability as reason for Medicare entitlement	0.0698	0.0227	3.07	0.002
End-stage renal disease	1.5614	0.0189	82.69	<0.001
Participation in other Shared Savings Program	0.0826	0.0280	2.95	0.003
Hierarchical Condition Category score	0.3183	0.0061	52.30	<0.001
Medicare spending per dually eligible beneficiary, ages 19+	0.0000	0.0000	6.05	<0.001
Medicare Advantage penetration rate	−0.2186	0.1412	−1.55	0.122
Medicaid-Medicare fee index	0.3636	0.1210	3.00	0.003
Medicaid spending per dually eligible beneficiary, ages 19+	0.0000	0.0000	−0.68	0.496
Fraction of dually eligible beneficiaries using nursing facility, ages 65+	0.0141	0.0988	0.14	0.887
Fraction of dually eligible beneficiaries using HCBS, ages 65+	0.8031	0.1625	4.94	<0.001
Fraction of dually eligible beneficiaries using personal care, ages 19+	−3.0415	0.9071	−3.35	0.001
Fraction of dually eligible beneficiaries with Medicaid managed care, ages 19+	0.1889	0.0410	4.60	<0.001
Population per square mile, all ages	0.0000	0.0000	−1.60	0.109
Percent of population living in married household	−0.0012	0.0006	−1.93	0.053
Percent of adults with college education	−0.0029	0.0005	−5.54	<0.001
Percent of adults with self-care limitation	0.0002	0.0030	0.07	0.943
Percent of adults who are unemployed	−0.0018	0.0017	−1.02	0.306
Percent of households with individuals younger than 18	−0.0024	0.0006	−3.92	<0.001
Percent of households with individuals older than 60	−0.0019	0.0007	−2.63	0.009
Distance to nearest hospital	0.0019	0.0019	1.02	0.306
Distance to nearest nursing facility	−0.0019	0.0033	−0.57	0.568
Pandemic Vulnerability Index	−0.2864	0.0263	−10.88	<0.001
Intercept	−4.6943	0.2001	−23.46	<0.001

HCBS = home and community-based services.

Appendix E

Descriptive and Special Population Supplemental Analysis

Tables E-1, ***E-2***, and ***E-3*** provide the regression-adjusted DinD service utilization estimates cumulatively and for each demonstration year, for all measures and populations. 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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Adjusted DinD estimate	Relative difference (%)	p-value	95% confidence interval	90% confidence interval
Monthly probability of any inpatient admission (%)					
Cumulative	–0.04	NS	0.7663	–0.30, 0.22	–0.26, 0.18
Demonstration year 1	–0.24	–4.8	0.0239	–0.44, –0.03	–0.41, –0.06
Demonstration year 2	–0.07	NS	0.6960	–0.42, 0.28	–0.37, 0.23
Demonstration year 3	–0.01	NS	0.9612	–0.32, 0.30	–0.27, 0.25
Demonstration year 4	0.12	NS	0.5094	–0.23, 0.47	–0.18, 0.41
Demonstration year 5	0.18	NS	0.1070	–0.04, 0.41	–0.00, 0.37
Number of all-cause 30-day readmissions per 1,000 discharges					
Cumulative	9.88	3.7	0.0488	0.05, 19.70	1.63, 18.13
Demonstration year 1	1.18	NS	0.8801	–14.19, 16.56	–11.72, 14.08
Demonstration year 2	6.36	NS	0.3461	–6.88, 19.60	–4.75, 17.48
Demonstration year 3	6.67	NS	0.3485	–7.28, 20.62	–5.03, 18.38
Demonstration year 4	23.80	9.3	0.0108	5.50, 42.09	8.44, 39.15
Demonstration year 5	19.58	8.4	0.0053	5.80, 33.36	8.02, 31.15
Monthly probability of any ACSC admission, overall (%)					
Cumulative	–0.00	NS	0.8950	–0.07, 0.06	–0.06, 0.05
Demonstration year 1	–0.05	NS	0.1399	–0.11, 0.02	–0.10, 0.01
Demonstration year 2	–0.01	NS	0.8168	–0.13, 0.10	–0.11, 0.08
Demonstration year 3	–0.02	NS	0.7301	–0.11, 0.07	–0.09, 0.06
Demonstration year 4	0.03	NS	0.5307	–0.06, 0.11	–0.04, 0.10
Demonstration year 5	0.07	12.1	0.0222	0.01, 0.14	0.02, 0.13

(continued)

Table E-1 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures for eligible beneficiaries in Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Adjusted DinD estimate	Relative difference (%)	p-value	95% confidence interval	90% confidence interval
Monthly probability of any ACSC admission, chronic (%)					
Cumulative	0.01	NS	0.6480	–0.04, 0.06	–0.03, 0.06
Demonstration year 1	–0.03	NS	0.2187	–0.08, 0.02	–0.07, 0.01
Demonstration year 2	–0.00	NS	0.9187	–0.09, 0.08	–0.08, 0.07
Demonstration year 3	0.00	NS	0.9504	–0.07, 0.07	–0.06, 0.06
Demonstration year 4	0.05	NS	0.0873	–0.01, 0.10	0.00, 0.09
Demonstration year 5	0.10	21.5	0.0015	0.04, 0.15	0.05, 0.14
Monthly probability of any ED visit (%)					
Cumulative	0.29	5.6	0.0152	0.06, 0.52	0.09, 0.48
Demonstration year 1	–0.03	NS	0.7709	–0.26, 0.19	–0.22, 0.16
Demonstration year 2	0.37	6.9	0.0022	0.13, 0.60	0.17, 0.56
Demonstration year 3	0.41	7.8	0.0200	0.06, 0.75	0.12, 0.69
Demonstration year 4	0.48	8.8	0.0073	0.13, 0.82	0.18, 0.77
Demonstration year 5	0.55	13.6	<0.0001	0.35, 0.76	0.38, 0.72
Monthly number of preventable ED visits per 1,000 persons					
Cumulative	2.51	8.8	0.0002	1.18, 3.84	1.39, 3.63
Demonstration year 1	0.80	NS	0.2644	–0.61, 2.21	–0.38, 1.98
Demonstration year 2	2.26	7.6	0.0133	0.47, 4.06	0.76, 3.77
Demonstration year 3	3.26	11.1	0.0047	1.00, 5.51	1.36, 5.15
Demonstration year 4	3.22	10.4	0.0021	1.17, 5.27	1.50, 4.94
Demonstration year 5	3.92	18.7	<0.0001	2.20, 5.63	2.48, 5.36
Monthly probability of any SNF admission (%)					
Cumulative	–0.17	–11.4	0.0320	–0.33, –0.01	–0.31, –0.04
Demonstration year 1	–0.17	–10.5	0.0282	–0.32, –0.02	–0.29, –0.04
Demonstration year 2	–0.19	–12.4	0.0125	–0.33, –0.04	–0.31, –0.06
Demonstration year 3	–0.22	–15.6	0.0011	–0.35, –0.09	–0.33, –0.11
Demonstration year 4	–0.17	–13.8	0.0349	–0.34, –0.01	–0.31, –0.04
Demonstration year 5	–0.14	NS	0.4415	–0.50, 0.22	–0.44, 0.16

(continued)

Table E-1 (continued)
Cumulative and annual demonstration impacts on service utilization and quality of care measures for eligible beneficiaries in Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Adjusted DinD estimate	Relative difference (%)	p-value	95% confidence interval	90% confidence interval
Annual probability of any long-stay NF use (%)					
Cumulative	–1.82	–10.1	0.0002	–2.77, –0.87	–2.62, –1.02
Demonstration year 1	–0.87	NS	0.1053	–1.92, 0.18	–1.75, 0.01
Demonstration year 2	–2.00	–10.5	0.0001	–3.03, –0.98	–2.87, –1.14
Demonstration year 3	–2.41	–13.2	<0.0001	–3.57, –1.26	–3.38, –1.45
Demonstration year 4	–2.47	–14.7	<0.0001	–3.70, –1.24	–3.51, –1.44
Demonstration year 5	–2.13	–15.0	0.0064	–3.66, –0.60	–3.42, –0.85
Probability of 30-day follow-up after mental health discharge (%)					
Cumulative	2.45	NS	0.1970	–1.27, 6.17	–0.67, 5.57
Demonstration year 1	2.16	NS	0.3100	–2.01, 6.34	–1.34, 5.67
Demonstration year 2	2.12	NS	0.3721	–2.53, 6.77	–1.79, 6.03
Demonstration year 3	2.70	NS	0.2205	–1.62, 7.03	–0.93, 6.33
Demonstration year 4	3.67	NS	0.1152	–0.90, 8.25	–0.16, 7.51
Demonstration year 5	1.26	NS	0.5775	–3.17, 5.69	–2.46, 4.97
Monthly number of physician E&M visits per 1,000 persons					
Cumulative	–29.66	NS	0.2099	–76.02, 16.70	–68.57, 9.25
Demonstration year 1	–47.05	NS	0.0638	–96.80, 2.70	–88.81, –5.30
Demonstration year 2	–17.98	NS	0.4153	–61.22, 25.27	–54.27, 18.32
Demonstration year 3	–16.15	NS	0.4736	–60.33, 28.03	–53.23, 20.92
Demonstration year 4	–37.77	NS	0.1782	–92.74, 17.21	–83.90, 8.37
Demonstration year 5	–5.31	NS	0.8896	–80.34, 69.71	–68.28, 57.65

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Service Utilization Measures								
Monthly probability of any inpatient admission (%)	Cumulative	LTSS users	0.09	NS	0.6970	–0.36, 0.54	–0.29, 0.47	.01
		Non-LTSS users	0.08	NS	0.3152	–0.07, 0.22	–0.05, 0.20	
	Demonstration year 1	LTSS users	–0.15	NS	0.4368	–0.53, 0.23	–0.47, 0.17	−0.02
		Non-LTSS users	–0.13	–3.6	0.0316	–0.25, –0.01	–0.23, –0.03	
	Demonstration year 2	LTSS users	0.22	NS	0.5267	–0.46, 0.90	–0.35, 0.79	0.26
		Non-LTSS users	–0.04	NS	0.6734	–0.23, 0.15	–0.20, 0.12	
	Demonstration year 3	LTSS users	0.44	NS	0.0605	–0.02, 0.90	0.05, 0.83	0.28
		Non-LTSS users	0.16	NS	0.1318	–0.05, 0.37	–0.01, 0.33	
	Demonstration year 4	LTSS users	0.29	NS	0.3562	–0.33, 0.91	–0.23, 0.81	0.05
		Non-LTSS users	0.24	8.7	0.0431	0.01, 0.48	0.05, 0.44	
	Demonstration year 5	LTSS users	0.23	NS	0.4513	–0.37, 0.83	–0.27, 0.73	−0.04
		Non-LTSS users	0.27	10.8	0.0025	0.10, 0.45	0.12, 0.42	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Service Utilization Measures (continued)								
Monthly probability of any ED visit (%)	Cumulative	LTSS users	0.27	NS	0.2782	–0.21, 0.74	–0.14, 0.67	−0.06
		Non-LTSS users	0.32	6.9	0.0075	0.09, 0.56	0.12, 0.52	
	Demonstration year 1	LTSS users	0.04	NS	0.8394	–0.34, 0.42	–0.28, 0.36	0.09
		Non-LTSS users	–0.06	NS	0.6439	–0.29, 0.18	–0.25, 0.14	
	Demonstration year 2	LTSS users	0.47	9.2	0.0302	0.05, 0.90	0.11, 0.84	0.14
		Non-LTSS users	0.34	6.9	0.0059	0.10, 0.58	0.14, 0.54	
	Demonstration year 3	LTSS users	0.47	NS	0.1981	–0.25, 1.19	–0.13, 1.07	0.00
		Non-LTSS users	0.47	9.7	0.0064	0.13, 0.80	0.19, 0.75	
	Demonstration year 4	LTSS users	0.43	NS	0.3461	–0.46, 1.33	–0.32, 1.18	−0.14
		Non-LTSS users	0.57	11.6	0.0021	0.21, 0.94	0.27, 0.88	
	Demonstration year 5	LTSS users	0.48	NS	0.0998	–0.09, 1.06	0.00, 0.97	−0.08
		Non-LTSS users	0.56	14.8	<0.0001	0.36, 0.76	0.40, 0.73	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Service Utilization Measures (continued)								
Monthly number of physician E&M visits per 1,000 persons	Cumulative	LTSS users	1.13	NS	0.9887	–154.86, 157.12	–129.79, 132.04	−42.32
		Non-LTSS users	43.45	5.7	0.0037	14.11, 72.79	18.83, 68.08	
	Demonstration year 1	LTSS users	–4.43	NS	0.9422	–124.22, 115.36	–104.96, 96.10	−19.54
		Non-LTSS users	15.11	NS	0.3239	–14.91, 45.14	–10.09, 40.31	
	Demonstration year 2	LTSS users	15.29	NS	0.8648	–160.72, 191.29	–132.42, 163.00	−19.54
		Non-LTSS users	47.54	6.1	0.0042	14.96, 80.11	20.20, 74.87	
	Demonstration year 3	LTSS users	–3.12	NS	0.9728	–182.26, 176.02	–153.46, 147.22	−32.25
		Non-LTSS users	74.74	9.9	<0.0001	41.40, 108.09	46.76, 102.73	
	Demonstration year 4	LTSS users	–10.23	NS	0.9334	–249.88, 229.43	–211.35, 190.90	−77.86
		Non-LTSS users	63.09	8.3	0.0008	26.37, 99.82	32.27, 93.91	
	Demonstration year 5	LTSS users	98.94	NS	0.5734	–245.42, 443.29	–190.05, 387.93	−73.32
		Non-LTSS users	39.87	6.1	0.0358	2.65, 77.10	8.63, 71.12	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Service Utilization Measures (continued)								
Monthly probability of any SNF admission (%)	Cumulative	LTSS users	–0.06	NS	0.7759	–0.44, 0.33	–0.38, 0.27	−0.07
		Non-LTSS users	0.02	5.0	0.0004	0.01, 0.03	0.01, 0.03	
	Demonstration year 1	LTSS users	0.06	NS	0.7817	–0.38, 0.51	–0.31, 0.44	0.06
		Non-LTSS users	0.00	NS	0.8103	–0.02, 0.02	–0.01, 0.02	
	Demonstration year 2	LTSS users	–0.14	NS	0.5311	–0.58, 0.30	–0.51, 0.23	−0.14
		Non-LTSS users	0.00	NS	0.7253	–0.01, 0.02	–0.01, 0.02	
	Demonstration year 3	LTSS users	–0.18	NS	0.1310	–0.40, 0.05	–0.37, 0.02	−0.21
		Non-LTSS users	0.03	10.0	0.0006	0.01, 0.05	0.02, 0.05	
	Demonstration year 4	LTSS users	–0.14	NS	0.3457	–0.44, 0.15	–0.39, 0.11	−0.18
		Non-LTSS users	0.03	11.5	0.0179	0.01, 0.06	0.01, 0.06	
	Demonstration year 5	LTSS users	–0.16	NS	0.6980	–0.99, 0.66	–0.86, 0.53	−0.19
		Non-LTSS users	0.03	13.2	0.0050	0.01, 0.05	0.01, 0.05	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Quality of Care Measures								
Monthly number of preventable ED visits per 1,000 persons	Cumulative	LTSS users	2.04	NS	0.2905	–1.75, 5.83	–1.14, 5.22	−0.33
		Non-LTSS users	2.37	8.5	0.0025	0.83, 3.91	1.08, 3.66	
	Demonstration year 1	LTSS users	1.61	NS	0.3601	–1.84, 5.05	–1.28, 4.50	1.08
		Non-LTSS users	0.53	NS	0.4879	–0.96, 2.02	–0.72, 1.78	
	Demonstration year 2	LTSS users	2.64	NS	0.1870	–1.28, 6.56	–0.65, 5.93	1.22
		Non-LTSS users	1.43	NS	0.1604	–0.56, 3.42	–0.24, 3.10	
	Demonstration year 3	LTSS users	2.55	NS	0.3308	–2.59, 7.70	–1.77, 6.88	−0.80
		Non-LTSS users	3.35	11.6	0.0102	0.79, 5.91	1.20, 5.50	
	Demonstration year 4	LTSS users	1.54	NS	0.5811	–3.94, 7.03	–3.06, 6.15	−2.00
		Non-LTSS users	3.54	11.5	0.0083	0.91, 6.17	1.34, 5.75	
	Demonstration year 5	LTSS users	2.92	NS	0.1588	–1.14, 6.97	–0.49, 6.32	−0.66
		Non-LTSS users	3.58	17.0	<0.0001	2.35, 4.80	2.54, 4.61	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Quality of Care Measures (continued)								
Monthly probability of any ACSC admission, overall (%)	Cumulative	LTSS users	0.03	NS	0.7077	–0.11, 0.17	–0.09, 0.14	0.00
		Non-LTSS users	0.03	NS	0.3091	–0.02, 0.08	–0.02, 0.07	
	Demonstration year 1	LTSS users	–0.03	NS	0.6888	–0.18, 0.12	–0.15, 0.09	−0.01
		Non-LTSS users	–0.02	NS	0.2109	–0.06, 0.01	–0.06, 0.01	
	Demonstration year 2	LTSS users	0.13	NS	0.2044	–0.07, 0.34	–0.04, 0.31	0.16
		Non-LTSS users	–0.03	NS	0.4897	–0.10, 0.05	–0.09, 0.04	
	Demonstration year 3	LTSS users	0.11	NS	0.1338	–0.03, 0.25	–0.01, 0.23	0.07
		Non-LTSS users	0.04	NS	0.2438	–0.03, 0.11	–0.02, 0.10	
	Demonstration year 4	LTSS users	0.01	NS	0.9173	–0.23, 0.25	–0.19, 0.21	−0.07
		Non-LTSS users	0.08	14.0	0.0130	0.02, 0.14	0.03, 0.13	
	Demonstration year 5	LTSS users	–0.01	NS	0.9323	–0.18, 0.17	–0.15, 0.14	−0.10
		Non-LTSS users	0.09	20.5	0.0065	0.03, 0.15	0.04, 0.14	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Quality of Care Measures (continued)								
Monthly probability of any ACSC admission, chronic (%)	Cumulative	LTSS users	0.00	NS	0.9118	–0.07, 0.08	–0.06, 0.07	−0.02
		Non-LTSS users	0.02	NS	0.3337	–0.02, 0.07	–0.02, 0.06	
	Demonstration year 1	LTSS users	–0.03	NS	0.4367	–0.12, 0.05	–0.11, 0.04	−0.01
		Non-LTSS users	–0.02	NS	0.3134	–0.06, 0.02	–0.06, 0.01	
	Demonstration year 2	LTSS users	0.07	NS	0.2124	–0.04, 0.19	–0.02, 0.17	0.09
		Non-LTSS users	–0.02	NS	0.5763	–0.08, 0.05	–0.07, 0.04	
	Demonstration year 3	LTSS users	0.04	NS	0.3936	–0.05, 0.14	–0.04, 0.12	0.01
		Non-LTSS users	0.03	NS	0.2645	–0.03, 0.09	–0.02, 0.08	
	Demonstration year 4	Non-LTSS users	0.02	NS	0.8089	–0.11, 0.15	–0.09, 0.13	−0.05
		Non-LTSS users	0.07	14.2	0.0430	0.00, 0.13	0.01, 0.12	
	Demonstration year 5	LTSS users	–0.00	NS	0.9527	–0.13, 0.12	–0.11, 0.10	−0.09
		Non-LTSS users	0.09	24.3	0.0037	0.03, 0.15	0.04, 0.14	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Quality of Care Measures (continued)								
Probability of 30-day follow-up after mental health discharge (%)	Cumulative	LTSS users	4.08	NS	0.3415	–4.33, 12.49	–2.97, 11.13	1.42
		Non-LTSS users	2.66	NS	0.2178	–1.57, 6.89	–0.89, 6.21	
	Demonstration year 1	LTSS users	1.39	NS	0.7862	–8.67, 11.46	–7.06, 9.84	−1.09
		Non-LTSS users	2.48	NS	0.3704	–2.95, 7.91	–2.07, 7.03	
	Demonstration year 2	LTSS users	9.00	NS	0.0914	–1.45, 19.45	0.23, 17.77	7.03
		Non-LTSS users	1.97	NS	0.4190	–2.81, 6.75	–2.04, 5.98	
	Demonstration year 3	LTSS users	2.08	NS	0.7041	–8.67, 12.84	–6.94, 11.11	−1.75
		Non-LTSS users	3.83	NS	0.2044	–2.09, 9.76	–1.14, 8.80	
	Demonstration year 4	LTSS users	5.48	NS	0.2254	–3.38, 14.35	–1.96, 12.92	0.99
		Non-LTSS users	4.49	NS	0.0860	–0.64, 9.62	0.19, 8.80	
	Demonstration year 5	LTSS users	5.18	NS	0.1788	–2.37, 12.74	–1.16, 11.52	5.15
		Non-LTSS users	0.03	NS	0.9909	–5.40, 5.46	–4.52, 4.59	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (LTSS versus non-LTSS)
Quality of Care Measures (continued)								
Number of all-cause 30-day readmissions per 1,000 discharges	Cumulative	LTSS users	2.39	NS	0.7938	–15.54, 20.32	–12.65, 17.43	−4.41
		Non-LTSS users	6.80	NS	0.2388	–4.51, 18.10	–2.69, 16.29	
	Demonstration year 1	LTSS users	–8.68	NS	0.4622	–31.80, 14.45	–28.08, 10.73	−8.86
		Non-LTSS users	0.19	NS	0.9835	–17.58, 17.95	–14.72, 15.10	
	Demonstration year 2	LTSS users	–0.31	NS	0.9754	–19.88, 19.26	–16.73, 16.12	−0.00
		Non-LTSS users	–0.31	NS	0.9705	–16.61, 16.00	–13.99, 13.38	
	Demonstration year 3	LTSS users	9.03	NS	0.4575	–14.79, 32.85	–10.96, 29.02	4.36
		Non-LTSS users	4.67	NS	0.6292	–14.30, 23.65	–11.25, 20.60	
	Demonstration year 4	LTSS users	20.56	NS	0.2084	–11.47, 52.59	–6.32, 47.44	4.45
		Non-LTSS users	16.11	NS	0.1907	–8.02, 40.23	–4.14, 36.35	
	Demonstration year 5	LTSS users	23.65	NS	0.3603	–27.03, 74.33	–18.88, 66.18	6.58
		Non-LTSS users	17.07	NS	0.1611	–6.80, 40.94	–2.96, 37.10	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$
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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Service Utilization Measures								
Monthly probability of any inpatient admission (%)	Cumulative	SPMI	0.13	NS	0.4398	–0.20, 0.46	–0.15, 0.41	0.24*
		Non-SPMI	–0.11	NS	0.1577	–0.26, 0.04	–0.24, 0.02	
	Demonstration year 1	SPMI	–0.13	NS	0.3173	–0.39, 0.13	–0.35, 0.09	0.14
		Non-SPMI	–0.28	–8.0	0.0018	–0.45, –0.10	–0.42, –0.13	
	Demonstration year 2	SPMI	0.23	NS	0.3458	–0.25, 0.72	–0.17, 0.64	0.43*
		Non-SPMI	–0.19	NS	0.0805	–0.41, 0.02	–0.38, –0.01	
	Demonstration year 3	SPMI	0.24	NS	0.2929	–0.21, 0.70	–0.14, 0.63	0.35*
		Non-SPMI	–0.11	NS	0.2201	–0.28, 0.06	–0.25, 0.04	
	Demonstration year 4	SPMI	0.38	NS	0.0882	–0.06, 0.81	0.01, 0.74	0.37*
		Non-SPMI	0.01	NS	0.9553	–0.22, 0.23	–0.18, 0.20	
	Demonstration year 5	SPMI	0.27	NS	0.0917	–0.04, 0.59	0.01, 0.54	0.13
		Non-SPMI	0.14	5.8	0.0393	0.01, 0.28	0.03, 0.26	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Service Utilization Measures (continued)								
Monthly probability of any ED visit (%)	Cumulative	SPMI	0.44	6.2	0.0027	0.15, 0.72	0.20, 0.68	0.20
		Non-SPMI	0.23	6.0	0.0228	0.03, 0.43	0.06, 0.40	
	Demonstration year 1	SPMI	0.03	NS	0.8433	–0.23, 0.28	–0.19, 0.24	0.06
		Non-SPMI	–0.04	NS	0.7406	–0.25, 0.18	–0.22, 0.14	
	Demonstration year 2	SPMI	0.67	9.4	<0.0001	0.39, 0.95	0.43, 0.90	0.42**
		Non-SPMI	0.25	5.9	0.0374	0.01, 0.48	0.05, 0.44	
	Demonstration year 3	SPMI	0.66	9.3	0.0061	0.19, 1.14	0.27, 1.06	0.36
		Non-SPMI	0.30	7.5	0.0431	0.01, 0.60	0.06, 0.55	
	Demonstration year 4	SPMI	0.73	10.0	0.0015	0.28, 1.19	0.35, 1.11	0.36
		Non-SPMI	0.37	9.0	0.0196	0.06, 0.68	0.11, 0.63	
	Demonstration year 5	SPMI	0.64	10.7	0.0024	0.23, 1.05	0.29, 0.99	0.14
		Non-SPMI	0.50	17.0	<0.0001	0.38, 0.62	0.40, 0.60	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Service Utilization Measures (continued)								
Monthly number of physician E&M visits per 1,000 persons	Cumulative	SPMI	–47.00	NS	0.2282	–123.46, 29.45	–111.16, 17.16	−39.34
		Non-SPMI	–7.66	NS	0.6451	–40.27, 24.94	–35.03, 19.70	
	Demonstration year 1	SPMI	–54.73	NS	0.1164	–123.05, 13.59	–112.07, 2.61	−25.10
		Non-SPMI	–29.63	NS	0.1000	–64.94, 5.68	–59.26, 0.00	
	Demonstration year 2	SPMI	–23.83	NS	0.5595	–103.87, 56.21	–91.00, 43.34	−29.97
		Non-SPMI	6.14	NS	0.7449	–30.82, 43.09	–24.88, 37.15	
	Demonstration year 3	SPMI	–28.63	NS	0.4946	–110.76, 53.51	–97.56, 40.30	−37.80
		Non-SPMI	9.18	NS	0.5928	–24.46, 42.81	–19.05, 37.41	
	Demonstration year 4	SPMI	–64.62	NS	0.2074	–165.07, 35.83	–148.92, 19.68	−58.50
		Non-SPMI	–6.12	NS	0.7395	–42.19, 29.95	–36.39, 24.15	
	Demonstration year 5	SPMI	–28.65	NS	0.6633	–157.60, 100.30	–136.86, 79.57	−31.55
		Non-SPMI	2.90	NS	0.8928	–39.28, 45.08	–32.50, 38.30	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Service Utilization Measures (continued)								
Monthly probability of any SNF admission (%)	Cumulative	SPMI	–0.20	NS	0.1058	–0.45, 0.04	–0.41, 0.00	−0.09
		Non-SPMI	–0.11	–14.3	0.0046	–0.19, –0.03	–0.18, –0.05	
	Demonstration year 1	SPMI	–0.16	NS	0.2116	–0.41, 0.09	–0.37, 0.05	−0.02
		Non-SPMI	–0.14	–16.5	0.0006	–0.22, –0.06	–0.20, –0.07	
	Demonstration year 2	SPMI	–0.17	NS	0.2031	–0.43, 0.09	–0.39, 0.05	−0.03
		Non-SPMI	–0.14	–17.2	<0.0001	–0.21, –0.07	–0.20, –0.08	
	Demonstration year 3	SPMI	–0.26	–11.1	0.0017	–0.43, –0.10	–0.40, –0.12	−0.14*
		Non-SPMI	–0.12	–16.4	0.0121	–0.22, –0.03	–0.21, –0.04	
	Demonstration year 4	SPMI	–0.24	NS	0.0529	–0.49, 0.00	–0.45, –0.04	−0.17
		Non-SPMI	–0.07	NS	0.1013	–0.16, 0.01	–0.15, 0.00	
	Demonstration year 5	SPMI	–0.26	NS	0.3824	–0.84, 0.32	–0.75, 0.23	−0.20
		Non-SPMI	–0.06	NS	0.4207	–0.19, 0.08	–0.17, 0.06	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Quality of Care Measures								
Monthly number of preventable ED visits per 1,000 persons	Cumulative	SPMI	3.83	10.1	0.0002	1.83, 5.83	2.15, 5.50	2.00
		Non-SPMI	1.83	8.5	0.0001	0.89, 2.76	1.04, 2.61	
	Demonstration year 1	SPMI	1.21	NS	0.1943	–0.62, 3.05	–0.32, 2.75	0.53
		Non-SPMI	0.68	NS	0.2566	–0.50, 1.86	–0.31, 1.67	
	Demonstration year 2	SPMI	4.72	12.5	0.0043	1.48, 7.96	2.00, 7.44	3.55*
		Non-SPMI	1.17	4.9	0.0467	0.02, 2.32	0.20, 2.13	
	Demonstration year 3	SPMI	5.67	14.7	0.0002	2.67, 8.66	3.16, 8.18	3.53**
		Non-SPMI	2.13	9.3	0.0239	0.28, 3.98	0.58, 3.69	
	Demonstration year 4	SPMI	5.17	12.8	0.0001	2.55, 7.79	2.97, 7.37	2.84*
		Non-SPMI	2.33	9.5	0.0132	0.49, 4.17	0.78, 3.87	
	Demonstration year 5	SPMI	4.80	15.6	0.0040	1.53, 8.07	2.05, 7.54	1.63
		Non-SPMI	3.17	20.9	<0.0001	2.08, 4.25	2.26, 4.08	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Quality of Care Measures (continued)								
Monthly probability of any ACSC admission, overall (%)	Cumulative	SPMI	0.02	NS	0.7058	–0.09, 0.14	–0.07, 0.12	0.03
		Non-SPMI	–0.01	NS	0.5964	–0.06, 0.03	–0.05, 0.03	
	Demonstration year 1	SPMI	–0.04	NS	0.5168	–0.15, 0.08	–0.13, 0.06	0.01
		Non-SPMI	–0.04	–6.3	0.0131	–0.08, –0.01	–0.07, –0.01	
	Demonstration year 2	SPMI	0.05	NS	0.5960	–0.13, 0.23	–0.10, 0.20	0.09
		Non-SPMI	–0.04	NS	0.3489	–0.12, 0.04	–0.11, 0.03	
	Demonstration year 3	SPMI	0.04	NS	0.6261	–0.12, 0.19	–0.09, 0.17	0.07
		Non-SPMI	–0.03	NS	0.2890	–0.10, 0.03	–0.09, 0.02	
	Demonstration year 4	SPMI	0.07	NS	0.3390	–0.07, 0.21	–0.05, 0.19	0.05
		Non-SPMI	0.01	NS	0.6393	–0.05, 0.07	–0.04, 0.06	
	Demonstration year 5	SPMI	0.08	NS	0.0621	–0.00, 0.17	0.01, 0.16	0.02
		Non-SPMI	0.07	NS	0.0551	–0.00, 0.14	0.01, 0.13	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Quality of Care Measures (continued)								
Monthly probability of any ACSC admission, chronic (%)	Cumulative	SPMI	0.03	NS	0.4548	–0.05, 0.10	–0.03, 0.09	0.02
		Non-SPMI	0.01	NS	0.8080	–0.04, 0.05	–0.03, 0.05	
	Demonstration year 1	SPMI	–0.03	NS	0.4854	–0.10, 0.05	–0.09, 0.04	−0.00
		Non-SPMI	–0.03	NS	0.2182	–0.07, 0.02	–0.06, 0.01	
	Demonstration year 2	SPMI	0.03	NS	0.6374	–0.11, 0.18	–0.08, 0.15	0.06
		Non-SPMI	–0.02	NS	0.4968	–0.09, 0.04	–0.08, 0.03	
	Demonstration year 3	SPMI	0.03	NS	0.5784	–0.08, 0.15	–0.06, 0.13	0.04
		Non-SPMI	–0.01	NS	0.8067	–0.07, 0.06	–0.06, 0.05	
	Demonstration year 4	SPMI	0.08	8.8	0.0471	0.00, 0.15	0.01, 0.14	0.04
		Non-SPMI	0.03	NS	0.3086	–0.03, 0.10	–0.02, 0.09	
	Demonstration year 5	SPMI	0.12	18.1	0.0056	0.03, 0.20	0.05, 0.19	0.04
		Non-SPMI	0.08	24.7	0.0133	0.02, 0.14	0.03, 0.13	

(continued)

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 Texas, demonstration years 1-5, March 1, 2015–December 31, 2020

Measure	Demonstration year	Special population	Demonstration effect relative to the comparison group	Relative difference (%)	p-value	95% confidence interval	90% confidence interval	Difference in demonstration effect (SPMI versus non-SPMI)
Quality of Care Measures (continued)								
Number of all-cause 30-day readmissions per 1,000 discharges	Cumulative	SPMI	16.96	5.5	0.0184	2.86, 31.07	5.13, 28.80	15.47
		Non-SPMI	1.49	NS	0.8111	–10.76, 13.74	–8.79, 11.77	
	Demonstration year 1	SPMI	8.20	NS	0.4366	–12.46, 28.86	–9.14, 25.54	14.82
		Non-SPMI	–6.62	NS	0.3615	–20.84, 7.60	–18.55, 5.31	
	Demonstration year 2	SPMI	19.47	6.9	0.0118	4.31, 34.63	6.75, 32.19	28.20*
		Non-SPMI	–8.73	NS	0.3780	–28.14, 10.68	–25.02, 7.56	
	Demonstration year 3	SPMI	16.08	NS	0.1622	–6.47, 38.63	–2.84, 35.00	20.65
		Non-SPMI	–4.57	NS	0.5569	–19.84, 10.69	–17.39, 8.24	
	Demonstration year 4	SPMI	28.74	9.8	0.0051	8.63, 48.85	11.86, 45.62	10.71
		Non-SPMI	18.03	NS	0.1613	–7.20, 43.25	–3.14, 39.19	
	Demonstration year 5	SPMI	19.63	NS	0.1044	–4.06, 43.32	–0.25, 39.51	1.37
		Non-SPMI	18.26	NS	0.2234	–11.13, 47.66	–6.41, 42.93	

* 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 types 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 Texas 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 (see ***Table E-5***) and NF-related measures derived from the MDS (see ***Table E-6***). These descriptive 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 some outcomes where differences were apparent. For example, independent therapy use was higher among the comparison group than among the demonstration group.

In contrast to the service utilization measures (see ***Table E-4***), many of the RTI quality of care and care coordination measures were somewhat different for the Texas demonstration eligible beneficiaries than the comparison group (see ***Table E-5***). In general, the comparison group had higher rates of 30-day all-cause risk-standardized readmission and more ACSC admissions (overall and chronic) than the demonstration group over the predemonstration and demonstration periods. On the other hand, rates of 30-day follow-up after hospitalization for mental illness and counts of screening for clinical depression were higher among the demonstration group across all years.

Finally, across the predemonstration and demonstration periods, the demonstration eligible group had lower rates of new long-stay NF admissions and mostly had a lower percentage of long-stay NF users relative to the comparison group (***Table E-6***). There were differences in some characteristics of long-stay NF residents at admission: relative to the comparison group, in most years, demonstration eligible beneficiaries had greater functional limitations and a higher proportion of beneficiaries with severe cognitive impairment.

Table E-4
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Number of demonstration eligible beneficiaries		63,625	58,876	51,320	43,376	41,343	40,904	42,057
Number of comparison eligible beneficiaries		188,359	182,854	199,093	170,821	166,464	162,925	165,952
Institutional setting								
Inpatient admissions[1]	Demonstration							
% with use		5.7	5.6	4.6	4.4	4.3	4.2	3.7
Utilization per 1,000 user months		1,195.8	1,188.7	1,187.1	1,181.7	1,170.0	1,170.3	1,165.1
Utilization per 1,000 eligible months		67.8	66.3	54.7	52.4	49.9	48.9	42.7
Inpatient admissions[1]	Comparison							
% with use		5.7	5.6	5.0	4.6	4.4	4.2	3.6
Utilization per 1,000 user months		1,164.7	1,167.7	1,170.4	1,169.9	1,161.3	1,156.0	1,161.4
Utilization per 1,000 eligible months		66.2	65.8	58.2	54.3	51.0	49.0	42.2
Inpatient psychiatric	Demonstration							
% with use		0.2	0.3	0.2	0.2	0.2	0.2	0.2
Utilization per 1,000 user months		1,108.0	1,099.7	1,123.7	1,109.8	1,105.8	1,119.0	1,119.4
Utilization per 1,000 eligible months		2.7	3.0	2.7	2.4	2.4	2.4	2.1
Inpatient psychiatric	Comparison							
% with use		0.2	0.2	0.2	0.2	0.2	0.2	0.1
Utilization per 1,000 user months		1,106.4	1,103.1	1,108.1	1,091.6	1,083.8	1,092.4	1,110.5
Utilization per 1,000 eligible months		1.9	2.0	1.8	1.7	1.7	1.7	1.6

(continued)

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Inpatient non-psychiatric	Demonstration							
% with use		5.4	5.3	4.4	4.2	4.1	4.0	3.5
Utilization per 1,000 user months		1,194.2	1,187.6	1,184.8	1,179.1	1,167.9	1,167.6	1,161.5
Utilization per 1,000 eligible months		65.0	63.2	52.0	49.9	47.5	46.5	40.5
Inpatient non-psychiatric	Comparison							
% with use		5.5	5.5	4.8	4.5	4.2	4.1	3.5
Utilization per 1,000 user months		1,161.4	1,164.4	1,167.7	1,167.8	1,158.9	1,153.8	1,158.7
Utilization per 1,000 eligible months		64.3	63.8	56.4	52.6	49.2	47.2	40.5
Emergency department use (non-admit)	Demonstration							
% with use		5.0	5.1	5.0	5.3	5.3	5.4	4.2
Utilization per 1,000 user months		1,208.2	1,217.1	1,249.1	1,251.3	1,234.7	1,239.9	1,264.0
Utilization per 1,000 eligible months		60.7	62.3	62.5	66.2	65.1	67.4	53.6
Emergency department use (non-admit)	Comparison							
% with use		5.3	5.5	5.4	5.3	5.2	5.4	4.1
Utilization per 1,000 user months		1,223.1	1,227.1	1,221.0	1,218.9	1,200.4	1,216.3	1,230.5
Utilization per 1,000 eligible months		64.7	67.2	65.9	64.8	62.9	65.6	50.1

(continued)

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Emergency department use (psychiatric)	Demonstration							
% with use		0.2	0.2	0.2	0.2	0.2	0.2	0.1
Utilization per 1,000 user months		1,138.0	1,140.3	1,159.4	1,124.5	1,100.7	1,135.6	1,195.7
Utilization per 1,000 eligible months		1.9	2.1	1.9	1.9	1.8	2.0	1.7
Emergency department use (psychiatric)	Comparison							
% with use		0.2	0.2	0.2	0.2	0.2	0.2	0.2
Utilization per 1,000 user months		1,160.1	1,184.4	1,168.4	1,135.5	1,126.2	1,106.7	1,190.8
Utilization per 1,000 eligible months		2.4	2.7	2.5	2.2	2.2	2.3	2.0
Observation stays	Demonstration							
% with use		0.8	0.8	0.8	0.9	0.9	0.9	0.7
Utilization per 1,000 user months		1,080.1	1,048.9	1,100.8	1,094.7	1,092.2	1,093.3	1,098.8
Utilization per 1,000 eligible months		9.0	8.8	9.3	9.4	9.4	9.8	8.0
Observation stays	Comparison							
% with use		0.7	0.8	0.8	0.8	0.8	0.8	0.6
Utilization per 1,000 user months		1,057.2	1,049.9	1,053.5	1,058.9	1,049.7	1,075.5	1,116.8
Utilization per 1,000 eligible months		7.8	8.0	8.4	8.5	8.4	8.8	6.5

(continued)

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Skilled nursing facility	Demonstration							
% with use		1.8	1.8	1.2	1.1	1.0	0.9	1.5
Utilization per 1,000 user months		1,092.8	1,086.7	1,115.8	1,089.8	1,084.2	1,081.9	1,073.5
Utilization per 1,000 eligible months		19.5	19.1	13.6	12.1	10.7	9.8	15.7
Skilled nursing facility	Comparison							
% with use		2.0	2.0	1.6	1.5	1.4	1.3	1.8
Utilization per 1,000 user months		1,096.0	1,093.4	1,094.9	1,087.6	1,092.1	1,086.6	1,068.0
Utilization per 1,000 eligible months		21.4	21.4	17.4	16.4	15.1	13.8	19.2
Hospice	Demonstration							
% with use		3.7	3.6	2.6	2.3	2.3	2.2	2.1
Utilization per 1,000 user months		1,038.3	1,021.4	1,020.2	1,021.1	1,019.5	1,021.7	1,018.8
Utilization per 1,000 eligible months		38.8	36.5	26.3	23.8	23.3	22.9	21.4
Hospice	Comparison							
% with use		2.8	2.7	2.3	2.3	2.3	2.2	1.9
Utilization per 1,000 user months		1,026.0	1,013.8	1,014.3	1,015.1	1,012.1	1,015.7	1,012.2
Utilization per 1,000 eligible months		28.6	27.8	23.8	23.3	22.8	21.9	19.5

(continued)

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Non-institutional setting								
Primary care E&M visits	Demonstration							
% with use		59.6	58.6	55.3	55.3	55.2	54.5	48.0
Utilization per 1,000 user months		2,270.4	2,287.2	2,236.1	2,245.3	2,234.9	2,226.6	2,285.1
Utilization per 1,000 eligible months		1,352.5	1,340.3	1,237.2	1,242.0	1,233.5	1,213.4	1,097.9
Primary care E&M visits	Comparison							
% with use		57.8	56.8	56.0	54.5	53.8	53.4	46.7
Utilization per 1,000 user months		2,196.5	2,194.9	2,170.3	2,200.5	2,218.7	2,251.9	2,275.6
Utilization per 1,000 eligible months		1,270.0	1,247.3	1,215.4	1,200.3	1,193.9	1,203.0	1,063.5
Outpatient therapy (PT, OT, ST)	Demonstration							
% with use		6.3	6.8	5.3	5.5	5.7	5.8	5.3
Utilization per 1,000 user months		30,943.4	32,832.8	31,839.9	31,490.1	30,506.6	29,842.9	31,066.0
Utilization per 1,000 eligible months		1,957.7	2,219.6	1,682.7	1,723.0	1,737.6	1,718.6	1,631.0
Outpatient therapy (PT, OT, ST)	Comparison							
% with use		5.5	5.7	5.8	6.4	6.7	6.7	5.7
Utilization per 1,000 user months		25,639.1	27,676.7	28,829.3	29,022.8	28,507.8	27,547.0	29,423.2
Utilization per 1,000 eligible months		1,406.9	1,568.1	1,668.8	1,850.5	1,912.1	1,841.9	1,663.5

(continued)

Table E-4 (continued)
Proportion and utilization for institutional and non-institutional services for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Independent therapy (PT, OT, ST)	Demonstration							
% with use		0.6	0.6	0.8	0.9	1.0	1.1	0.8
Utilization per 1,000 user months		11,036.1	12,250.5	11,620.0	10,798.0	11,098.4	10,240.5	8,730.4
Utilization per 1,000 eligible months		69.7	76.5	87.5	97.9	110.0	110.0	67.4
Independent therapy (PT, OT, ST)	Comparison							
% with use		1.3	1.3	1.5	1.6	1.7	1.9	1.3
Utilization per 1,000 user months		17,313.4	18,775.0	19,705.2	20,213.4	19,676.7	19,378.3	17,635.5
Utilization per 1,000 eligible months		219.7	247.4	292.7	321.2	334.0	364.3	226.2
Other hospital outpatient services	Demonstration							
% with use		18.1	18.8	19.2	20.3	20.5	20.9	18.5
Utilization per 1,000 user months		—	—	—	—	—	—	—
Utilization per 1,000 eligible months		—	—	—	—	—	—	—
Other hospital outpatient services	Comparison							
% with use		24.0	24.2	24.2	24.6	24.1	24.4	22.1
Utilization per 1,000 user months		—	—	—	—	—	—	—
Utilization per 1,000 eligible months		—	—	—	—	—	—	—

— = data not available. E&M = evaluation and management; OT = occupational therapy, PT = physical therapy, ST = speech therapy.
[1] Includes acute admissions, inpatient rehabilitation, and long-term care hospital admissions.
SOURCE: RTI International analysis of Medicare data

Table E-5
Quality of care and care coordination outcomes for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Quality and care coordination measures	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
30-day all-cause risk-standardized readmission rate (%)	Demonstration	18.7	18.6	18.9	20.0	19.6	21.2	20.3
	Comparison	21.0	21.5	20.8	21.3	21.0	21.3	20.5
Preventable ED visits per 1,000 persons	Demonstration	27.6	28.4	28.5	29.1	29.3	30.3	22.7
	Comparison	29.3	30.9	29.8	29.3	28.2	29.5	21.1
Rate of 30-day follow-up after hospitalization for mental illness (%)	Demonstration	46.4	42.7	37.5	34.5	37.0	36.2	32.9
	Comparison	40.4	41.8	31.7	28.9	30.9	29.5	28.5
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	Demonstration	10.6	10.1	8.6	8.9	8.4	8.4	6.3
	Comparison	11.4	11.2	10.2	10.1	9.6	9.1	6.4
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	Demonstration	6.4	6.1	5.4	6.3	5.8	6.1	4.9
	Comparison	7.1	7.2	6.7	7.3	6.8	6.6	4.6
Screening for clinical depression per 1,000 eligible months	Demonstration	3.4	8.0	14.3	13.6	13.8	15.7	11.2
	Comparison	2.3	6.0	8.9	9.0	8.8	9.8	9.1

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-6
MDS long-stay NF utilization and characteristics at admission for the demonstration and comparison groups in Texas, March 1, 2013–December 31, 2020

Measures by setting	Group	Predemon-stration year 1	Predemon-stration year 2	Demonstra-tion year 1	Demonstra-tion year 2	Demonstra-tion year 3	Demonstra-tion year 4	Demonstra-tion year 5
Annual NF utilization								
Number of demonstration beneficiaries	Demonstration	42,843	39,840	33,104	32,197	31,253	30,996	42,843
New long-stay NF admissions per 1,000 eligible beneficiaries		18.2	17.8	15.1	7.4	7.1	6.6	18.2
Number of comparison beneficiaries	Comparison	128,653	125,133	127,083	122,413	120,484	119,140	128,653
New long-stay NF admissions per 1,000 eligible beneficiaries		19.0	18.3	27.9	17.2	14.4	13.0	19.0
Number of demonstration beneficiaries	Demonstration	54,523	49,987	38,973	37,507	35,807	35,102	54,523
Long-stay NF users as % of eligible beneficiaries		22.5	21.4	16.0	14.4	13.0	11.6	22.5
Number of comparison beneficiaries	Comparison	161,669	155,456	152,104	148,041	144,610	140,241	161,669
Long-stay NF users as % of eligible beneficiaries		21.7	20.8	18.9	18.4	17.5	16.0	21.7
Characteristics of new long-stay NF residents at admission								
Number of admitted demonstration beneficiaries	Demonstration	779	710	501	238	222	204	779
Number of admitted comparison beneficiaries	Comparison	2,439	2,284	3,543	2,105	1,737	1,546	2,439
Functional status (RUG-IV ADL scale)	Demonstration	8.6	8.4	9.2	9.1	8.8	9.5	8.6
Functional status (RUG-IV ADL scale)	Comparison	8.3	8.6	8.4	8.5	8.1	7.8	8.3
Percent with severe cognitive impairment	Demonstration	49.9	48.4	50.8	46.0	50.5	43.6	49.9
Percent with severe cognitive impairment	Comparison	45.9	45.5	41.9	43.9	42.6	43.7	45.9
Percent with low level of care need	Demonstration	1.9	1.7	1.6	0.8	1.0	1.0	1.9
Percent with low level of care need	Comparison	1.4	2.4	1.2	1.8	2.2	1.0	1.4

ADL = activities of daily living; MDS = Nursing Home Minimum Data Set; NF = nursing facility; RUG = Resource Utilization Group.
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, compared to those demonstration eligible beneficiaries who were eligible but not enrolled (non-enrollees), for each service by demonstration year, to help understand the utilization experience over time.

Non-enrollees generally had higher utilization than demonstration enrollees across most service settings (see ***Table E-7***). Some measures of quality of care and care coordination were more favorable for enrollees, specifically rates of preventable ED visits and ACSC admission (overall and chronic) (see ***Table E-8***). On the other hand, rates of screening for clinical depression were more favorable among non-enrollees than among enrollees.

Table E-7
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Texas, March 1, 2015–December 31, 2020

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Number of demonstration enrollees		21,424	15,409	15,796	15,920	17,157
Number of demonstration non-enrollees		29,823	27,951	25,545	24,976	24,897
Institutional setting						
Inpatient admissions[1]	Enrollees					
% with use		3.0	3.1	2.9	2.8	2.6
Utilization per 1,000 user months		1,136.4	1,134.8	1,126.2	1,133.6	1,146.1
Utilization per 1,000 eligible months		34.1	34.6	32.4	31.8	30.0
Inpatient admissions[1]	Non-enrollees					
% with use		5.4	5.0	5.1	5.0	4.3
Utilization per 1,000 user months		1,195.9	1,194.4	1,186.1	1,180.9	1,173.5
Utilization per 1,000 eligible months		64.2	59.9	59.9	59.1	51.0
Inpatient psychiatric	Enrollees					
% with use		0.3	0.2	0.2	0.2	0.2
Utilization per 1,000 user months		1,151.7	1,101.3	1,116.8	1,116.7	1,141.6
Utilization per 1,000 eligible months		2.9	2.4	2.6	2.3	2.2
Inpatient psychiatric	Non-enrollees					
% with use		0.2	0.2	0.2	0.2	0.2
Utilization per 1,000 user months		1,119.8	1,105.6	1,097.9	1,113.9	1,110.3
Utilization per 1,000 eligible months		2.3	2.2	2.2	2.3	2.0
Inpatient non-psychiatric	Enrollees					
% with use		2.8	2.9	2.7	2.6	2.4
Utilization per 1,000 user months		1,127.0	1,128.9	1,120.6	1,128.8	1,138.5
Utilization per 1,000 eligible months		31.1	32.2	29.8	29.5	27.8
Inpatient non-psychiatric	Non-enrollees					
% with use		5.2	4.8	4.9	4.8	4.2
Utilization per 1,000 user months		1,193.5	1,193.0	1,184.5	1,178.7	1,171.1
Utilization per 1,000 eligible months		61.9	57.7	57.7	56.7	49.0

(continued)

Table E-7 (continued)
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Texas, March 1, 2015–December 31, 2020

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Emergency department use (non-admit)	Enrollees					
% with use		4.0	4.3	4.5	4.6	3.8
Utilization per 1,000 user months		1,325.9	1,286.9	1,282.4	1,252.8	1,270.3
Utilization per 1,000 eligible months		53.2	54.9	57.7	57.9	48.6
Emergency department use (non-admit)	Non-enrollees					
% with use		5.5	5.7	5.7	5.9	4.5
Utilization per 1,000 user months		1,221.7	1,238.6	1,213.8	1,236.1	1,261.0
Utilization per 1,000 eligible months		66.7	71.1	69.3	73.1	56.5
Emergency department use (psychiatric)	Enrollees					
% with use		0.2	0.1	0.2	0.2	0.1
Utilization per 1,000 user months		1,267.5	1,174.8	1,155.9	1,151.0	1,169.4
Utilization per 1,000 eligible months		2.2	1.7	2.0	1.8	1.6
Emergency department use (psychiatric)	Non-enrollees					
% with use		0.2	0.2	0.2	0.2	0.1
Utilization per 1,000 user months		1,080.8	1,103.8	1,068.1	1,137.2	1,216.4
Utilization per 1,000 eligible months		1.6	1.9	1.8	2.1	1.7
Observation stays	Enrollees					
% with use		0.7	0.7	0.8	0.8	0.7
Utilization per 1,000 user months		1,267.3	1,202.2	1,190.2	1,169.6	1,160.5
Utilization per 1,000 eligible months		8.3	8.7	9.2	9.1	7.9
Observation stays	Non-enrollees					
% with use		0.9	0.9	0.9	1.0	0.8
Utilization per 1,000 user months		1,054.0	1,058.9	1,046.0	1,058.8	1,061.5
Utilization per 1,000 eligible months		9.8	9.7	9.5	10.3	8.1

(continued)

Table E-7 (continued)
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Texas, March 1, 2015–December 31, 2020

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Skilled nursing facility	Enrollees					
% with use		1.1	0.8	0.7	0.6	0.7
Utilization per 1,000 user months		1,214.6	1,102.7	1,061.8	1,073.6	1,072.2
Utilization per 1,000 eligible months		13.1	8.7	6.9	6.1	7.5
Skilled nursing facility	Non-enrollees					
% with use		1.3	1.2	1.1	1.1	1.9
Utilization per 1,000 user months		1,085.1	1,085.4	1,089.7	1,082.9	1,072.8
Utilization per 1,000 eligible months		14.6	13.2	12.4	11.9	20.5
Hospice	Enrollees					
% with use		2.5	2.3	1.9	1.9	1.6
Utilization per 1,000 user months		1,018.0	1,017.8	1,014.9	1,022.3	1,018.3
Utilization per 1,000 eligible months		25.8	23.3	19.6	19.6	16.7
Hospice	Non-enrollees					
% with use		2.8	2.3	2.4	2.4	2.4
Utilization per 1,000 user months		1,022.0	1,022.0	1,021.9	1,021.8	1,017.9
Utilization per 1,000 eligible months		28.7	23.7	25.0	24.9	24.6
Non-institutional setting						
Primary care E&M visits	Enrollees					
% with use		38.7	43.0	44.0	44.2	38.9
Utilization per 1,000 user months		2,235.0	2,229.2	2,172.7	2,067.1	2,095.2
Utilization per 1,000 eligible months		864	959	955.3	912.8	815.3
Primary care E&M visits	Non-enrollees					
% with use		63.2	61.2	61.8	60.8	54.3
Utilization per 1,000 user months		2,253.5	2,229.8	2,245.8	2,289.5	2,362.3
Utilization per 1,000 eligible months		1,424.7	1,365.6	1,387.2	1,392.2	1,283.6

(continued)

Table E-7 (continued)
Proportion and utilization of institutional and non-institutional services for demonstration enrollees and non-enrollees in Texas, March 1, 2015–December 31, 2020

Measures by setting	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Outpatient therapy (PT, OT, ST)	Enrollees					
% with use		3.1	4.0	4.2	3.7	3.4
Utilization per 1,000 user months		27,083.4	23,481.4	20,855.7	19,372.3	19,940.8
Utilization per 1,000 eligible months		838.3	941.1	868.6	709.6	678.3
Outpatient therapy (PT, OT, ST)	Non-enrollees					
% with use		6.3	5.7	6.3	6.9	6.3
Utilization per 1,000 user months		32,674.9	33,127.1	33,314.3	32,910.8	34,910.2
Utilization per 1,000 eligible months		2,056.9	1,899.4	2,088.0	2,265.8	2,207.4
Independent therapy (PT, OT, ST)	Enrollees					
% with use		0.4	0.5	0.7	0.8	0.6
Utilization per 1,000 user months		9,937.0	7,532.9	8,473.2	9,367.0	8,007.3
Utilization per 1,000 eligible months		43.5	40.8	63.0	78.2	49.9
Independent therapy (PT, OT, ST)	Non-enrollees					
% with use		0.9	1.1	1.2	1.2	0.9
Utilization per 1,000 user months		12,245.0	11,557.0	12,140.6	10,455.4	9,029.0
Utilization per 1,000 eligible months		111.1	125.5	140.8	128.3	79.2
Other hospital outpatient services	Enrollees					
% with use		13.9	15.8	17.0	17.7	15.8
Utilization per 1,000 user months		—	—	—	—	—
Utilization per 1,000 eligible months		—	—	—	—	—
Other hospital outpatient services	Non-enrollees					
% with use		21.7	22.4	22.5	22.8	20.4
Utilization per 1,000 user months		—	—	—	—	—
Utilization per 1,000 eligible months		—	—	—	—	—

— = data not available. E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy.
[1] Includes acute admissions, inpatient rehabilitation, and long-term care hospital admissions.
SOURCE: RTI International analysis of Medicare data.

Table E-8
Quality of care and care coordination outcomes for demonstration enrollees and non-enrollees in Texas, March 1, 2015–December 31, 2020

Quality and care coordination measures	Group	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
30-day all-cause risk-standardized readmission rate (%)	Enrollees	19.2	19.6	18.9	21.1	20.2
	Non-enrollees	18.6	20.2	19.9	21.3	20.4
Preventable ED visits per 1,000 persons	Enrollees	23.8	21.4	25.9	26.6	21.3
	Non-enrollees	30.5	32.5	31.3	32.7	23.5
Rate of 30-day follow-up after hospitalization for mental illness (%)	Enrollees	35.1	35.8	37.7	36.4	33.2
	Non-enrollees	36.6	34.6	37.0	35.7	33.1
Ambulatory care sensitive condition admissions per 1,000 eligible months—overall composite (AHRQ PQI # 90)	Enrollees	5.1	5.4	5.6	5.7	4.7
	Non-enrollees	10.1	10.5	10.1	10.0	7.4
Ambulatory care sensitive condition admissions per 1,000 eligible months—chronic composite (AHRQ PQI # 92)	Enrollees	2.9	3.7	3.8	4.2	3.8
	Non-enrollees	6.4	7.3	7.0	7.2	5.6
Screening for clinical depression per 1,000 eligible months	Enrollees	5.6	2.6	5.7	8.2	6.1
	Non-enrollees	19.4	19.1	18.8	19.1	14.9

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.

To help summarize the Medicaid utilization experience for demonstration enrollees, ***Table E-9*** presents unadjusted descriptive statistics of services traditionally paid for by Medicaid. Nursing home stays and dental services are excluded from analysis as encounter data was deemed incomplete. LTSS NF service use derived from MMP-submitted Medicaid encounters is excluded from analysis in all FAI States because we could not correctly identify all LTSS NF stays and could not reliably create the measure as a result. Instead, each evaluation report includes an analysis of LTSS NF use using MDS data. Secondly, CMS and RTI also decided that dental services in Texas were either incomplete or had unexplained variation, precluding the use of those encounter data for analysis. Finally, one Texas MMP plan, Molina, was excluded from the analyses because its encounter data was deemed incomplete.

Table E-9
Medicaid use for demonstration enrollees in Texas, March 1, 2015–December 31, 2020

Measure	Demonstration year 1	Demonstration year 2	Demonstration year 3	Demonstration year 4	Demonstration year 5
Personal care					
Users as percentage of enrollees per enrollee month (%)	25.74	27.60	28.91	30.18	30.93
Service days per enrollee month	7.06	7.35	7.71	7.95	8.05
Service days per user month	27.41	26.64	26.67	26.33	26.02
Other HCBS services					
Users as percentage of enrollees per enrollee month (%)	9.33	10.12	11.22	12.08	11.92
Service days per enrollee month	1.72	1.83	2.01	2.14	1.97
Service days per user month	18.44	18.10	17.94	17.70	16.50
Behavioral health services					
Users as percentage of enrollees per enrollee month (%)	3.79	4.91	5.09	5.41	4.74
Service days per enrollee month	0.14	0.18	0.18	0.21	0.20
Service days per user month	3.63	3.73	3.60	3.90	4.13
Nonemergency medical transportation					
Users as percentage of enrollees per enrollee month (%)	3.30	3.59	3.71	3.74	3.58
Service days per enrollee month	0.06	0.07	0.08	0.08	0.08
Service days per user month	1.71	1.90	2.03	2.16	2.35

E.1 Service Use by Demographic Characteristics of Eligible Beneficiaries

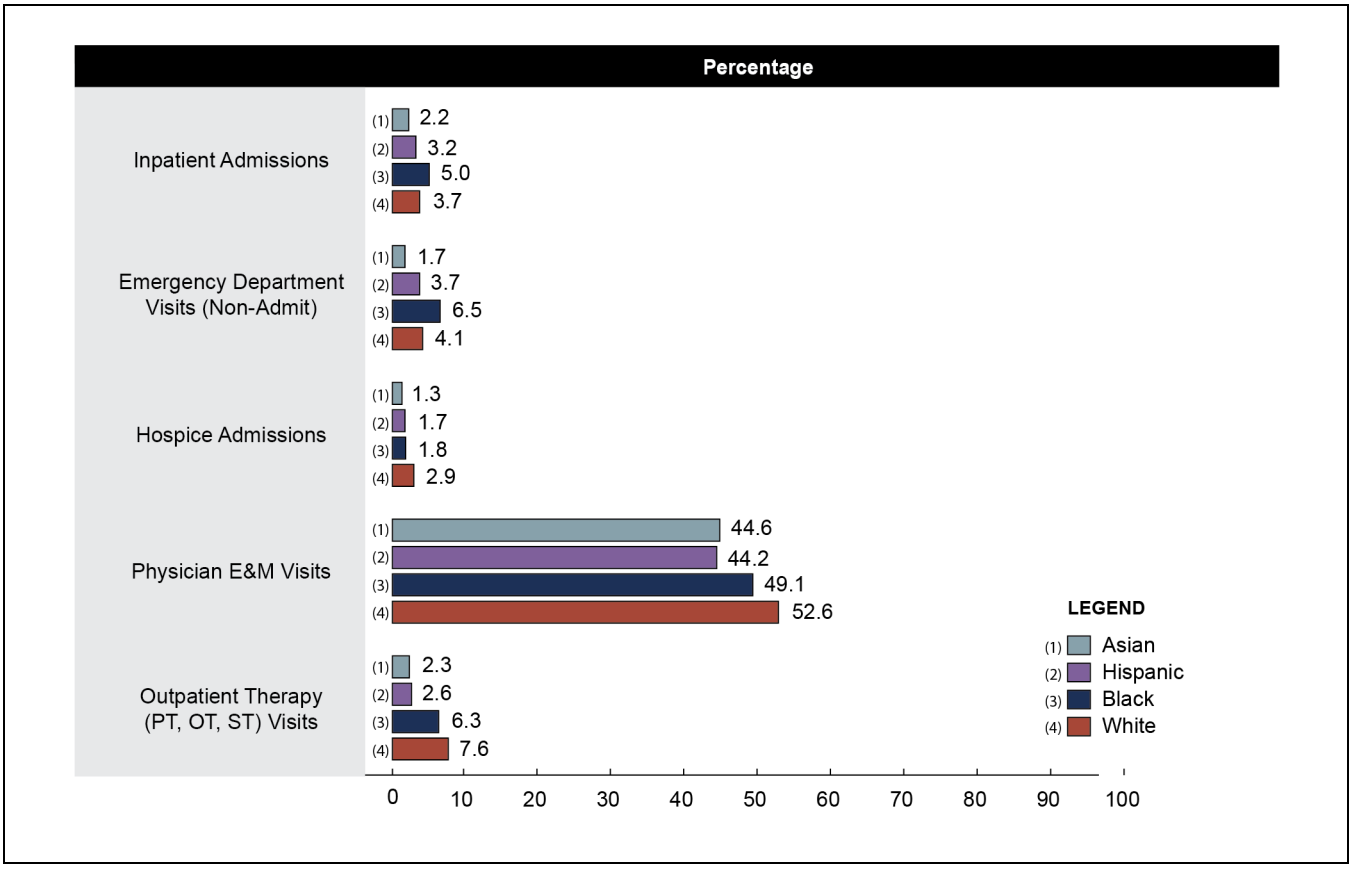
To examine any differences in racial and ethnic groups, ***Figures E-1, E-2***, and ***E-3*** provide month-level results for five settings of interest for Texas eligible beneficiaries: inpatient admissions, ED visits (non-admit), hospice admissions, primary care E&M visits, and outpatient therapy (physical 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. These comparisons should be interpreted with caution as we did not test for statistical significance.

Figure E-1 presents the percentage with use of selected Medicare services by race. A slightly higher percentage of Black beneficiaries had any inpatient admissions and ED visits, while a higher percentage of White beneficiaries had any primary care visits, outpatient therapy visits, and hospice admissions relative to other racial groups.

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, ED visits, and hospice use. Primary care E&M visits were highest among Black beneficiaries and White beneficiaries relative to other racial groups in months when there was any use. Outpatient therapy visits were lowest among Hispanic beneficiaries relative to other racial categories.

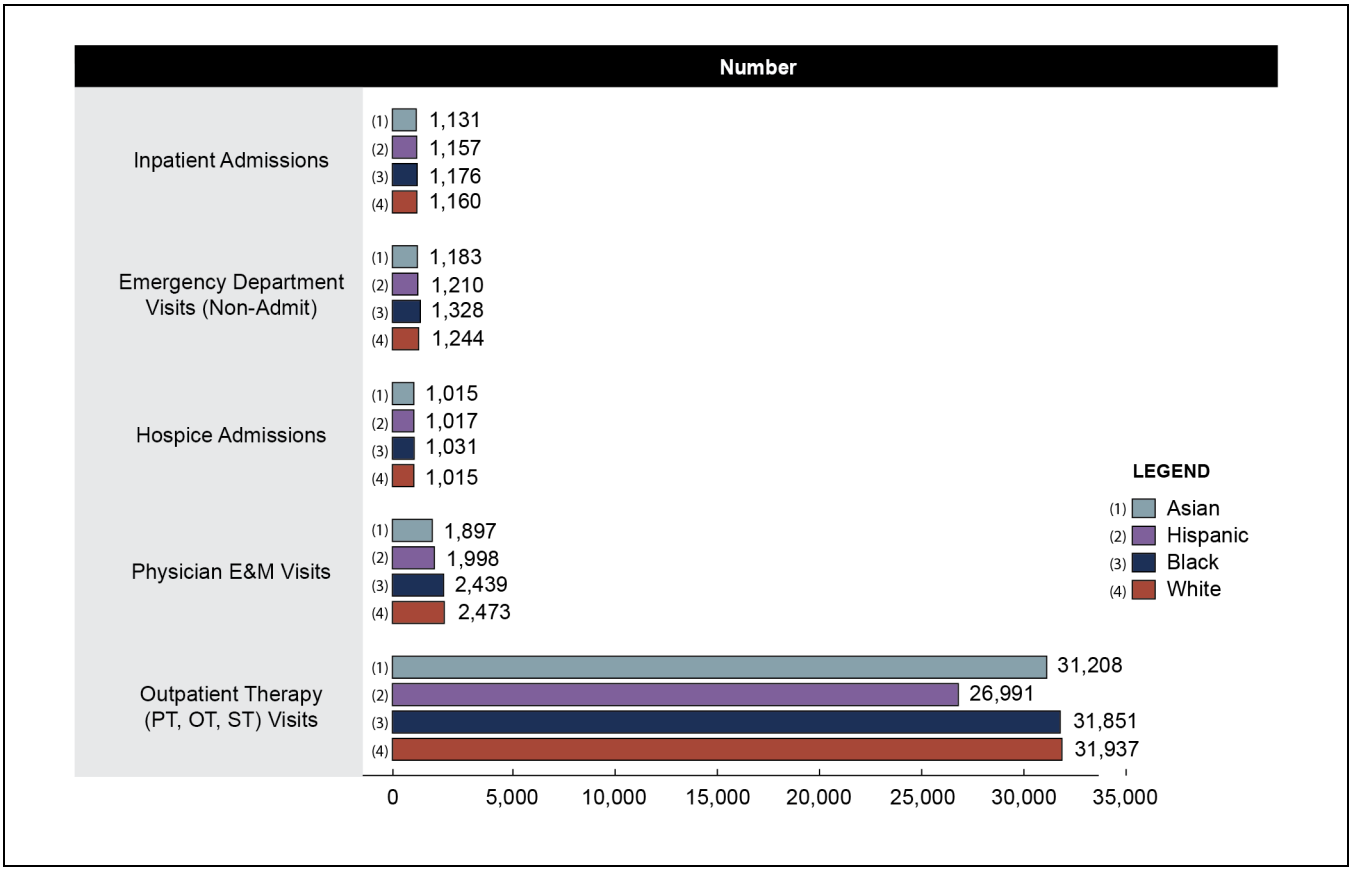
Figure E-3 presents counts of services across all Texas demonstration eligible beneficiaries regardless of having any use of the respective services. Inpatient admissions and ED visits were highest among Black beneficiaries by a small margin relative to the other racial groups. Primary care E&M visits and outpatient therapy visits were highest among White beneficiaries.

Figure E-1
Percentage with use of selected Medicare services among Texas demonstration eligible beneficiaries, January 1, 2020–December 31, 2020



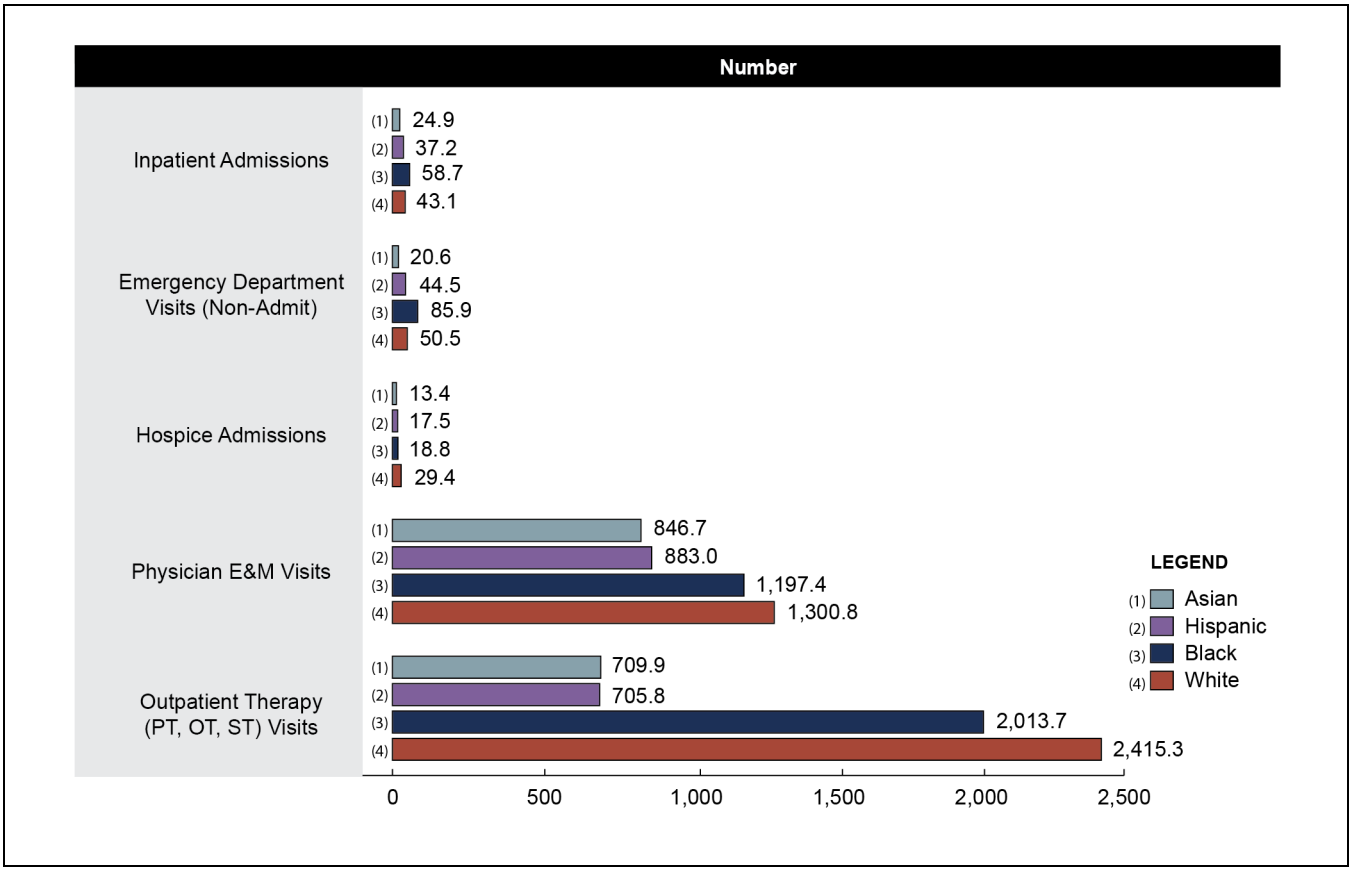
E&M = evaluation and management; OT = occupational therapy; PT = physical therapy; ST = speech therapy

Figure E-2
Service use per 1,000 user months among Texas demonstration eligible beneficiaries, January 1, 2020–December 31, 2020



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 Texas demonstration eligible beneficiaries, January 1, 2020–December 31, 2020



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

Appendix F

Cost Savings Methodology and Supplemental Tables

F.1 Cost Savings Methodology

To identify the demonstration group, RTI used quarterly files on demonstration eligible beneficiaries submitted by Texas. 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 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 F-1***. 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 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 experience rebate reconciliation and any associated retroactive adjustments in the system at the time of the data pull (December 2022). We also used Medicare FFS claims to calculate expenditures for eligible beneficiaries who were not enrolled in an MMP or MA plan. These FFS claims included all Medicare Parts A and B services.

Table F-1
Data sources for monthly Medicare expenditures

Group	Predemonstration period March 1, 2013–February 28, 2015	Demonstration period March 1, 2015–December 31, 2020
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.

To estimate the effect of the demonstration on Medicare expenditures, we ran 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, 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.

F.1.1 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-2*** summarizes

each adjustment and the application of the adjustments to FFS expenditures or to the capitation rate.

Table F-2
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 1, 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%.
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 0.91% for CY 2013, 0.89% for CY 2014, 0.89% for CY 2015, 0.97% for CY 2016, 0.81% for CY 2017, 0.82% for CY 2018, 0.84% for CY 2019, and 0.81% for CY 2020.

(continued)

Table F-2 (continued)
Adjustments to Medicare expenditures variable

Data source	Adjustment description	Reason for adjustment	Adjustment detail
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 2015, 0.97% for CY 2016, 0.81% for CY 2017, 0.82% for CY 2018, 0.84% for CY 2019, and 0.81% for CY 2020. Reduced the FFS portion of the capitation rate by an additional 1.71% for CY 2015, 1.73% for CY 2016, and 1.64% for CY 2017, 1.67% for CY 2018, 1.84% for CY 2019, and 1.77% for CY 2020 to account for the disproportional share of bad debt attributable to MMP 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.
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. While they result in a small reduction to the capitation payment received by MMPs, we did not account for this reduction in the capitated rate.

(continued)

Table F-2 (continued)
Adjustments to Medicare expenditures variable

Data source	Adjustment description	Reason for adjustment	Adjustment detail
Capitation rate (MMP)	Quality withhold	A 1% quality withhold was applied in the first demonstration year, 2% was applied in the second demonstration year, and a 3% quality withhold was applied in the third, fourth, and fifth demonstration years. However, quality withholds were not reflected in the capitation rate used in the analysis.	Final quality withhold repayments for CY 2015, CY 2016, CY 2017, CY 2018, CY 2019, and CY 2020 were incorporated into the dependent variable construction.
Capitation rate (MMP)	Experience Rebates	The demonstration uses a one-sided experience rebate system for risk mitigation, similar to the system used in STAR+PLUS. The rebate is intended to limit MMP profits to a reasonable percent of total revenue and encourage use of revenues for services rather than administrative expenses. Experience rebates were not reflected in MMP capitation rates.	Final experience rebate payments were incorporated into the dependent variable construction for demonstration years 1, 2, and 3.

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 (1.25 percent for the first portion of the first demonstration year (March 1, 2015 to December 31, 2015), 2.75 percent for the remaining portion of the first demonstration year (January 1, 2016 to December 31, 2016), 3.75 percent for the second demonstration year, and 5.5 percent for the third, fourth, and fifth demonstration years) but do not reflect the quality withhold amounts.

For the Medicaid analysis, no adjustments were made to the claims and capitation payment amounts from the MAX and T-MSIS files, beyond winsorizing the monthly total cost of care amounts at the 99th percentile separately for the demonstration group and the comparison group, and within those groups separately for each year.

F.1.2 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 both Medicare and Medicaid models were:
  - Age
  - Sex

  - Race/ethnicity
  - Enrolled in another Medicare shared saving program
  - End-stage renal disease status
  - Disability as reason for Medicare entitlement
  - Medicare Advantage status
- Area-level variables included in both the Medicare and Medicaid savings models were:
  - Medicare spending per dually eligible beneficiary age 19 or older
  - MA penetration rate
  - Medicaid-to-Medicare FFS fee index for all services
  - Medicaid spending per dually eligible beneficiary age 19 or older
  - Proportion of dually eligible beneficiaries using
    - NFs age 65 or older
    - HCBS age 65 or older
    - Medicaid managed care age 19 or older
    - Personal care, age 65 or older
  - 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
  - Distance to nearest hospital
  - Distance to nearest nursing home
  - COVID-19 Pandemic Vulnerability Index
- Demographic variables included only in the Medicaid model were:
  - Medicaid eligibility (medically needy, aged, disabled, and missing)
  - Proportion of dually eligible beneficiaries using
    - Medicaid managed care age 19 or older

F.1.3 Populations Analyzed

The population analyzed for the Cost Savings outcome include all demonstration eligible beneficiaries, as well as demonstration enrollees. ***Table F-3*** presents descriptive statistics of

select characteristics for four population subgroups in demonstration year five: all demonstration eligible beneficiaries, the comparison group, all MMP enrollees, and all non-MMP enrollees.

The most prevalent age group among the comparison group and demonstration group was age 75 and older, with 37.79 percent and 38.95 percent, respectively. For demonstration group enrollees, age 65 to 74 was the most prevalent age group at 35.88 percent. Meanwhile, among demonstration group non-enrollees, the most prevalent age group was 75 and older, with 40.62 percent. All four groups were predominantly White (approximately 39 percent) with African American and Hispanic being the next highest percentages (each were approximately 23 percent). Among the overall demonstration population and demonstration group non-enrollee population, there was a relatively higher percentage of Asians (7.2 percent and 8.3 percent respectively) compared to the other groups (ranging from 3.9 to 4.1 percent).

Across all groups, most beneficiaries were female (58.5 to 62.7 percent), did not have disability as the primary reason for Medicare entitlement, and did not have ESRD. All beneficiaries resided in a metropolitan area as it was an eligibility requirement.

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 those with scores of 2 are predicted to have twice the average annual cost. Average HCC scores ranged between 1.1 and 1.3 among all groups.

Table F-3
Characteristics of eligible beneficiaries in Texas demonstration year 5 by group

Characteristics	Demonstration group	Comparison group	Demonstration group, enrollees	Demonstration group, non-enrollees
Weighted number of eligible beneficiaries	165,783	341,905	43,368	122,415
Demographic characteristics				
Age				
64 and younger	27.14	26.34	29.89	26.16
65 to 74	33.92	35.87	35.88	33.22
75 and older	38.95	37.79	34.23	40.62
Female				
No	37.42	37.33	41.53	35.97
Yes	62.58	62.67	58.47	64.03
Race/ethnicity				
White	38.66	39.88	38.48	38.73
African American	22.64	23.03	22.95	22.53
Hispanic	22.66	25.12	24.37	22.05
Asian	7.16	4.11	3.90	8.31
Other	5.97	4.84	6.83	5.67
Disability as reason for original Medicare entitlement				
No	67.94	68.97	66.37	68.50
Yes	32.06	31.03	33.63	31.50
ESRD status				
No	96.45	96.27	96.50	96.43
Yes	3.55	3.73	3.50	3.57
MSA				
No	0.00	0.00	0.00	0.00
Yes	100.00	100.00	100.00	100.00
Participating in Shared Savings Program				
No	92.86	93.03	99.67	90.45
Yes	7.14	6.97	0.33	9.55
HCC score	1.26	1.26	1.13	1.31

(continued)

Table F-3 (continued)
Characteristics of eligible beneficiaries in Texas demonstration year 5 by group

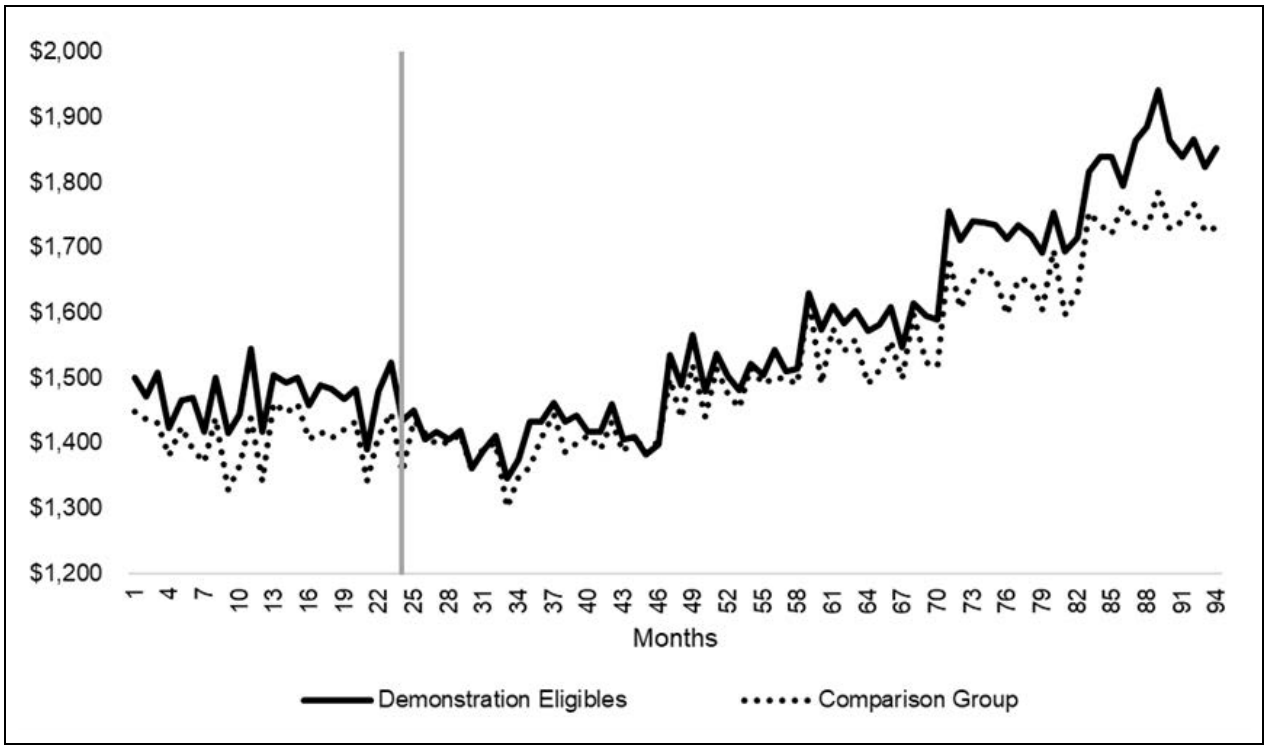
Characteristics	Demonstration group	Comparison group	Demonstration group, enrollees	Demonstration group, non-enrollees
Market characteristics				
Medicare spending per dually eligible beneficiary, ages 19+ ($)	21,529.87	19,201.45	21,467.20	21,552.07
MA penetration rate	0.34	0.22	0.34	0.34
Medicaid-to-Medicare fee index (FFS)	0.65	0.57	0.65	0.65
Medicaid spending per dually eligible beneficiary, ages 19+ ($)	11,552.69	17,368.01	11,738.50	11,486.87
Fraction of dually eligible beneficiaries using NF, ages 65+	0.84	0.81	0.84	0.84
Fraction of dually eligible beneficiaries using HCBS, ages 65+	0.06	0.06	0.06	0.07
Fraction of dually eligible beneficiaries using personal care, ages 19+	0.01	0.01	0.01	0.01
Fraction of dually eligible beneficiaries with Medicaid managed care, ages 19+	0.54	0.49	0.51	0.55
Population per square mile, all ages	1,857.46	886.94	1,780.78	1,884.62
Patient care physicians per 1,000 population	0.58	0.72	0.57	0.58
Area characteristics				
% of Medicare population in Medicare Advantage	49.35	50.26	NA	65.71
% of population living in married households	63.04	61.39	63.03	63.05
% of adults with college education	20.51	20.17	20.28	20.59
% of adults with self-care limitations	3.90	3.43	4.00	3.87
% of adults unemployed	6.65	6.89	6.61	6.66
% of household with individuals younger than 18	39.47	39.79	39.83	39.34
% of household with individuals older than 60	35.06	34.79	35.01	35.07
Distance to nearest hospital	4.65	4.26	4.74	4.61
Distance to nearest nursing facility	3.32	3.20	3.42	3.29
Pandemic Vulnerability Index	0.55	0.53	0.55	0.55

ESRD = end-stage renal disease; FFS = fee-for-service; HCBS = home and community-based services; HCC = Hierarchical Condition Category; NF = nursing facility; MA = Medicare Advantage; MSA = metropolitan statistical area.
NOTE: Analysis conducted on demonstration eligible FFS population and Medicare-Medicaid Plan enrollees.
SOURCE: RTI Analysis of Texas demonstration eligible and comparison group Medicare data.

F.2 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 periods in Texas, demonstration and comparison group, March 2013–December 2020



SOURCE: RTI analysis of Texas demonstration eligible and comparison group Medicare data.

The DinD values in ***Tables F-4*** through ***F-13*** 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 (additional costs) 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 regression results presented in the ***Section 6*** and ***Table F-14*** represent the most accurate adjusted impact on Medicare costs.

Tables F-4 through ***F-8*** show the mean monthly Medicare expenditures for the demonstration group and comparison group in the predemonstration and each demonstration period, unweighted. The unweighted tables show a statistically significant negative DinD estimate for demonstration year 1, indicating a decrease in mean monthly Medicare expenditures for the demonstration group, relative to the comparison group in demonstration year 1. There were no statistically significant increases or decreases in mean monthly Medicare expenditures for the demonstration group, relative to the comparison group, in the later demonstration years. Mean Medicare expenditures increased for the demonstration group in demonstration years 2 through 5 and for the comparison group in all demonstration years, relative to the previous demonstration year. However, the change in mean Medicare expenditures was not significant for either group in the first demonstration year and for the demonstration group in demonstration periods 2 and 3. The weighted tables display no statistically significant increases or decreases in mean monthly Medicare expenditures among the demonstration group, relative to the comparison group (***Tables F-9*** through ***F-13***). Similar to the unweighted results, the mean weighted monthly Medicare expenditures increased in the demonstration and comparison groups in demonstration years 2 through 5, relative to the previous demonstration year. However, there was a decrease in weighted expenditures for the comparison group in demonstration year 1, whereas there was an increase in the unweighted table—yet neither are statistically significant.

Table F-4
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 1, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 1 (March 2015–December 2016) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,412.26 ($1,341.5, $1,483.01)	−$57.41 (−$139.4, $24.58)
Comparison	$1,317.33 ($1,272.88, $1,361.78)	$1,323.34 ($1,275.01, $1,371.68)	$6.02 (−$9.84, $21.88)
DinD	N/A	N/A	−$63.42 (−$123.49, −$3.36)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicare claims.

Table F-5
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 2, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 2 (January 2017–December 2017) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,515.13 ($1,416.18, $1,614.07)	$45.46 (−$82.55, $173.47)
Comparison	$1,317.33 ($1,272.88, $1,361.78)	$1,389.89 ($1,336.57, $1,443.21)	$72.56 ($51.4, $93.72)
DinD	N/A	N/A	−$27.10 (−$120.15, $65.95)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicare claims.

Table F-6
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 3, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 3 (January 2018–December 2018) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,592.52 ($1,469.74, $1,715.3)	$122.86 (−$45.97, $291.68)
Comparison	$1,317.33 ($1,272.88, $1,361.78)	$1,447.22 ($1,392.45, $1,501.99)	$129.90 ($105.42, $154.37)
DinD	N/A	N/A	−$7.04 (−$129.07, $114.99)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicare claims.

Table F-7
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 4, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 4 (January 2019–December 2019) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,725.23 ($1,604.3, $1,846.17)	$255.57 ($84.9, $426.23)
Comparison	$1,317.33 ($1,272.88, $1,361.78)	$1,526.10 ($1,465.26, $1,586.95)	$208.78 ($181.21, $236.34)
DinD	N/A	N/A	$46.79 (−$77.06, $170.64)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-8
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 5, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 5 (January 2020–December 2020) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,852.42 ($1,700.14, $2,004.71)	$382.76 ($161.27, $604.25)
Comparison	$1,317.33 ($1,272.88, $1,361.78)	$1,635.81 ($1,560.81, $1,710.81)	$318.48 ($277.16, $359.81)
DinD	N/A	N/A	$64.27 (−$97.81, $226.36)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-9
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 1, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 1 (March 2015–December 2016) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,412.26 ($1,341.5, $1,483.01)	−$57.41 (−$139.4, $24.58)
Comparison	$1,408.07 ($1,344.66, $1,471.48)	$1,395.37 ($1,320.94, $1,469.8)	−$12.70 (−$30.91, $5.51)
DinD	N/A	N/A	−$44.71 (−$105.38, $15.96)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicare claims.

Table F-10
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 2, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 2 (January 2017–December 2017) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,515.13 ($1,416.18, $1,614.07)	$45.46 (−$82.55, $173.47)
Comparison	$1,408.07 ($1,344.66, $1,471.48)	$1,486.97 ($1,404.36, $1,569.57)	$78.90 ($45.62, $112.18)
DinD	N/A	N/A	−$33.44 (−$130.12, $63.24)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicare claims.

Table F-11
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 3, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 3 (January 2018–December 2018) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,592.52 ($1,469.74, $1,715.3)	$122.86 (−$45.97, $291.68)
Comparison	$1,408.07 ($1,344.66, $1,471.48)	$1,540.68 ($1,460.91, $1,620.45)	$132.61 ($100.83, $164.38)
DinD	N/A	N/A	−$9.75 (−$133.44, $113.94)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicare claims.

Table F-12
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 4, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 4 (January 2019–December 2019) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,725.23 ($1,604.3, $1,846.17)	$255.57 ($84.90, $426.23)
Comparison	$1,408.07 ($1,344.66, $1,471.48)	$1,640.63 ($1,554.16, $1,727.1)	$232.56 ($188.93, $276.19)
DinD	N/A	N/A	$23.01 (−$105.47, $151.48)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-13
Mean monthly Medicare expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 5, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 5 (January 2020–December 2020) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$1,469.67 ($1,384.87, $1,554.46)	$1,852.42 ($1,700.14, $2,004.71)	$382.76 ($161.27, $604.25)
Comparison	$1,408.07 ($1,344.66, $1,471.48)	$1,743.08 ($1,636.43, $1,849.74)	$335.02 ($271.51, $398.52)
DinD	N/A	N/A	$47.74 (−$121.52, $217)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

F.3 Medicare Regression Results

Table F-14 shows the main results from the DinD analysis for demonstration years 1–5 and for the entire demonstration period, controlling for beneficiary demographics and market characteristics. Relative to the comparison group, the demonstration was not associated with statistically significant increases or decreases to the Medicare program during any demonstration years. Similarly, the cumulative impact estimate over all 5 demonstration years was not statistically significant, suggesting that, overall, the demonstration was not associated with increases or decreases to Medicare costs.

Table F-14
Cumulative and annual demonstration effects on Medicare Parts A and B costs in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Period	Adjusted coefficient DinD ($)	*p*-value	95% confidence interval ($)	90% confidence interval ($)
Demonstration Year 1 (March 2015–December 2016)	−43.49	0.1569	(−103.70, 16.72)	(−94.02, 7.04)
Demonstration Year 2 (January 2017–December 2017)	−15.19	0.7697	(−116.86, 86.48)	(−100.51, 70.13)
Demonstration Year 3 (January 2018–December 2018)	5.39	0.9353	(−124.67, 135.44)	(−103.76, 114.53)
Demonstration Year 4 (January 2019–December 2019)	47.21	0.4813	(−84.17, 178.58)	(−63.05, 157.46)
Demonstration Year 5 (January 2020–December 2020)	59.44	0.5151	(−119.56, 238.44)	(−90.78, 209.66)

(continued)

Table F-14 (continued)
Cumulative and annual demonstration effects on Medicare Parts A and B costs in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Period	Adjusted coefficient DinD ($)	*p*-value	95% confidence interval ($)	90% confidence interval ($)
Cumulative (Demonstration Years 1–5, March 2015–December 2020)	0.88	0.9873	(−106.98, 108.73)	(−89.64, 91.39)

DinD = difference-in-differences.
SOURCE: RTI analysis of Medicare claims.

Table F-15 provides an illustrative example of the generalized linear model output for each covariate on mean monthly Medicare expenditures across the entire demonstration period.

Table F-15
Generalized linear model results on monthly Medicare expenditures in Texas
(n = 40,506,489 person months)

Independent variables	Coefficient	Standard error	z-value	*p*-value
Demonstration group	0.0299	0.0478	0.63	0.531
Post period	0.0603	0.0101	6.00	0.000
Interaction of post period x demonstration group	0.0005	0.0337	0.02	0.987
Age (continuous)	0.0196	0.0004	54.06	0.000
Asian	−0.5447	0.0240	−22.69	0.000
Black	0.0506	0.0175	2.90	0.004
Female	−0.0661	0.0091	−7.27	0.000
Hispanic	−0.2289	0.0278	−8.25	0.000
Other race/ethnicity	−0.3148	0.0311	−10.11	0.000
Disability as reason for Medicare entitlement	0.2493	0.0144	17.31	0.000
End-stage renal disease	1.9034	0.0231	82.39	0.000
Participation in other Shared Savings Program	0.0579	0.0226	2.57	0.010
Medicare Advantage status	−0.0402	0.0233	−1.72	0.085
Fraction of duals with Medicaid managed care, ages 19+	0.0136	0.0434	0.31	0.755
Medicare Advantage penetration rate	0.3470	0.0951	3.65	0.000
Medicaid-to-Medicare fee index (FFS)	0.5558	0.1342	4.14	0.000
Medicaid spending per dually eligible beneficiary	0.0000	0.0000	1.83	0.067
Medicare spending per dually eligible beneficiary	0.0000	0.0000	0.32	0.751
Fraction of duals using HCBS, ages 65+	−0.1964	0.1583	−1.24	0.215
Fraction of duals using nursing facility, ages 65+	−0.1435	0.1074	−1.34	0.182

(continued)

Table F-15 (continued)
Generalized linear model results on monthly Medicare expenditures in Texas
(n = 40,506,489 person months)

Independent variables	Coefficient	Standard error	z-value	*p*-value
Fraction of duals using personal care…	3.1756	1.0229	3.10	0.002
Percent of adults with college education	−0.0012	0.0005	−2.50	0.013
Percent of adults with self-care limitation	−0.0010	0.0024	−0.41	0.683
Percent of households with individuals older than 60	0.0004	0.0007	0.56	0.574
Percent of households with individuals younger than 18	−0.0016	0.0007	−2.21	0.027
Percent of population married	−0.0001	0.0007	−0.20	0.844
Percent of adults who are unemployed	−0.0045	0.0017	−2.56	0.010
Distance to nearest hospital	0.0031	0.0020	1.58	0.114
Distance to nearest nursing facility	0.0013	0.0025	0.51	0.609
Pandemic Vulnerability Index	0.3173	0.0126	25.17	0.000
Intercept	5.3685	0.2226	24.11	0.000

FFS = fee-for-service; HCBS = home and community-based services.
SOURCE: RTI analysis of Medicare claims.

Table F-16 presents the results from the DinD analysis for the enrollee-only 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. Note that a subset of the comparison group developed for the ITT analysis was used in the enrollee-subgroup analyses. Comparison group beneficiaries used in the enrollee-subgroup analyses were required to have at least 3 months of eligibility in the demonstration period (March 1, 2015– December 31, 2020) and at least 3 months of eligibility in the predemonstration period (March 1, 2013–February 28, 2015), analogous to the criteria for identifying enrollees. The results indicate statistically significant additional costs associated with enrollees. This enrollee-subgroup analysis is limited by the absence of person-level data on characteristics that potentially would lead an individual in a comparison area to enroll in a similar demonstration, and thus the results should only be considered in the context of this limitation.

Table F-16
Cumulative and annual demonstration effects on Medicare Parts A and B costs among enrolled beneficiaries in Texas, demonstration years 1–5, March 1, 2015–December 31, 2020

Period	Adjusted coefficient DinD ($)	*p*-value	95% confidence interval ($)	90% confidence interval ($)
Demonstration Year 1 (March 2015–December 2016)	71.57	0.0360	(4.66, 138.49)	(15.42, 127.73)
Demonstration Year 2 (January 2017–December 2017)	124.97	0.0135	(25.86, 224.08)	(41.80, 208.15)
Demonstration Year 3 (January 2018–December 2018)	141.41	0.0309	(12.99, 269.84)	(33.63, 249.19)
Demonstration Year 4 (January 2019–December 2019)	213.28	0.0058	(61.62, 364.94)	(86.01, 340.55)
Demonstration Year 5 (January 2020–December 2020)	251.97	0.0079	(66.01, 437.93)	(95.90, 408.03)
Cumulative (Demonstration Years 1–5, March 2015–December 2020)	138.23	0.0113	(31.23, 245.23)	(48.44, 228.03)

DinD = difference-in-differences.
SOURCE: RTI analysis of Medicare claims.

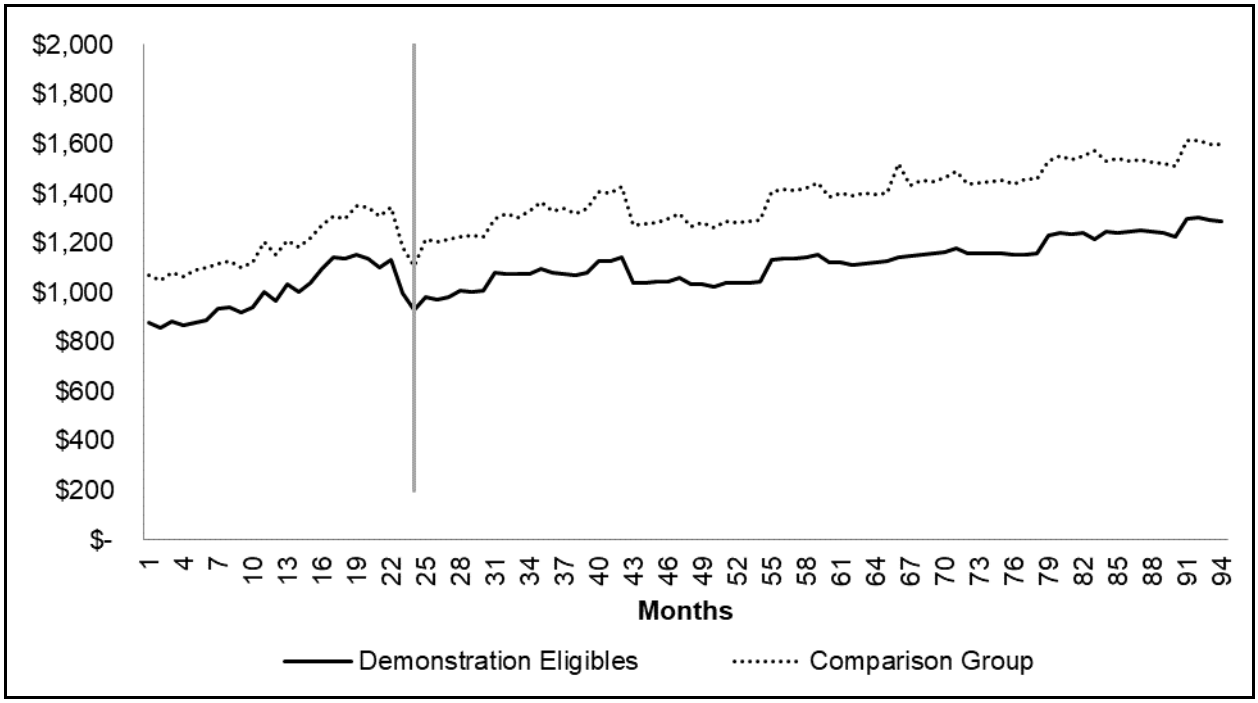
F.5 Medicaid Results

Using the Medicaid data, we also tested the parallel trends in the predemonstration period. We plotted the mean monthly Medicaid expenditures for both the comparison group and demonstration group, with the PS weights applied. Monthly Medicaid total cost of care values were winsorized by State and year and by demonstration/comparison group status. ***Figure F-2*** show the weighted plots, suggesting parallel trends in the predemonstration period.

The comparison group in this figure is a subset of the multi-state Medicare comparison group, with only beneficiaries in Texas included. A Texas-only comparison group serves as a better comparison group for the demonstration eligibles due to a significant change in the Texas Medicaid program that occurred at the end of the predemonstration period: a transition to managed care for LTSS.[50] This shift is readily apparent in both the demonstration group and the comparison group in ***Figure F-2***. See ***Appendix F*** in the Preliminary Second Evaluation Report for additional details on the choice to limit the comparison group to Texas for the Medicaid analysis.

[50] STAR+PLUS is a managed care model within the Texas Medicaid program designed to meet the health care needs of individuals age 65 or older and individuals with disabilities. In 2015, STAR+PLUS expanded to cover NF residents who were participating in Medicaid. For additional details, see https://www.hhs.texas.gov/services/health/medicaid-chip/medicaid-chip-members/starplus

Figure F-2
Mean monthly Medicaid expenditures (weighted) in Texas, predemonstration and demonstration periods, demonstration and comparison groups, March 2013–December 2020



SOURCE: RTI Analysis of Texas demonstration eligible and comparison group Medicaid data.

The DinD values in ***Tables F-17*** through ***F-21*** represent the overall impact on Medicaid 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 regression results presented in ***Section 6, Demonstration Impact on Cost Savings*** and ***Table F-27*** represent the most accurate adjusted impact on Medicaid costs.

Tables F-17 through ***F-21*** show the mean monthly Medicaid expenditures for the demonstration group and comparison group in the predemonstration and each demonstration period, unweighted. The unweighted tables show that monthly Medicaid expenditures for the demonstration and comparison group increased in each demonstration period compared to the previous demonstration period. The DinD estimates are negative and statistically significant in all demonstration years. The weighted tables display a similar pattern for both the increases in Medicaid expenditures in the demonstration group and the comparison group over all demonstration periods, and that the DinD estimates are negative and statistically significant in all years (***Tables F-22*** through ***F-26***).

Table F-17
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 1, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 1 (March 2015–December 2016) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,054.73 ($873.76, $1,235.71)	$60.61 ($15.05, $106.18)
Comparison	$1,359.67 ($1,298.27, $1,421.08)	$1,485.42 ($1,418.93, $1,551.92)	$125.75 ($111.46, $140.04)
DinD	N/A	N/A	−$65.14 (−$100.48, −$29.79)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-18
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 2, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 2 (January 2017–December 2017) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,071.46 ($887.14, $1,255.79)	$77.35 ($17.75, $136.94)
Comparison	$1,359.67 ($1,298.27, $1,421.08)	$1,497.55 ($1,431.66, $1,563.44)	$137.88 ($112.43, $163.33)
DinD	N/A	N/A	−$60.53 (−$110.17, −$10.89)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-19
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 3, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 3 (January 2018–December 2018) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,136.42 ($938.04, $1,334.79)	$142.30 ($67.23, $217.37)
Comparison	$1,359.67 ($1,298.27, $1,421.08)	$1,600.57 ($1,521.43, $1,679.71)	$240.89 ($200.39, $281.40)
DinD	N/A	N/A	−$98.59 (−$165.77, −$31.42)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-20
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 4, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 4 (January 2019–December 2019) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,184.52 ($974.61, $1,394.42)	$190.40 ($95.87, $284.93)
Comparison	$1,359.67 ($1,298.27, $1,421.08)	$1,658.77 ($1,573.38, $1,744.16)	$299.10 ($250.82, $347.38)
DinD	N/A	N/A	−$108.70 (−$191.45, −$25.94)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-21
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 5, unweighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 5 (January 2020–December 2020) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,257.98 ($1,045.28, $1,470.68)	$263.86 ($165.22, $362.51)
Comparison	$1,359.67 ($1,298.27, $1,421.08)	$1,760.38 ($1,670.18, $1,850.57)	$400.70 ($355.14, $446.27)
DinD	N/A	N/A	−$136.84 (−$220.44, −$53.24)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-22
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 1, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 1 (March 2015–December 2016) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,054.73 ($873.76, $1,235.71)	$60.61 ($15.05, $106.18)
Comparison	$1,182.97 ($1,103.14, $1,262.80)	$1,301.38 ($1,215.23, $1,387.53)	$118.41 ($104.11, $132.71)
DinD	N/A	N/A	−$57.80 (−$93.16, −$22.43)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-23
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 2, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 2 (January 2017–December 2017) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,071.46 ($887.14, $1,255.79)	$77.35 ($17.75, $136.94)
Comparison	$1,182.97 ($1,103.14, $1,262.80)	$1,328.28 ($1,234.78, $1,421.77)	$145.31 ($114.01, $176.61)
DinD	N/A	N/A	−$67.96 (−$120.89, −$15.03)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-24
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 3, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 3 (January 2018–December 2018) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,136.42 ($938.04, $1,334.79)	$142.30 ($67.23, $217.37)
Comparison	$1,182.97 ($1,103.14, $1,262.80)	$1,428.75 ($1,313.77, $1,543.73)	$245.78 ($195.78, $295.78)
DinD	N/A	N/A	−$103.48 (−$176.87, −$30.08)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-25
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 4, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 4 (January 2019–December 2019) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,184.52 ($974.61, $1,394.42)	$190.40 ($95.87, $284.93)
Comparison	$1,182.97 ($1,103.14, $1,262.80)	$1,483.03 ($1,368.34, $1,597.71)	$300.06 ($252.28, $347.83)
DinD	N/A	N/A	−$109.65 (−$192.28, −$27.03)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-26
Mean monthly Medicaid expenditures for demonstration group and comparison group in Texas, predemonstration period and demonstration year 5, weighted

Group	Predemonstration period (March 2013–February 2015) (95% confidence intervals)	Demonstration year 5 (January 2020–December 2020) (95% confidence intervals)	Difference (95% confidence intervals)
Demonstration	$994.12 ($832.72, $1,155.51)	$1,257.98 ($1,045.28, $1,470.68)	$263.86 ($165.22, $362.51)
Comparison	$1,182.97 ($1,103.14, $1,262.80)	$1,558.10 ($1,444.71, $1,671.48)	$375.13 ($319.70, $430.56)
DinD	N/A	N/A	−$111.26 (−$200.70, −$21.83)

DinD = difference-in-differences; N/A = not applicable.
SOURCE: RTI analysis of Medicaid claims.

Table F-27 shows the Medicaid results from the DinD analysis for demonstration years 1–5 and for the entire demonstration period, controlling for beneficiary demographics and market characteristics.

Table F-27
Cumulative and annual demonstration effects on Medicaid costs in Texas, demonstration years 1–5, March 2015—December 2020

Period	Adjusted coefficient DinD ($)	p-value	95% confidence interval ($)	90% confidence interval ($)
Demonstration Year 1 (March 2015—December 2016)	13.21	0.5363	(−28.65, 55.06)	(−21.92, 48.33)
Demonstration Year 2 (January 2017–December 2017)	19.36	0.5029	(−37.29, 76.02)	(−28.18, 66.91)
Demonstration Year 3 (January 2018–December 2018)	17.07	0.6228	(−50.94, 85.07)	(−40.00, 74.14)
Demonstration Year 4 (January 2019–December 2019)	35.19	0.3788	(−43.17, 113.55)	(−30.57, 100.95)
Demonstration Year 5 (January 2020–December 2020)	34.44	0.3653	(−40.12, 109.01)	(−28.13, 97.02)
Cumulative (Demonstration Years 1–5, March 2015–December 2020)	20.01	0.5127	(−39.89, 79.90)	(−30.26, 70.27)

DinD = difference-in-differences.
SOURCE: RTI analysis of Medicaid claims.

Medicaid experience rebates paid from the MMPs to the State over the first three demonstration years were large, as shown in ***Table F-28***. These amounts were not reported in the T-MSIS data and therefore not included in our main DinD analysis reported in ***Figure 6-2*** and ***Table F-27***, since we do not have data on comparable payments made to managed care plans among the comparison group or the eligible but not enrolled portion of the demonstration group. However, we did estimate a sensitivity analysis adjusting the Medicaid payments for the experience rebates. While the magnitude of the cumulative effect was lower ($10.14 compared to $20.01), the overall impact remained positive and not statistically significant.

Table F-28 also shows the Medicare experience rebates, which were included in the adjustments made to the Medicare payment outcomes—unlike the approach taken with Medicaid payments.

Table F-28
Medicare and Medicaid experience rebates paid to the State of Texas from the MMPs

Rebate	State fiscal year 2015 (6 months)	State fiscal year 2016	State fiscal year 2017	State fiscal year 2018	Total (all years)
Medicare total	$22,579,014	$57,559,137	$26,195,525	$3,087,366	$109,421,041
Medicaid total	$14,624,876	$57,034,649	$24,354,328	$3,629,959	$84,380,837
TOTAL	$37,203,889	$114,593,786	$50,549,853	$6,717,325	$193,801,879

SOURCE: Received from CMS by email on February 16, 2023.
NOTE: Subsequent to the email from CMS, the State of Texas made minor corrections to the Medicaid experience rebates they reported. These changes were small and unlikely to impact the Medicaid sensitivity analysis we conducted. We report the experience rebates that were available to us at the time of the analysis.

Appendix G

Supplemental Analyses

G.1 Service Utilization Supplemental Analyses

Improved care coordination, a cornerstone of the State's MMP demonstration efforts, is expected to impact service utilization patterns by increasing access to primary care and reducing hospitalizations and emergency care. To better understand the demonstration impact results described in ***Section 5***, ***Demonstration Impact on Service Utilization and Quality of Care***, RTI conducted the following descriptive analyses:

- A cohort analysis comparing the predemonstration trends of select service utilization outcomes among beneficiaries who were enrolled at any point during demonstration year 1 with beneficiaries who were eligible but not enrolled (ENE) in demonstration year 1.
- A cross-sectional analysis of mortality rates among enrolled beneficiaries and ENE beneficiaries during the entire study period.

These analyses may provide more context for the DinD results reported in ***Section 5, Demonstration Impact on Service Utilization and Quality of Care*** by illustrating the predemonstration service utilization and risk profile of the beneficiaries who enrolled in the demonstration, relative to that of the demonstration eligible population who did not enroll. If beneficiaries who enrolled in the demonstration had lower service utilization rates in the predemonstration period than the ENE, then this favorable selection into enrollment may decrease the likelihood of observing any desired demonstration impact on high-cost measures such as inpatient admissions, ED use, and SNF admissions. This analysis does not, however, explain statistically significant unfavorable increases in these measures.

G.1.1 Pre-enrollment Cohort Analysis

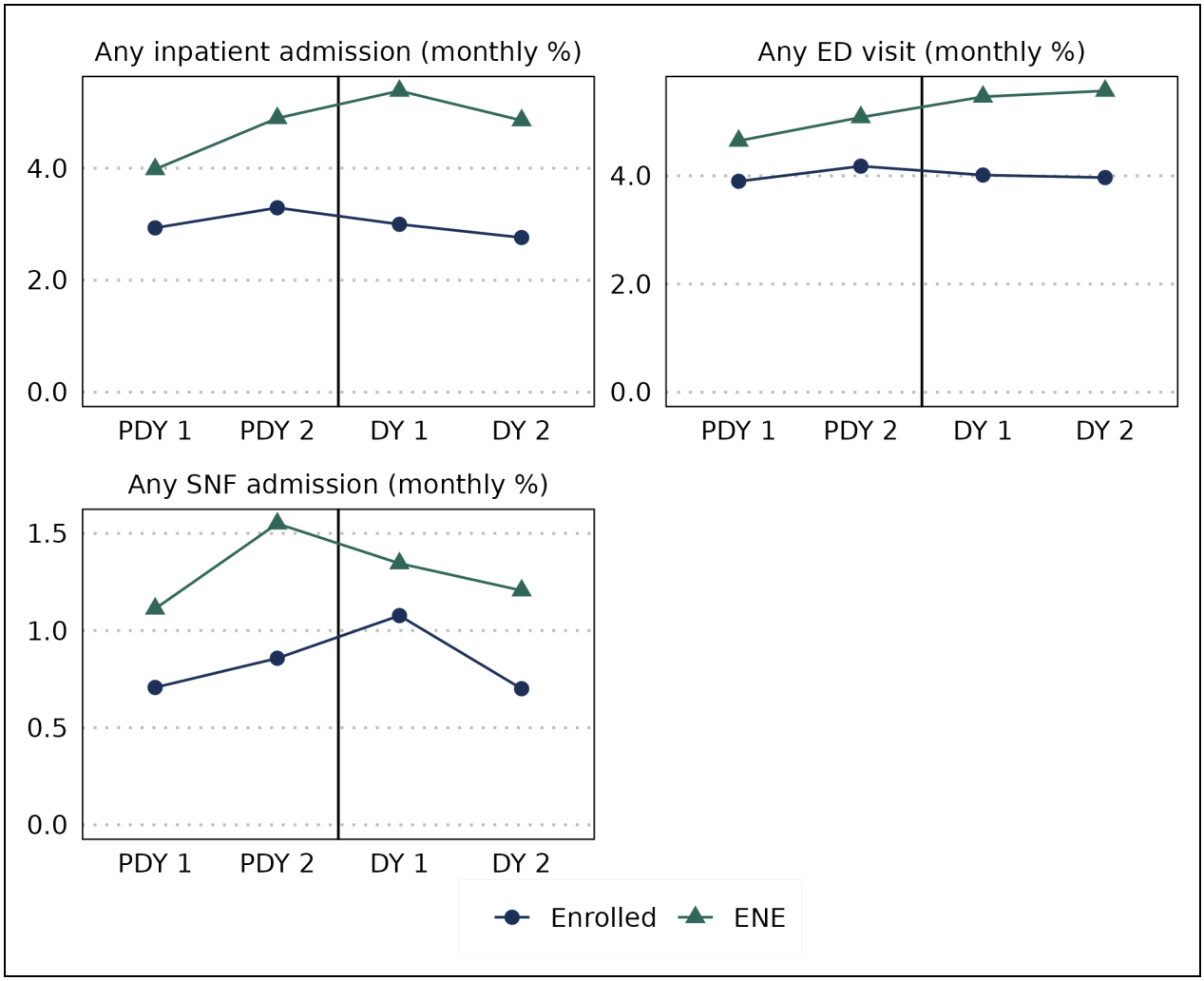
The purpose of this analysis was to compare the predemonstration utilization experience of Medicare FFS beneficiaries who enrolled in an MMP during demonstration year 1 with the utilization experience of those who were ENE in demonstration year 1. The measures we analyzed include any inpatient admission, any ED use, and any SNF admission as described in ***Appendix D.*** The analysis included individuals who were eligible during demonstration year 1. Enrolled and ENE cohorts were defined by determining whether a beneficiary was enrolled at any point during demonstration year 1. ***Figure G-1*** shows the trends for the enrolled and ENE groups in 2 predemonstration years and the first 2 demonstration years. The number of beneficiary months and utilization rates are presented in ***Table G-1***.

- The pre-enrollment differences in inpatient use, ED use, and SNF use between the demonstration year 1 enrolled and ENE cohorts provide evidence of favorable selection into the MMPs. ***Figure G-1*** illustrates that the enrolled group had lower utilization of these services than the ENE cohort during the predemonstration and demonstration periods.
- Favorable selection into the MMPs may impact the likelihood or extent of observing a favorable demonstration impact on the inpatient admissions measures. Indeed, the

enrolled population in demonstration year 1 already had a relatively low monthly rate of inpatient admission.

- The decline in SNF use among the ENE cohort from predemonstration year 2 to demonstration year 1 may explain some of the decrease observed in the overall demonstration group, relative to the comparison group.
- Similarly, trends in ED use among the ENE cohort may have helped drive the increase in ED use among the demonstration eligible population relative to the comparison group. ED visits among the ENE group increased from predemonstration year 2 to demonstration year 1, while slightly decreasing among those who enrolled in demonstration year 1.

Figure G-1
Monthly percentage and count of service utilization among eligible months by demonstration year 1 enrollment in Texas, March 1, 2013–December 31, 2017



DY = demonstration year; ED = emergency department; ENE = eligible but never enrolled; PDY = predemonstration year; SNF = skilled nursing facility

Table G-1
Service utilization by demonstration year 1 enrollment in Texas, March 1, 2013–December 31, 2017

Period	N (beneficiary months)		Any inpatient admission (monthly %)		Any ED visit (monthly %)		Any SNF admission (monthly %)	
	Enrolled	ENE	Enrolled	ENE	Enrolled	ENE	Enrolled	ENE
PDY 1	203,474	226,794	2.93	3.98	3.90	4.65	0.71	1.11
PDY 2	226,475	248,329	3.29	4.89	4.18	5.08	0.86	1.55
DY 1	224,964[1]	413,444	3.00	5.38	4.01	5.46	1.08	1.35
DY 2	110,864[2]	224,422	2.76	4.85	3.97	5.57	0.70	1.21

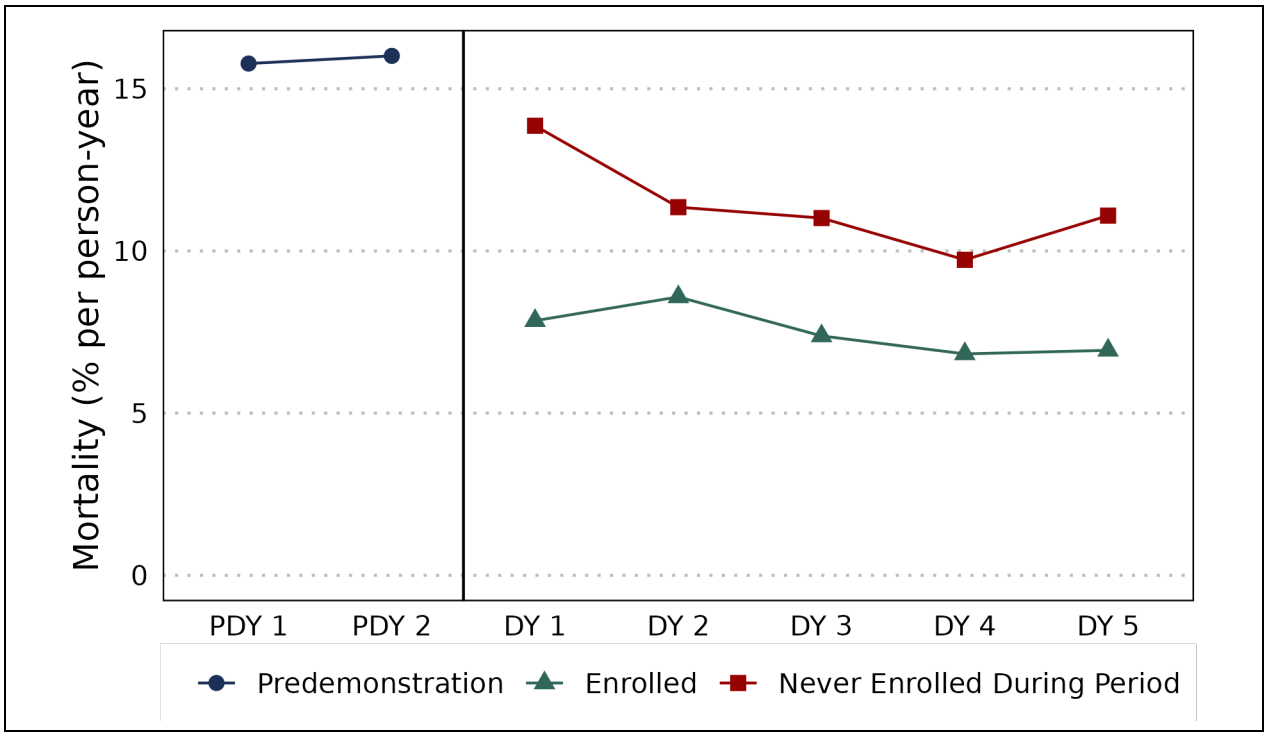
DY = demonstration year; ED = emergency department; ENE = eligible but never enrolled; PDY = predemonstration year; SNF = skilled nursing facility.
[1] N includes enrolled months among beneficiaries who enrolled in a Medicare-Medicaid Plan during DY 1.
[2] This number is a subset of DY 1 enrollees.
SOURCE: RTI analysis of Texas demonstration eligible Medicare administrative claims and encounter data.

G.1.2 Mortality Analysis

This descriptive analysis examines mortality rates to provide additional insight into differences in health characteristics between enrolled and non-enrolled beneficiaries in the demonstration group. These differences can help understand the DinD results described in ***Section 5, Demonstration Impact on Service Utilization and Quality of Care***. A mortality rate observed to be lower among the enrolled population than among the ENE population would suggest favorable selection into demonstration enrollment and would lower the likelihood of observing favorable demonstration effects. Demonstration eligible beneficiaries are categorized into three groups: predemonstration, enrolled during a demonstration period, and never enrolled during a demonstration period**.** Enrollment categories are based on period-level indicators, so the same beneficiary's observations may be categorized differently over time. ***Figure G-2*** and ***Table G-2*** show the annualized mortality rate for each group, defined as the number of beneficiaries who died during a given period divided by the number of person-years (months alive divided by 12) during the period.

- Beneficiaries who enrolled in MMPs during the demonstration period have a lower mortality rate than the ENE population during the demonstration period.
- These findings are consistent with the pre-enrollment service utilization analysis (see ***Figure G-1***) findings that suggest favorable selection in the MMPs. Favorable selection may make it less likely to observe favorable demonstration effects because a healthier enrolled population may be less likely to meaningfully benefit from greater care coordination and access to care. Lower mortality during the demonstration period among the enrolled population than among the ENE population may reflect the impact of the demonstration. However, the size of the difference suggests this is an unlikely explanation.

Figure G-2
Mortality rate among enrolled and not enrolled in Texas, March 1, 2013–December 31, 2020



PDY = predemonstration year; DY = demonstration year.
NOTES: Mortality rates are not easily interpretable during the first demonstration year due to increased demonstration enrollment through the first demonstration year. Beneficiaries who enroll late in DY 1 are included in the mortality rate's denominator for the entire period, whereas the non-enrolled group does not select for beneficiaries who survive longer. By DY 2, the mortality rate is more comparable between the enrolled and non-enrolled beneficiaries.

Table G-2
Monthly percentage of beneficiaries who died during the predemonstration and demonstration periods in Texas, March 1, 2013–December 31, 2020

Period	Predemonstration		Demonstration: Enrolled		Demonstration: Eligible not enrolled	
	N	Died (%)	N	Died (%)	N	Died (%)
PDY 1	712,834	15.78	—	—	—	—
PDY 2	660,275	16.02	—	—	—	—
DY 1	—	—	446,646	7.85	578,253	13.86
DY 2	—	—	177,838	8.58	319,084	11.35
DY 3	—	—	183,255	7.38	291,320	11.01
DY 4	—	—	185,456	6.83	287,080	9.73
DY 5	—	—	200,169	6.94	285,572	11.09

DY = demonstration year; PDY = predemonstration year; — = not applicable.
NOTE: The N includes the number of alive months during the year among demonstration eligible beneficiaries. Mortality rates are reported as percentages per beneficiary-year.
SOURCE: RTI analysis of Medicare fee-for-service claims and encounter data.

G.2 Cost Savings

The FAI mandated that certain savings percentages be applied to the MMP capitated rate to ensure that the demonstration would result in a decrease in Medicare and Medicaid spending. Our findings in ***Section 6, Demonstration Impact on Cost Savings*** indicate that the demonstration had no impact on Medicare costs among *all* eligible beneficiaries in the demonstration group, relative to the comparison group, from demonstration year 1 to demonstration year 5. To better understand these results, we conducted three analyses:

1. We calculated and compared a normalized county-based FFS standardized rate with the actual MMP rate to determine whether the MMP capitated rate was set higher than what would otherwise have been spent in Medicare FFS.[51] Specifically, using observed FFS expenditure data available from CMS, we calculated FFS county rates by taking county-level per capita costs and dividing them by the average risk score for each county.[52] In this way, we obtained a county-level rate for a person whose risk is 1.0 that can be used for comparison with the MMP rate. If the MMP rates were set higher than what would have been observed under FFS, it could help explain in part why the Texas demonstration resulted in no changes for Medicare costs.

2. We compared the predemonstration spending history among those who enrolled in demonstration year 1 and those who were ENE. If enrolled beneficiaries are less expensive than those who never enrolled during the predemonstration period, it would provide additional evidence of favorable selection into the enrolled group.

[51] The analysis is focused on FFS as over 70 percent of the beneficiaries who enrolled were previously in FFS.
[52] FFS Data (2015–2020). Available at: https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/FFS-Data.

3. We compared the predemonstration risk score profiles among those who enrolled in demonstration year 1 and those who were ENE. If enrolled beneficiaries have lower average risk scores than those who never enrolled during the predemonstration period, it would provide additional evidence of favorable selection into the enrolled group.

G.2.1 Rate-Setting Comparison

Table G-3 provides an example of how RTI calculated the normalized county rate using observed FFS Parts A and B expenditures for Harris County, Texas. First, using observed FFS expenditure data available from CMS, we summed Part A and Part B per capita costs and then we divided the amount by the county-level risk score. [53]

Table G-3
Example of RTI normalized county rate calculations for 2016 (demonstration year 1), Harris County, Texas

County	Part A total per capita[1]	Part B total per capita[1]	Part A + Part B	Risk score[2]	RTI normalized FFS rate
Harris, TX	406.97	491.29	898.26	1.00677	892.22

FFS = fee-for-service.
[1] FFS15.xlsx file found in the download titled *FFS DATA 2015 (ZIP)* from FFS Data (2015-2020) | CMS.
[2] Medicare FFS County 2022 Web.xlsx files found in the download titled *FFS DATA 2019 (ZIP)* from FFS Data (2015-2021) | CMS.

[53] Because the Part A total per capita costs in the actuary file includes both Part A only beneficiaries and those with both Part A and Part B, we raised the RTI rate by 3 percent to reflect the exclusion of Part A only beneficiaries in managed care (see column C, ***Tables G-3***, ***G-4***, and ***G-5***).

Table G-4
Comparison of MMP rates in Texas to observed FFS spending in FAI counties, 2016 (demonstration year 1)

County	Enrollment (bene-months)[1]	Percent enrollment (of total eligible bene-months)[1]	RTI normalized FFS rate	Final MMP rate after application of 2.75% savings	MMP rate as % of RTI Normalized FFS rate
	A	B	C	D	E
Bexar	78,326	17.4%	734.08	811.22	110.5%
Dallas	67,609	15.1%	877.02	948.17	108.1%
El Paso	58,443	13.0%	700.93	747.37	106.6%
Harris	116,599	26.0%	892.22	958.09	107.4%
Hildalgo	87,161	19.4%	745.52	891.88	119.6%
Tarrant	41,081	9.1%	843.40	881.17	104.5%
Weighted Average[2]	—	—	804.55	883.69	110.0%
Total	449,219	—	—	—	—

FFS = fee-for-service; MMP = Medicare-Medicaid Plan; — = not applicable.
[1] As reflected in RTI's DinD impact analysis sample.
[2] Numbers in column A are used as the weights.
NOTE: In 2016, CMS increased the MMP rate to adjust for underprediction in the HCC risk adjustment model for dually eligible beneficiaries. This partially explains the large difference between the RTI standardized and final MMP rate.

Table G-5
Comparison of MMP rates in Texas to observed FFS spending in FAI counties, 2020 (demonstration year 5)

County	Enrollment (bene-months)[1]	Percent enrollment (of total eligible bene-months)[1]	RTI normalized FFS rate	Final MMP rate after application of 5.5% savings	MMP rate as % of RTI Normalized FFS rate
	A	B	C	D	E
Bexar	67,388	16.0%	780.50	867.19	111.1%
Dallas	66,323	15.8%	919.56	1,003.80	109.2%
El Paso	47,365	11.3%	709.72	846.71	119.3%
Harris	107,548	25.6%	944.44	1,019.78	108.0%
Hildalgo	89,540	21.3%	703.47	854.65	121.5%
Tarrant	41,978	10.0%	865.85	944.89	109.1%
Weighted Average[2]	—	—	828.55	930.60	112.9%
Total	420,142	—	—	—	—

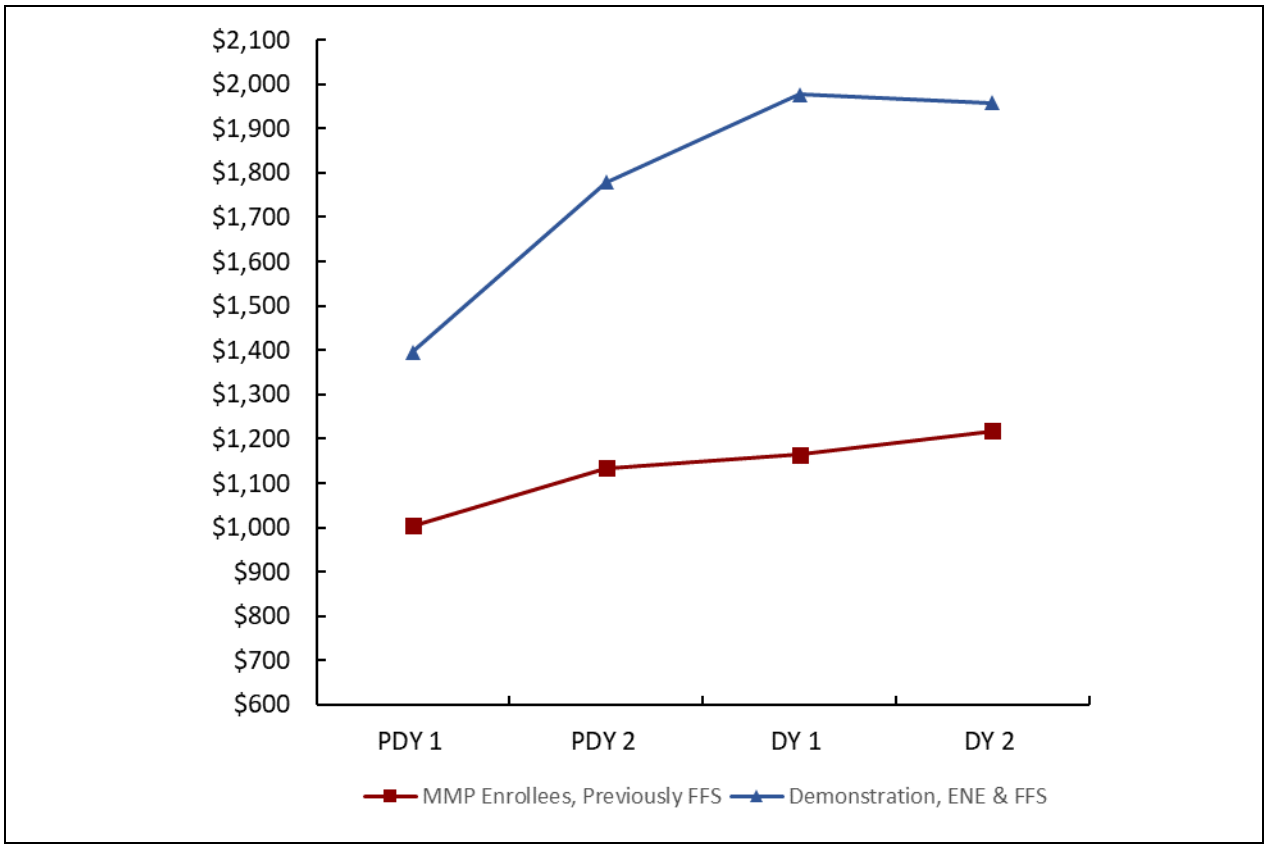
FFS = fee-for-service; MMP = Medicare-Medicaid Plan; — = not applicable.
[1] As reflected in RTI's DinD impact analysis sample.
Numbers in column A are used as the weights.

On a composite basis, the MMP capitation rates are higher than the RTI normalized FFS rate (overall, the weighted average MMP rate is 110.0 percent of the RTI FFS rate in demonstration year 1 and 112.9 percent in demonstration year 5). Additionally, the MMP rates are higher than the RTI normalized FFS rate in every county for both demonstration year 1 and 5 (***Table G-4*** and ***G-5***, column E) despite the application of FAI-mandated savings percentages. The findings indicate that MMP rate-setting could contribute to the lack of cost savings as indicated by the DinD estimates, although it is important to note that the PHE in 2020 might add to this difference between the RTI normalized FFS rate (which reflects actual 2020 utilization and expenditures) and the MMP rates, which are based on historical data.

G.2.2 Pre-enrollment Cohort Analysis

Our analysis of predemonstration trends found that FFS beneficiaries with lower predemonstration FFS expenditures were more likely to enroll in an MMP plan. ***Figure G-4*** illustrates that the demonstration year 1 enrolled population was less costly during the predemonstration period than its ENE counterpart. Together with the results of the predemonstration utilization analysis shown in section ***G.1***, ***Service Utilization Supplemental Analyses***, these findings provide additional evidence of favorable selection into the MMPs at the start of the demonstration; however, favorable selection into the MMPs does not explain the increase in Medicare spending among all demonstration eligible beneficiaries described in ***Section 6, Demonstration Impact on Cost Savings***.

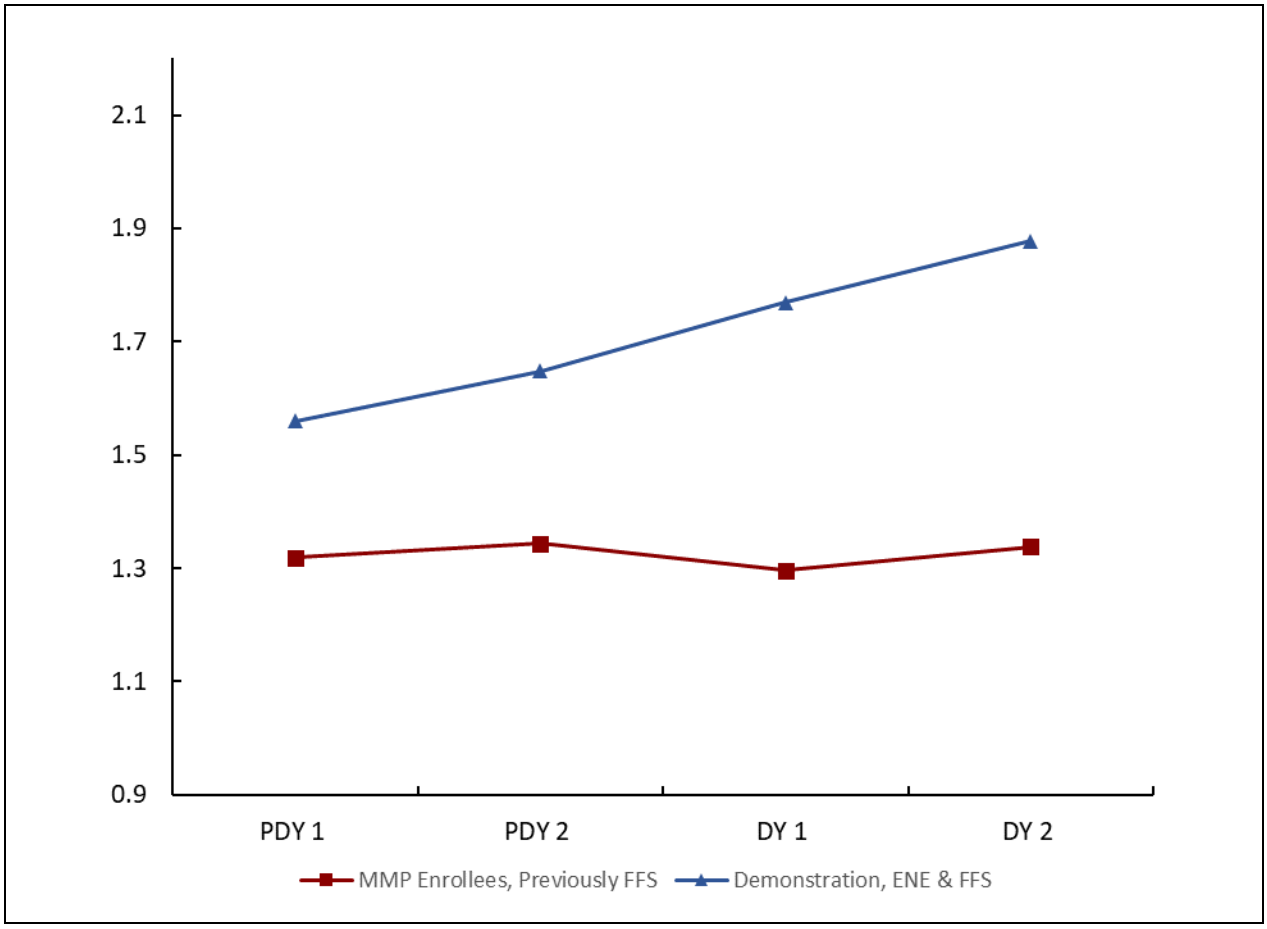
Figure G-4
Average Medicare Parts A and B costs PMPM among demonstration year 1 enrolled and ENE cohorts in Texas



DY = demonstration year; ENE = eligible not enrolled; FFS = fee-for-service; MMP = Medicare-Medicaid Plan; PDY = predemonstration year; PMPM = per member per month.
NOTES: The number of observations for DY 2 represents a subset of DY 1 enrollees. PDY 1 is from March 2013 through February 2014; PDY 2 is from March 2014 through February 2015; DY 1 is from March 2015 through December 2016; DY 2 is from January 2017 to December 2017.
SOURCE: RTI analysis of Texas pre-enrollment trends.

Additional factors may explain our DinD cost savings analysis findings. For instance, more thorough diagnostic coding could raise MMP payments, which could increase average payments faster in the demonstration group than in the comparison group, although we do not have the data to support this hypothesis. ***Figure G-5*** illustrates that risk scores for the enrollees are lower than the average risk scores of the ENEs, further reinforcing the favorable selection finding from the analyses presented above. Favorable selection can occur for multiple reasons. Plans may purposefully target healthier beneficiaries, and sicker beneficiaries may decide not to enroll in the demonstration. Passive enrollment may have helped alleviate the extent of favorable selection; however, MMPs consistently noted concern that enrollment levels were too low (see Preliminary Second Evaluation Report).

Figure G-5
Average risk score among demonstration year 1 enrolled and ENE cohorts in Texas



DY = demonstration year; ENE = eligible not enrolled; FFS = fee-for-service; MMP = Medicare-Medicaid Plan; PDY = predemonstration year; PMPM = per member per month.
NOTES: The number of observations for DY 2 represents a subset of DY 1 enrollees. PDY 1 is from March 2013 through February 2014; PDY 2 is from March 2014 through February 2015; DY 1 is from March 2015 through December 2016; DY 2 is from January 2017 to December 2017.
SOURCE: RTI analysis of Texas pre-enrollment trends.

Finally, although the factors described here are at play for the enrollee population, the FFS ENE beneficiaries are not affected by the savings percentages built into the MMP capitated rates. The analysis of the demonstration's impact on Medicare costs used an ITT approach that included all eligible beneficiaries, not only those enrolled in an MMP, to alleviate concerns about selection bias in enrollment that could not be replicated in the comparison group. The ENE population was substantially larger than the enrolled population (which was about 26 percent[54]). As such, the spending among the ENE population could obscure any savings achieved among the enrolled population. Although the supplemental analyses presented here shed light on the favorable selection of relatively healthier and lower-cost beneficiaries in MMP enrollment and

[54] The enrollment percentages reported in the section may be different from what was reported in ***Section 3.2, Enrollment and Eligibility*** because of the timing for completion and submitting the finder file versus the SDRS, as well as ***Section 5, Demonstration Impact on Service Utilization and Quality of Care*** because of the exclusion of beneficiaries enrolled in Medicare Advantage.

help understand why favorable demonstration impacts may be difficult to observe, they do not pinpoint the drivers of the unfavorable service utilization outcomes among all eligible beneficiaries in the demonstration group relative to the comparison group.