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# Independent Evaluation of the New York State Medicaid Redesign Team, Section 1115 Demonstration

## Preliminary Interim Report

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# Executive Summary

## Evaluation Objective

To meet the special terms and conditions specified by the Centers for Medicare and Medicaid Services under New York State's 1115 Medicaid Redesign Team (MRT) Waiver, the RAND Corporation was competitively selected as the independent evaluator to assess two components under this 1115 Demonstration Waiver: the Managed Long-Term Care (MLTC) program and the 12-month continuous eligibility policy. Starting in September 2012, the state required individuals who are over 21, eligible for both Medicare and Medicaid, and in need of 120 days or more of long-term care to enroll in MLTC plans, which are reimbursed on a capitated basis. The 12-month continuous eligibility policy was implemented in January 2014 for individuals eligible for Medicaid, based on the Modified Adjusted Gross Income guideline, including pregnant women; childless adults who are not pregnant, are younger than 65, and are not on Medicare; parents or caretaker relatives; and individuals eligible for the Family Planning Benefit Program. Individuals who qualified for 12-month continuous eligibility were guaranteed Medicaid coverage regardless of changes in income in the 12 months after enrollment. This interim evaluation aims to examine whether these two programs have achieved the following goals:

- expanding access to long-term services and supports and improving patient safety, quality of care, and consumer satisfaction (in the case of MLTC)
- reducing enrollment gaps and increasing Medicaid enrollment duration (in the case of 12-month continuous eligibility).

Because of a delay in access to data, at the time of this writing (December 2020), the analysis of the 12-month continuous eligibility policy has not been completed; the results of this analysis will be presented in the final interim report.

## Analytical Approach

To achieve the goals of this interim evaluation, RAND researchers have conducted a number of analyses using various data sources provided by the New York State Department of Health (NYS DOH), including the 2010–2018 MLTC monthly enrollment by county; 2007–2019 MLTC plan-level aggregate data[1] on patient safety, quality of care, and consumer satisfaction; and 2010–2018 American Community Survey data. The evaluation team described the trends in various outcomes over time and conducted statistical modeling and testing to answer the evaluation questions. As described in the request for proposal, only aggregate data at the state-

[1] The data years vary across different outcome measures. Please see the study design section for more details.

and plan-level were available for the analysis; the absence of individual-level data did not allow us to control for individual-level characteristics or identify individuals under the mandate and thus has reduced the statistical power to detect MLTC's effects on outcomes.

## Findings and Conclusions

The results of our analyses showed that the MLTC mandate was associated with a large increase in MLTC enrollment during 2012–2018, with its effect stabilizing after 19 months; there is no evidence of a decline in patient safety, quality of care, or consumer satisfaction, except for a decrease in satisfaction with care managers (Table ES1). Among those who transitioned from institutional settings to community settings, enrollment in MLTC increased during 2015–2018, but no statistically significant changes in patient safety and quality of care were observed except for an increase in receipt of dental exams.

**Table ES1. Summary of Evaluation Results**

| Domain | Goal | Outcome | Result | |
|---|---|---|---|---|
| Domain 1, Component 1: Managed Long-Term Care (MLTC) | Goal 1: Expand access to MLTC for Medicaid enrollees in need of long-term services and supports (LTSS) | Time for the MLTC mandate's effect on enrollment to stabilize | ↑ | 19 months, stabilizing at +2.4 percentage points per year; a 37-percentage point increase in enrollment rates during the first 79 months post-mandate ($p<0.05$) |
| | Goal 2: Demonstrate stability or improvement in patient safety | Percentage without emergency room visits | — | +0.8 percentage points ($p>0.05$) |
| | | Percentage without falls requiring medical intervention or resulting major or minor injuries | — | –1.8 percentage points ($p>0.05$) |
| | Goal 3: Demonstrate stability or improvement in quality of care | Receipt of timely care | — | –0.8 percentage points ($p>0.05$) |
| | | Influenza vaccination | — | +0.2 percentage points ($p>0.05$) |
| | | Dental exam | — | –5.6 percentage points ($p>0.05$) |

| Domain | Goal | Outcome | Result | |
|---|---|---|---|---|
| | Goal 4: Stabilize or reduce preventable acute hospital admissions | Potentially avoidable hospitalization | — | –1.3 hospitalizations per 10,000 enrollee days (p>0.05) |
| | Goal 5: Demonstrate stability or improvement in consumer satisfaction | Satisfaction with MLTC plans | — | –1.8 percentage points (p>0.05) |
| | | Satisfaction with care managers | ↓ | –3.1 percentage points (p<0.05) |
| | | Satisfaction with provider timeliness | — | –2.2 percentage points (p>0.05) |
| | | Satisfaction with service quality | — | –1.2 percentage points (p>0.05) |
| Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings for LTSS | Goal 1: Improve access to MLTC for those who transitioned from an institutional setting to the community | Enrollment in MLTC within one year post discharge from an institution | ↑ | 7% in 2015; 60% in 2018 (p<0.05) |
| | Goal 2: Stability or improvement in patient safety | Percentage without emergency room visits | — | 50% in 2015; 85% in 2018 (p>0.05) |
| | | Percentage without falls requiring medical intervention or resulting major or minor injuries | — | 50% in 2015; 93% in 2018 (p>0.05) |
| | Goal 3: Stability or improvement in quality of care | Percentage in community within one year post discharge from an institution | — | 85% in 2015; 81% in 2018 (p>0.05) |
| | | Influenza vaccination | — | 50% in 2015; 73% in 2018 (p>0.05) |
| | | Dental exam | ↑ | 50% in 2015; 64% in 2018 (p<0.05) |
| Domain 2: Mainstream Medicaid Managed Care and Temporary Assistance to Needy Families (TANF) | Goal 1: Increase access to health insurance through Medicaid enrollment—Express Lane Eligibility | Medicaid enrollment, demographic characteristics, and percentage of ineligible enrollees | | Removed from the evaluation |

| Domain | Goal | Outcome | Result |
|---|---|---|---|
| | Goal 2: Limit gaps in Medicaid eligibility due to fluctuations in recipient income—12-month continuous eligibility | Medicaid enrollment, demographic characteristics, enrollment duration, health care utilization and cost, and percentage of ineligible enrollees | Results are not available yet due to the delay in data access |

NOTE: For Domain 1, Component 2, since no pre-MLTC mandate data were available, only the post-period trends are presented.

### *Domain 1, Component 1, Goal 1: MLTC Enrollment*

The MLTC mandate increased enrollment rapidly and dramatically. Within 20 months of the mandate's implementation, its impact on statewide enrollment stabilized at a growth rate of about 0.2 percent per month, or 2.4 percent per year (Table ES1). Increases in enrollment and time for the MLTC mandate's effect on enrollment to stabilize differed across regions, however, suggesting that idiosyncratic factors may have affected implementation across the state. New York City, for which the mandate was implemented first, drove the results.

### *Domain 1, Component 1, Goals 2–5: Patient Safety, Quality of Care, and Consumer Satisfaction Among the MLTC Population*

In our examination of patient safety (without emergency room visits and without falls) and quality of care (influenza vaccinations, dental exams, and potentially avoidable hospitalizations), we found no evidence of changes in these key measures. Satisfaction measures remained high with MLTC, with no statistically significant evidence of decline occurring except for satisfaction with care managers. Thus, results indicate that MLTC plans were able to accommodate the large increases in enrollment without noticeably compromising patient safety, quality of care, or consumer satisfaction with care. These results are particularly important given the rapid and large increase in MLTC enrollment.

### *Domain 1, Component 2, Goals 1–3: Individuals Moved from Institutional Settings to Community Settings*

Among those who transitioned from institutional to community settings, enrollment in MLTC increased, which is not surprising given that MLTC enrollment of new nursing home residents became mandatory starting in February 2015. We found no evidence of changes in patient safety measures (either without emergency room visits or without falls requiring medical intervention or resulting in major or minor injuries) among MLTC enrollees who transitioned from institutions to the community from 2015 through 2018. We also found that a significant majority or more (65–85 percent) of the home- and community-based services (HCBS)

expansion population remained in the community. Among the HCBS expansion population, the changes in influenza vaccination rates were not statistically significant. Receipt of dental exams increased, perhaps in response to a performance improvement project for MLTC enrollees during the period.

### *Domain 2, Goal 2: 12-Month Continuous Eligibility*

We have been delayed in completing the tasks under Domain 2, Goal 2, regarding 12-month continuous eligibility. This is largely due to data acquisition delays resulting from the considerable time, attention, and resources NYS DOH has had to devote to addressing the coronavirus disease 2019 (COVID-19) pandemic. We have thus far obtained access to all the data needed to answer the research questions except for (1) health care utilization and cost data and (2) medical diagnoses required to answer Research Question 5.[2] We are currently in the process of cleaning the data and constructing an analytic file. Domain 2 results will be presented in the final interim evaluation report, a complete draft of which is expected to be delivered in spring 2021. A proposed timeline for the remaining tasks related to the evaluation of the 1115 Demonstration is presented below:

| **Proposed Timeline** | **Remaining Tasks** |
|---|---|
| November 2020 | Complete data access |
| December 2020 | Data processing |
| January 2021 | Data analysis |
| February 2021 | Draft report to NYS DOH |
| March 2021 | Quality assurance |
| April 2021 | Final report to CMS |

## Conclusions

Based on the results of our analyses, the MLTC program under the 1115 Demonstration Waiver has achieved its goal of increasing access to LTSS via MLTC, as illustrated by the rapid expansion of MLTC across the state from 2012 through 2018. There is little evidence suggesting that the rapid access expansion has led to a significant change in patient safety (as measured by without emergency room visits and without falls requiring medical interventions or resulting in major or minor injuries) or quality of care (as measured by timeliness of care access, preventive screenings, potentially avoidable hospitalizations, and consumer satisfaction). Note that the evidence from the evaluation Domain 1 objectives is weakened by important data limitations, which reduced statistical power to detect MLTC's effects on outcomes.

[2] How do outpatient, inpatient, and emergency department visits compare pre- and post-implementation of this policy? How have costs been impacted because of the change in utilization?

In brief, the state has achieved the demonstration's first goal of expanding access. We did not find evidence to support the second goal of improving quality of care, but increasing access without compromising quality of care is a success in its own right. Questions remain about whether the MLTC mandate has generated efficiencies in spending—the third goal of the demonstration—and the extent to which public reporting and quality assurance programs have affected quality of care. Future evaluations may be conducted to answer these questions to guide state policies.

# Abbreviations

| | |
|---|---|
| CHA | Community Health Assessment Data |
| CIN | client identification number |
| CMS | Centers for Medicare and Medicaid Services |
| COVID-19 | SARS-CoV-19 |
| FFS | fee-for-service |
| FIDA | Fully Integrated Duals Advantage |
| HCBS | home- and community-based services |
| IPRO | Island Peer Review Organization |
| LOC | level of care |
| LTSS | long-term services and supports |
| MAGI | modified adjusted gross income |
| MAP | Medicaid Advantage Plus |
| MDS | Minimum Data Set |
| MFP | Money Follows the Person Demonstration |
| MLTC | Managed Long-Term Care |
| MMC | Medicaid Managed Care |
| NYS DOH | New York State Department of Health |
| OASIS | Outcome and Assessment Information Set |
| PACE | Program for All-Inclusive Care for the Elderly |
| PIP | Performance Improvement Project |
| RFP | request for proposal |
| SAAM | Semi-Annual Assessment of Members |
| SD | standard deviation |
| SPARCS | Statewide Planning and Research Cooperative System |
| TANF | Temporary Assistance for Needy Families |
| UAS-NY | Uniform Assessment System for New York |

# 1. Introduction

## The 1115 Demonstration

New York State's Medicaid Redesign Team Section 1115 Demonstration—originally approved in 1997 through a federal Medicaid Section 1115 Waiver and named the Partnership Plan Demonstration—was established to improve the health of low-income residents through the implementation of a mandatory Medicaid managed care program (New York State Department of Health [NYS DOH], 2019a). The goals of the demonstration were to enroll a majority of the state's Medicaid population into a managed care plan, improve access to and quality of care, and capitalize on efficiencies gained by using managed care to expand insurance coverage to low-income individuals who would otherwise be uninsured.

The Medicaid Redesign Team Section 1115 Demonstration has evolved over time. It was originally authorized for a five-year period and has been extended multiple times through amendments that included different Medicaid populations, such as people living with HIV/AIDS or receiving supplemental security income, and certain populations in need of long-term services and supports (LTSS).

## Demonstration Evaluation

According to the special terms and conditions specified by the Centers for Medicare and Medicaid Services (CMS) for the demonstration, New York State is required to submit an interim evaluation report to CMS "as part of the state's request for any future renewal of the demonstration."[3] After a competitive bidding process, the RAND Corporation was selected by the state as the independent evaluator to conduct an interim evaluation to determine the effectiveness of the 1115 Demonstration in achieving its goals. The original evaluation plan covered three components: (1) Domain 1, Components 1 and 2—the Managed Long-Term Care (MLTC) program; (2) Domain 2, Goal 1—the Express-Lane Eligibility; and (3) Domain 2, Goal 2—the 12-month continuous eligibility. As communicated to CMS in early 2020, Domain 2, Goal 1, was removed, because the Express Lane Eligibility was not part of the 1115 Demonstration, and four additional questions were added to Domain 2, Goal 2 (Table 1).

[3] Request for Proposal (RFP) #20020, "Independent Evaluation of the New York State (NYS) 1115 Program," was released November 5, 2018. The RFP can be found at the following NYS DOH webpage: https://www.health.ny.gov/funding/rfp/inactive/20020/20020.pdf

**Table 1. Key Domains, Goals, and Outcomes**

| Domain | Goal | Outcome | Note |
|---|---|---|---|
| Domain 1, Component 1: Managed Long-Term Care (MLTC) | Goal 1: Expand access to MLTC for Medicaid enrollees in need of LTSS. | Time for the MLTC mandate's effect on enrollment to stabilize | |
| | Goal 2: Demonstrate stability or improvement in patient safety | Without emergency room visits and without falls requiring medical intervention | |
| | Goal 3: Demonstrate stability or improvement in quality of care | Receipt of timely care, influenza vaccination, and dental exam | |
| | Goal 4: Stabilize or reduce preventable acute hospital admissions | Potentially avoidable hospitalizations | |
| | Goal 5: Demonstrate stability or improvement in consumer satisfaction | Satisfaction with MLTC plans, care managers, care providers, and services | |
| Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings for LTSS | Goal 1: Improve access to MLTC for those who transitioned from an institutional setting to the community | Enrollment in MLTC within one year post-discharge from an institution | |
| | Goal 2: Stability or improvement in patient safety | Without emergency room visits and without falls requiring medical intervention | |
| | Goal 3: Stability or improvement in quality of care | Community residence and receipt of influenza vaccination and dental exam | |
| Domain 2: Mainstream Medicaid Managed Care and Temporary Assistance to Needy Families (TANF) | Goal 1: Increase access to health insurance through Medicaid enrollment—Express Lane Eligibility | Medicaid enrollment, demographic characteristics, and percentage of ineligible enrollees | Removed from the evaluation |
| | Goal 2: Limit gaps in Medicaid eligibility due to fluctuations in recipient income—12-month continuous eligibility | Medicaid enrollment, demographic characteristics, enrollment duration, health care utilization and cost, and percentage of ineligible enrollees | Four new questions added |

The broad goals of the MLTC program evaluation are to assess (1) the number of individuals who are MLTC-eligible and able to access LTSS through the program and (2) whether MLTC affects patient safety, quality of care, or consumer satisfaction. This includes the general MLTC population, as well as those who transitioned from institutions to the community and enrolled in MLTC. Specifically, Domain 1 covers the following questions:

- At what point in the demonstration did the MLTC enrollee population stabilize in size?
- Is MLTC enrollment associated with improved or stabilized patient safety, quality of care, or satisfaction with care?
- Among individuals who were discharged from an institution to the community and enrolled in the Money Follows the Person Demonstration (MFP) and MLTC (the Home-

and Community-Based Services [HCBS] expansion population), is MLTC enrollment associated with improved or stabilized patient safety and quality of care?

The key difference between fee-for-service (FFS) LTSS and MLTC is that MLTC plans receive capitated payments. On the one hand, such plans are incentivized to deliver services more efficiently. For example, MLTC plans could direct care from institutions to communities because LTSS in institutions are more expensive than those in communities.[4] For MLTC plans that integrate acute medical care with LTSS, unnecessary and expensive acute medical utilization, such as non-urgent emergency room visits and potentially avoidable hospitalizations, may be reduced to improve efficiency. On the other hand, the potential side effect of capitation is that service quality might be affected by financial incentives—though this might be mitigated by the fact that the New York State Department of Health (NYS DOH) publishes an annual MLTC report disclosing various service quality measures for each MLTC plan and implements quality assurance programs.

Presumably, mandatory MLTC enrollment could ensure budgetary certainty for the state Medicaid program, lead to efficiencies in spending, and expand access. Given this, mandatory MLTC enrollment would be a win for the state if patient safety, quality of care, and consumer satisfaction do not decline after the mandate. Although the evaluation goals of the MLTC mandate are to demonstrate stability or improvement in patient safety, quality of care, and consumer satisfaction, considering the various factors discussed above (financial incentives, quality assurance programs, and public reporting of quality of care), the direction of MLTC's impact on these outcomes is largely unclear. We hypothesize that, overall, mandatory MLTC enrollment is not associated with

- costly medical events, such as falls requiring medical interventions and potentially avoidable hospitalizations
- preventive medical services, such as influenza vaccination
- access to services covered by MLTC
- consumer satisfaction with LTSS, providers, or the MLTC plan.

The purpose of the 12-month continuous eligibility initiative is to prevent lapses in Medicaid coverage because of family income fluctuations. The goal of Domain 2 of this independent evaluation is to assess whether 12-month continuous eligibility has reduced enrollment gaps or increased enrollment duration. Continuous enrollment ensures enrollees' timely access to medical care and thus may increase outpatient utilization and cost—but timely access to care may lead to the avoidance of costly events and reduce cost in the future. We hypothesize that 12-month continuous eligibility is associated with increased Medicaid enrollment duration and increased outpatient visits, but decreased emergency room visits, inpatient admissions, and cost.

This preliminary interim report is organized as follows, as per guidance from NYS DOH: Chapter 2, "Demonstration Description," presents the background of the programs involved in

[4] MLTC's effect on LTSS expenditures is outside the scope of this evaluation.

this evaluation. Chapter 3, “Study Design,” describes research questions, study populations, data sources, and outcome measures for each evaluation domain and component in the order they appear in the request for proposal (RFP). The results of our analyses are presented in a similar order in Chapter 4, “Discussion of Findings and Conclusions,” and discussed further in Chapter 5, “Policy Implications.” Finally, Chapter 6, “Interactions with Other State Initiatives,” examines the interactions between the programs in the 1115 Demonstration and other state initiatives. Because of the delay in access to data, at the time of this writing (December 2020), the analysis of the 12-month continuous eligibility initiative has not been completed—those results will be presented in the final interim report.

# 2. Demonstration Description

## MLTC Mandatory Enrollment

MLTC plans benefit participants by delivering care plans to meet individual care needs, preferences, and goals and by providing coordination of care and related services for the participant to streamline the delivery of LTSS. Services can be provided at home, in an assisted living facility, in community residential settings, or in a nursing home. All MLTC plans provide home-and community-based services (HCBS) covered by Medicaid, such as care management, assistance with personal care (e.g., bathing and eating), adult day care, home-delivered meals, non-emergency transportation services, durable medical equipment, dental services, hearing aids, optometry and eyeglasses, podiatry, and nursing home care. Medicaid Advantage Plus (MAP), Program for All-Inclusive Care for the Elderly (PACE), and Fully Integrated Duals Advantage (FIDA) plans also cover medical services under Medicare. While MLTC programs help states provide services to their most vulnerable and medically complex populations, states can potentially reduce their costs by using managed care plans to effectively and efficiently manage resources to deliver LTSS (NYS DOH, 2003). In 2013, 42 percent of national Medicaid spending was attributed to 6 percent of Medicaid beneficiaries who used FFS to access LTSS (Medicaid and CHIP Payment and Access Commission [MACPAC], 2018).

Prior to 2012, New York State primarily operated three voluntary MLTC programs: (1) the MLTC Partial Capitation Program ("Partial Capitation") for adults age 18 to 64 with physical disabilities and adults age 65 or older who required a nursing home level of care; (2) the MAP program, which offered both acute medical care and LTSS to dually eligible individuals needing a nursing home level of care; and (3) the PACE program for adults age 55 and older who are otherwise eligible for nursing home admission to receive care at home. Despite the availability of these programs, the majority of Medicaid beneficiaries received LTSS on a FFS basis before the demonstration.

MLTC plans are required to conduct an initial assessment of new enrollees; a routine assessment is conducted every six months thereafter. An assessment is required if an individual returns from a hospital or when there is a significant change in health status. The assessment collects information on enrollees' physical function, cognitive function, behaviors such as wandering and resisting care, and clinical diagnoses.

Beginning in September 2012, under the demonstration, the state required individuals age 21 and over who are eligible for both Medicare and Medicaid and who are in need of 120 days or more of LTSS to enroll in an MLTC plan under one of these three programs (Partial Capitation, MAP, or PACE). Enrollment in an MLTC plan is optional for nursing home eligible individuals age 18 to 21 who are dual-eligible, or those who are over 18 and eligible for Medicaid only; it is

not allowed for individuals who need fewer than 120 days of LTSS, are younger than age 18, or are in other programs, including 1915(c) waivers (Traumatic Brain Injury, Nursing Home Transition and Diversion, or Office for People with Developmental Disabilities), a hospice program, or an assisted living program.

Mandatory enrollment in MLTC was rolled out region by region throughout the state over a three-year period, starting in New York City in September 2012 and ending in July 2015. During the implementation process, an announcement letter was sent to eligible individuals who were not yet in an MLTC plan. The following month, a 60-day notice letter advised individuals about the need to enroll in an MLTC plan. Enrollment applications were typically processed about two months later, and enrollment would then take effect sometime in the next two months, depending on the month in which the application was processed. For example, for an announcement letter sent out in January, the 60-day notice letter was sent out in February, the enrollment application was processed in April, and enrollment was effective in May or June, depending on when the application was processed. Individuals could enroll at any time in the program prior to the start date for a given region as long as at least one MLTC plan was offered in their community.

Two notable changes occurred during the rollout of the mandate. Starting in January 2015, the FIDA demonstration, an MLTC demonstration program for dually eligible individuals that includes both LTSS and medical care, was launched in New York City; FIDA was later expanded to a small number of counties around New York City. Enrollment in a FIDA plan also satisfied the MLTC mandate in counties where it was offered. The FIDA plans were phased out by the end of 2019. Also, prior to February 2015, eligible individuals who lived in a nursing home or who were newly admitted to a nursing home were not required to participate in an MLTC plan. Starting in February 2015, enrollment for these eligible individuals became mandatory.

At the start of 2018, managed care LTSS programs were available in 24 states (MACPAC, 2018). Some of these programs have been implemented in the past few years, but several were adopted earlier, including programs in Arizona (1989), Wisconsin (1996), and Texas (1998) (MACPAC, 2018). Prior MLTC studies are sparse and range from rollout evaluations to interim outcome evaluations. A 2018 interim evaluation sponsored by CMS examined the MLTC programs of New York and Tennessee. The study showed that MLTC led to higher use of HCBS and lower institutional and hospital services in New York, but MLTC was associated with more hospitalizations in Tennessee; these results are consistent with those of a 2004 study for New York City (Libersky et al., 2018; Nadash, 2004).

## The Money Follows the Person Program

In 2007, the federal Money Follows the Person Rebalancing Demonstration Program, authorized first by the Deficit Reduction Act and then by the Affordable Care Act, was designed to shift LTSS delivery from institutions to the community. Specifically, the Money Follows the

Person (MFP) program in New York State helps elderly individuals and individuals with intellectual disabilities (added in 2013), physical disabilities, and/or traumatic brain injury return to a qualified community-based setting from long-term care institutions, including hospitals, nursing homes, or intermediate care facilities (NYS DOH, 2016b; 2019b). Transition specialists assist potentially MFP-eligible individuals in the transition process by providing information about LTSS available in the community, identifying additional services offered in the community to facilitate independent living, and, once transitioned, conducting periodic check-ins to assess ongoing service needs (NYS DOH, 2016b). MFP provides information and transition planning assistance—a "bridge" between institutional and HCBS—but does not provide or pay for LTSS, which are covered by MLTC. MFP contracts with the New York Association on Independent Living to coordinate the Open Doors Transition Center Program (Open Doors) to provide for transition specialists and peer support (New York Association on Independent Living, 2019).

Individuals are eligible to participate in MFP if they have at least 90 or more consecutive days in a qualified institution, are eligible for Medicaid at least one day prior to the transition from an institution to the community, have health needs that can be met through services available in the community, meet enrollment criteria for a constituent partner program,[5] voluntarily consent to participate, and transition into a qualified residence, including a house, apartment, or a group home with a maximum of four residents (NYS DOH, 2017b).

MFP enrollment starts at the time of transition from an institution to the community, or within 90 days post-discharge, and continues for 365 days after enrollment (NYS DOH, 2017b). If a participant returns to an institution before the end of the 365-day period, their MFP time is put on hold until they return to the community. MFP enrollment ends when a participant completes 365 days in the community, requests an exit from the program, or is disenrolled from a constituent program. Individuals may re-enroll in the MFP program if they qualify again for MFP. Open Doors follows up with participants on a regular basis, and participants are asked to voluntarily complete a quality of life survey pre-transition as well as 11 months post-transition.

Transition specialists work with individuals who are potentially eligible for MFP to arrange for services and supports for when the individuals return to the community. This pre-transition assistance is provided by Open Doors. While there is no prescribed time limit, the typical range for transition is 2–18 months (New York Association on Independent Living, 2019). The pre-transition period is not counted toward the time an individual is enrolled in the MFP program. Medicare- and Medicaid-certified nursing facilities are required to conduct the Minimum Data Set (MDS) assessment for residents at regular intervals, or when there is a significant change in health status. The MDS assessment includes the following question (Section Q): "Do you want

[5] Constituent partner programs include the New York State Nursing Home Transition and Diversion waiver, Traumatic Brain Injury waiver, New York State Office for People With Developmental Disabilities waivers, mainstream Medicaid managed care, and MLTC.

to talk to someone about the possibility of returning to live and receive services in the community?" If residents express interest, nursing facilities are required to refer residents to Open Doors (NYS DOH, 2016b).

Initially, MFP was available to those who were eligible for specific Medicaid FFS 1915(c) waiver programs. As of January 2016, and retroactive to transitions that occurred on or after July 1, 2015, MFP was made available to those eligible for MLTC, as well as mainstream Medicaid managed care plans (NYS DOH, 2017b). MLTC plans have been tasked with educating their members about the availability of Open Doors assistance, in addition to other required actions, although the absence of such plan actions does not preclude eligible individuals' access to MFP.[6] MLTC assessments can be completed prior to MFP enrollment, and while MFP does not administer such assessments, Open Doors transition specialists can help arrange for the assessment. For MLTC enrollment, initial assessments may be conducted up to 45 days in advance of MLTC enrollment (NYS DOH, 2019b).

As of October 2019, MFP operated in 44 states (Lipson et al., 2007; Musumeci, Chidambaram, and Watts, 2019; Mathematica Policy Research, 2017), providing assistance with the transition back to the community for enrollees. From 2007 through December 2017, more than 100,000 people across the United States benefited from the MFP program (Liao and Peebles, 2019). States set a target for the number of participants they would like to transition each year. In 2016, 21 states achieved at least 85 percent of their transition goals; states that did not meet at least 85 percent of their transition goal for two years (excluding the state's first year) were required to draft an action plan for CMS describing how the goal would be achieved in the next year (Coughlin et al., 2017). In 2015, participants across the United States reported improvement in all seven categories of a quality of life survey at one year after their transition to the community, with the largest quality of life improvements associated with living arrangements (Irvin et al., 2017).

## Twelve-Month Continuous Eligibility

In January 2014, under the Section 1115 Demonstration Waiver, New York State implemented the 12-month continuous eligibility policy for individuals eligible for Medicaid, based on the Modified Adjusted Gross Income (MAGI) guideline, including pregnant women; infants and children age 19 or younger; childless adults who are not pregnant, are younger than 65, and are not on Medicare; parents or caretaker relatives; and individuals eligible for the Family Planning Benefit Program. Eligible individuals were guaranteed Medicaid coverage regardless of changes in income in the 12 months after enrollment, even though they may have lost eligibility under a MAGI or MAGI-like rule. Individuals could lose coverage for other

[6] MLTC plans must include an "MFP Attestation" in their existing Enrollment Agreement, include specific language describing MFP in their handbook, and review "NYS Money Follows the Person Guidance for Managed Care Organizations" and share it with all appropriate plan staff to encourage recommended practices (NYS DOH. 2019b).

reasons, however, such as moving out of the state or failure to provide documentation of citizenship.

The 12-month continuous eligibility policy is not new to New York State. In January 1999, the state provided 12 months of continuous coverage to children determined eligible for Medicaid under low-income family budgeting, regardless of income changes or circumstances during the subsequent 12 months. In 2007, the state revised laws to allow the provision of 12-month continuous coverage to certain adults eligible for Medicaid. Further, CMS authorized New York State, as of 2011, to provide a 12-month continuous eligibility period for select groups of adults under the Section 1115 Waiver, which, implemented in 2014, is evaluated under Domain 2, Component 2.

Prior studies have shown that continuous eligibility is effective in increasing Medicaid coverage. States adopting a 12-month continuous eligibility option increased the average length of enrollment by nearly two percent (Ku, Steinmetz, and Bruen, 2013). As of 2018, 25 states have adopted a 12-month continuous eligibility policy for children eligible for Medicaid. A simulation study by Swartz et al. (2015) showed that, compared with other policy options, extending eligibility to the end of a calendar year, or ensuring coverage for the following 12 months, could generate the greatest reduction in churning—that is, frequent or recurring Medicaid entries and exits due to monthly income fluctuation.

# 3. Study Design

Given the non-experimental nature of the demonstration, we developed descriptive statistics, estimated associations, and specified multivariable quasi-experimental models to evaluate the effects of the Medicaid Redesign Team Section 1115 Demonstration. Specifically, we described trends in various outcomes and used statistical models based on a difference-in-differences approach for MLTC-related research questions or survival analytic approaches for the evaluation questions related to 12-month continuous eligibility, while controlling for other factors in the models as necessary and feasible. These approaches allowed us to characterize trends and identify the impact of the demonstration while minimizing threats to the internal validity of our estimates. Note that, because of the delay in data access, the results of our analysis of the 12-month continuous eligibility policy are not available yet, so we present the methodologies only for Domain 2, Goal 2.

## Domain 1, Component 1: Managed Long-Term Care

Table 2 describes the study design, data, and analytic approaches for each of the research questions under Domain 1, Component 1. Medicaid member-level data are ideal to answer research questions on patient safety, quality of care, and consumer satisfaction, and thus were requested by the RAND team. The RFP for this independent evaluation specifies that NYS DOH would provide only data aggregated to the state level and plan level for analysis. As a result, the statistical power of our analysis has been reduced by the absence of individual-level data.

**Table 2. Study Design for Domain 1, Component 1: Managed Long-Term Care**

| Goal | Research Question | Measure | Data Source | Study Design and Analytic Approach |
|---|---|---|---|---|
| 1. Expand access to Managed Long-Term Care for Medicaid enrollees in need of long-term services and supports | 1. Enrollment into MLTC will continue to grow and then stabilize as the program is mandatory across the state. At what time point in the demonstration did the population stabilize in size? | The time needed for the incremental enrollment due to the mandate to stabilize | 2010–2018 NYS DOH Monthly MLTC Enrollment Data, 2010–2018 American Community Survey | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |
| 2. Demonstrate stability or improvement in patient safety | 1. Is the percentage of the MLTC population having an emergency room visit in the last 90 days stable or improving over the course of the demonstration? | Percentage without emergency room visit in the last 90 days | 2010–2019 UAS-NY Community Health Assessment Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |
| | 2. Is the percentage of the MLTC population having a fall requiring medical intervention in the last 90 days stable or improving over the course of the demonstration? | Percentage without falls that required medical intervention in the last 90 days | 2014–2019 UAS-NY Community Health Assessment Data | |
| 3. Demonstrate stability or improvement in quality of care | 1. Are enrollees' perceived timely access to personal, home care, and other services such as dental care, optometry, and audiology stable over time or improving? | Percentage of members who received dental care in a timely manner [Note: the data for other services were not available] | 2009–2019 MLTC Satisfaction Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |
| | 2. Is the percentage of the MLTC population accessing preventive care services, such as the influenza vaccination and dental care, consistent or improving? | Percentage of members who received an influenza vaccination in the last year; percentage of members who received a dental exam in the last year | 2010–2019 UAS-NY Community Health Assessment Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |
| 4. Stabilize or reduce preventable acute hospital admissions | 1. Is the MLTC population experiencing stable or reduced rates of potentially avoidable hospitalization? | The number of potentially avoidable hospitalizations per 10,000 member days | 2013–2017 SPARCS Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |

| Goal | Research Question | Measure | Data Source | Study Design and Analytic Approach |
|---|---|---|---|---|
| 5. Demonstrate stability or improvement in consumer satisfaction | 1. What is the percentage of members who rated their managed long-term care plan within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration? | Percentage of members who rated their managed long-term care plans as good or excellent | 2007–2019 MLTC Satisfaction Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |
| | 2. What is the percentage of members who rated the quality of care manager/case manager services within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration? | Percentage of members who rated the quality of care manager/case manager services within the last six months as good or excellent | | |
| | 3. What is the percentage of members who rated their home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse, or covering/on-call nurse services within the last six months as usually or always on time? Has this percentage remained stable or improved over the demonstration? | Percentage of members who rated their home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse/registered nurse or covering/on-call nurse services within the last six months as usually or always on time | 2007–2019 MLTC Satisfaction Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |
| | 4: What is the percentage of members who rated the quality of home health aide/personal care aide/personal assistant services within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration? | Percentage of members who rated the quality of home health aide/personal care aide/personal assistant services within the last six months as good or excellent | 2007–2019 MLTC Satisfaction Data | A quasi-experimental design:<br>Used a difference-in-differences approach by leveraging the fact that the mandate was rolled out gradually across 13 regions |

NOTE: SPARCS = Statewide Planning and Research Cooperative System.

### *Goal 1: MLTC Enrollment*

#### Research Question

- Goal 1, Research Question 1: Enrollment into MLTC will continue to grow and then stabilize as the program is mandatory across the state. At what point in the demonstration did the population stabilize in size?

#### Study Population and Data Sources

We used the 2010–2018 NYS DOH's MLTC monthly enrollment data to examine expanded access to MLTC for Goal 1. These data cover all individuals who were enrolled into MLTC during the time period. In addition, we used the New York Statewide Managed Long-Term Care Implementation Timeline to delineate the rollout schedule. The 2010–2018 American Community Survey data provide five-year moving average population estimates for each county for individuals who were age 65 or above and living in poverty. We used these estimates to approximate the size of the population eligible for MLTC, which we used as the denominator of MLTC enrollment rates. More details on the data sets used for this evaluation are in the appendix. We included data for the two years before and the five years after implementation of the demonstration. This provides a time series of sufficient length to observe the transition from pre-implementation to post-implementation.

#### Outcome Measures

The outcomes of interest for this analysis are the number of individuals enrolled in MLTC plans and enrollment rates among eligible individuals. Enrollment rates were calculated by dividing enrollment at the county and month level by the number of individuals who were age 65 or above and living in poverty, which we used to approximate the number of individuals eligible for MLTC.

#### Analytic Approach

For descriptive analysis, we delineated the time trends in MLTC enrollment by rollout region and month for the years 2009–2018. But a time point at which the total MLTC enrollment stabilized in descriptive trends could be the result of factors other than the MLTC mandate that are associated with the general time trend. To address the research question, therefore, we specified a multivariable model that identified a general time trend in addition to the post-mandate enrollment growth.

A key feature of the MLTC mandate is that it was rolled out at different times across the state. For example, the mandate was implemented first in New York City. During that time, the other regions in the state served as a comparison. Similarly, as more regions implemented the mandate, the rest of the state became a comparison. This staged rollout allows for the identification of a general underlying time trend separately from the impact of the mandate on the MLTC enrollment.

During the implementation, an announcement letter was sent to eligible individuals about two to three months prior to the official mandate start date for a given region. In our analysis, we chose the announcement letter date as the starting point, because many eligible individuals began to enroll before the official start date. For example, in New York City, the announcement letter was sent in June 2012, but the official start date was September 2012. Individuals could enroll any time prior to the mandate for a given region.

In the multivariable analysis, we examined the enrollment rate at the rollout region level using a variant of the well-known difference-in-differences approach. The models include a series of indicators for calendar months, as well as for the time since the mandate, which varies across rollout regions. We allowed the general time trend to vary across rollout regions, but we identified a common mandate effect across the regions, reflected by the coefficients of the indicators for the time since mandate. Note that because the 13 rollout regions differ substantially in population size, we modeled enrollment rates of each region using the number of individuals eligible for MLTC as the denominator, which was approximated by the number of individuals eligible both for Medicare and Medicaid. Thus, the dependent variable in our model is the rate of enrollment rather than the enrollment level in each county. In addition, we used the population aged 65 or above and living in poverty as analytic weights in the model, so that our results are representative of the state and not just averages across the 13 regions. The full methods for the regression analysis are in the appendix.

Because MLTC plans expected the mandate to be implemented on a specific date, there might be an anticipatory effect due to the competition among MLTC plans. That is, existing MLTC plans tried to enroll as many individuals as possible on a voluntary basis before the mandate started. Therefore, as a secondary analysis, we re-estimated the model with the inclusion of the ten months preceding the mandate rollout in each region (based on the descriptive trends) to capture such a potential anticipatory effect on enrollment.

To identify whether and when the mandate's effect stabilized, we visually examined the mandate's effect over time, and we conducted statistical tests to identify when enrollment increases were no longer statistically significantly greater than zero. That is, starting from the fourth month after implementation, and for each of the following rolling three-month periods, we tested whether the current three-month average of enrollment rate was statistically significantly larger than that of the previous three months, using a significance level of 5 percent. For example, we compared the average rate of enrollment in months 1–3 to that of months 4–6, months 2–4 to months 5–7, and so on. We consider the mandate's effect as stabilized at the point at which three-month average enrollment increases were no longer statistically significant.

### *Goals 2–4: Patient Safety and Quality of Care Among the MLTC Population*

#### *Research Questions*

- Goal 2, Research Question 1: Is the percentage of the MLTC population without any emergency room visits in the last 90 days stable or improving over the course of the demonstration?
- Goal 2, Research Question 2: Is the percentage of the MLTC population without any falls requiring medical intervention in the last 90 days stable or improving over the course of the demonstration?
- Goal 3, Research Question 1:[7] Are enrollees' perceived timely access to personal, home care, and other services, such as dental care, optometry, and audiology, stable over time or improving?
- Goal 3, Research Question 2: Is the percentage of the MLTC population accessing preventive care services, such as influenza vaccination and dental care, consistent or improving?
- Goal, 4 Research Question 1: Is the MLTC population experiencing stable or reduced rates of potentially avoidable hospitalization?

#### Study Population and Data Sources

We analyzed the data for individuals enrolled in an MLTC plan during 2009–2018 across the four different MLTC plan types: Partial Capitation, MAP, PACE, and FIDA. The NYS DOH provided aggregate MLTC plan-level performance data for five outcome measures: without emergency room visits, without falls requiring medical intervention, influenza vaccinations, dental exams, and potentially avoidable hospitalizations. Specifically, for the years 2010, 2012, and 2013, we used annual MLTC performance reports produced by NYS DOH, which contain MLTC plan-level outcome measures derived from the Semi-Annual Assessment of Members (SAAM) data (NYS DOH, 2010, 2012b, 2013c). For the years 2014–2018, we downloaded semi-annual MLTC plan-level outcome data from Open Data NY (NYS DOH, 2020a). The five outcome measures, except for potentially avoidable hospitalizations, were derived from the Uniform Assessment System for New York (UAS-NY) Community Health Assessment (CHA) data. Potentially avoidable hospitalization rates for each MLTC plan were calculated by NYS DOH using the 2014–2018 Statewide Planning and Research Cooperative System (SPARCS) data, an all-payer hospital discharge database in New York State (NYS DOH, 2013a, 2020a, 2020b).[8]

[7] Because Goal 3, Research Question 1, uses the survey data, its study design is described in the study design section for Goal 5.

[8] The MLTC rollout schedule is described in the appendix.

### Outcome Measures

In this analysis, we examined the following measures for each of the evaluation goals listed below:

- Goal 2: Demonstrate stability or improvement in patient safety
  1. Percentage of MLTC enrollees without any emergency room visits in the last 90 days
  2. Percentage of MLTC enrollees without any falls requiring medical intervention in the last 90 days
- Goal 3: Demonstrate stability or improvement in quality of care
  1. Percentage of MLTC enrollees receiving an influenza vaccination in the past year
  2. Percentage of MLTC enrollees receiving a dental exam in the past year
- Goal 4: Stabilize or reduce preventable acute hospital admissions
  1. Annual rate of potentially avoidable hospitalizations per 10,000 MLTC enrollee days.[9]

Significant changes in how each outcome was measured over time required manipulations to define a consistent measure; as a result, comparison over time should be made with caution. For example, in 2014, the measure instrument changed from the SAAM to the UAS-NY CHA instrument for reported outcomes, and this led to differences in how measures were calculated. Starting with outcomes reported in 2014, plans in each of the four MLTC programs conducted individual assessments every six months, as well as after a significant event such as discharge from a hospital, return from a facility, and a significant change in health status. Also, starting in 2014, the reference period for without emergency room visits and without falls requiring medical intervention changed from six months to 90 days. We discuss below the changes for each of the outcome measures.

Emergency room visits were based on items in the SAAM in the 2010 Annual MLTC Performance Report and included any emergent care in any setting (hospital, physician's office, or outpatient department) since the last MLTC assessment. Starting with the 2012 annual report, the without emergency room visits measure only included hospital emergent care since the last assessment, and this reported measure was risk-adjusted. In the 2013 annual report, this measure was reported as the percentage with no emergent hospital care since the last assessment. We reverse-coded this for our analyses. Starting with 2014 reported outcomes, this measure was based on items in the UAS-NY CHA data and used a 90-day lookback period.

The falls measure was based on items in the SAAM in the 2010, 2012, and 2013 Annual MLTC Performance Reports and initially included any fall since the last assessment. This

[9] Potentially avoidable hospitalizations are in-patient hospitalizations that could potentially have been avoided with timely care, including those with a SPARCS primary diagnosis of respiratory infection, urinary tract infection, congestive heart failure, anemia, sepsis, or electrolyte imbalance. The rate is determined by dividing the number of such diagnoses by the total plan days for members with more than three months of plan enrollment and then multiplying by 10,000.

measure was not restricted to falls requiring medical intervention until 2014. Starting in the 2012 report, this plan-level measure was risk-adjusted using a statewide statistical model. In the 2013 annual report, there are two measures based on SAAM: any falls and falls not resulting in medical intervention. Each measure is risk-adjusted separately, so we cannot cleanly identify falls that require medical intervention by subtracting one from the other. Starting with 2014 reported outcomes, the measure is based on items in the UAS-NY CHA data and used a 90-day lookback period. In our analysis, we therefore included only the data reported in 2014 and afterwards.

The measure of potentially avoidable hospitalizations was calculated for each plan starting with the 2013 Annual MLTC Performance Report. A potentially avoidable hospitalization is an inpatient admission that might have been avoided if the patient had received proper outpatient care in a timely manner. Potentially avoidable hospitalizations are identified by analyzing health care encounter data in SPARCS data for plan enrollees who have a hospital admission with an admitting diagnosis of respiratory infection, urinary tract infection, congestive heart failure, anemia, sepsis, or electrolyte imbalance during the measurement period. The plan's reported potentially avoidable hospitalization rate is the number of potentially avoidable hospitalizations per 10,000 enrollee days and is risk-adjusted. We did not use the January 1, 2013, data point in our analysis because it is about one third of that of other measurement periods.

Two of the outcome measures did not change over time: the percentage of members who received an influenza vaccine in the past year and the percentage of members who received a dental exam in the past year. The percentage of members who received an influenza vaccine in the past year is available in the 2010, 2012, and 2013 Annual MLTC Performance Reports and in the 2014–2018 semi-annual MLTC plan-level outcome data. Even though the instrument changed from SAAM to UAS-NY in 2014, the item on the influenza vaccine did not change. The percentage of members who received a dental exam in the past year is only available in the 2014–2018 semi-annual MLTC plan-level outcome data.

Starting with the 2012 Annual MLTC Performance Report, selected plan-level outcome measures were risk-adjusted by NYS DOH to account for differences among plan enrollee populations. Risk adjustment accounts for variation in demographics and health status among plan enrollee populations and is designed to create a more equal comparison across plans within a measurement period. Plans that have more frail enrollees may have poorer outcome scores than plans with healthier enrollees because they have sicker enrollees, not because they are performing poorly. Risk adjustment is an attempt to address these differences in plan populations. NYS DOH calculates the expected rates for a plan for each of the risk-adjusted outcomes that would occur if the plan's enrollee population matched the total enrollee population in the state in that year. The expected rate reflects how a plan would perform with an average enrollee population. A plan's risk-adjusted rate is the ratio of the observed rate to the expected rate, multiplied by the state average rate.

The risk adjustment is calculated for each measurement period, and the demographic and health status measures that were used have changed over time, so individual plan scores are not comparable over time. In the 2012 Annual MLTC Performance Report, risk adjustment was based on a number of factors, including demographics, major medical conditions, physical function, cognitive function, and living arrangement. Starting with 2014 reported measures, risk adjustment was based on health status information available on the CHA. The set of risk adjustors has also changed slightly over time. For example, enrollee race/ethnicity was included for the 2012 and 2013 annual reports but not in later reports. Even for the same risk adjustors, definitions could change during the study period. For instance, cognitive functions were measured differently in reports prior to 2014 than they were in later reports; this is due to the change of the data collection instrument from SAAM to UAS-NY CHA.

### Measure Reference Period Adjustment

Starting with data reported in 2014, the reference period changed from six months to 90 days for without emergency room visits and without falls requiring medical intervention due to the change of the assessment tool from SAAM to UAS-NY CHA. In our analysis, we adjusted these measures from earlier reports so that they reflect the same 90-day reference period and are therefore comparable over time. To make the adjustment, we assumed that the likelihood of each outcome occurring was the same for each month during the six-month time period, and we calculated the expected value for the outcome over a 90-day period.

### Analytic Approach

Because outcome definitions evolved over time and were risk-adjusted, we were not able to directly estimate the impact of the MLTC mandate on absolute changes in outcomes. Instead, we calculated the difference in each outcome measure between each MLTC plan and the statewide average in each year. That is, we "re-centered" each outcome measure around the statewide average of the outcome across plans, such that the sum of the re-centered measure across plans in each year was zero. Although the outcome measures themselves are not comparable over time because of risk adjustment or definitional changes, the re-centered measures are comparable over time unless the definitions of outcome measures changed over time. The re-centered outcome measures allow for a fair comparison over time between a plan's performance and all other plans. Our strategy was to then determine whether a plan's relative performance improved or worsened with increased mandated enrollment, using each of the five re-centered plan outcomes.

Mandatory enrollment was rolled out at different times for different regions in the state between September 2012 and July 2015. Typically, identification of the mandate's effect would be done using outcome measures by rollout region. However, we had only statewide plan–level outcome data, and plans operated in multiple regions. To overcome this limitation, for each MLTC plan, we calculated the fraction of its enrollees residing in the regions under the mandate using monthly MLTC enrollment data, and we estimated its association with the re-centered

outcomes. The assumption was that, on average, plan enrollees contributed equally to plan-level outcomes across mandated enrollment status. The identification of the mandate's effect comes from the variation in this fraction across plans and over time. The full statistical model is in the appendix.

### *Goal 5: Consumer Satisfaction Among the MLTC Population*

#### *Research Questions*

- Goal 5, Research Question 1: What is the percentage of members who rated their managed long-term care plan within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration?
- Goal 5, Research Question 2: What is the percentage of members who rated the quality of care manager/case manager services within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration?
- Goal 5, Research Question 3: What is the percentage of members who rated their home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse, or covering/on-call nurse services within the last six months as usually or always on time? Has this percentage remained stable or improved over the demonstration?
- Goal 5, Research Question 4: What is the percentage of members who rated the quality of home health aide/personal care aide/personal assistant services within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration?

#### Study Population and Data Sources

The target population of our analysis consists of all MLTC enrollees for the years 2007–2019. The data for this secondary analysis originated from the customer satisfaction survey administered to MLTC plan enrollees. The data for the years 2007, 2011, and 2013 came from the annual MLTC performance reports produced by NYS DOH (NYS DOH, 2010, 2012b, 2013c), which contained MLTC plan-level outcome measures. For the years 2015, 2017, and 2019, the MLTC plan-level outcome data were downloaded from Open Data NY (NYS DOH, 2020a). Statewide data were not generated; these data came directly from the reports or the Open Data NY.

The demographic information for the enrollees, available from Open Data NY, remained fairly consistent during 2015–2019. Approximately 30 percent were male and 70 percent were female. Race and ethnicity also remained consistent, with 32 percent white non-Hispanic, 25 percent Hispanic, and 18 percent African American; the remaining enrollees (25 percent) marked "other." Persons under 65 years of age represented only 16 percent of enrollees, while those 65 to 74 years old represented 24 percent, those age 75 to 84 represented 33 percent, and those age 85 plus represented 27 percent.

The customer satisfaction survey was developed by NYS DOH along with Island Peer Review Organization (IPRO), an external quality review organization, with the aim of evaluating

the satisfaction of services provided by the MLTC plans, including the quality, accessibility, and timeliness of services. The first customer member satisfaction survey of New York State's MLTC population was field-tested and administered by IPRO beginning in 2007 and then in two-year intervals starting in 2011 (NYS DOH, 2010).

Survey items explored health plan satisfaction; satisfaction with select providers and services, including timeliness of care and access; and self-reported demographic information. To maximize response rates, IPRO satisfaction surveys were offered in English, Spanish, Russian, and Chinese and included a follow-up mailing to nonresponders within three months post the initial distribution. The survey underwent periodic revisions over the years, with survey items being added or modified (see details in the "Outcome Measures" section below).

In 2007 and 2011, the results of the survey were provided in unadjusted prevalence rates at the MLTC plan level (no individual respondent-level data were available for the analysis); beginning in 2013, the results of four of the five items were risk-adjusted to allow for a fairer comparison among the MLTC plans. In addition, beginning in 2015, to account for unequal plan size, statewide survey data were weighted by plan-eligible population. This allowed larger plans to contribute more—and smaller plans to contribute less—to the statewide average, thus yielding more-representative statewide results (NYS DOH, 2015). As seen in Table 3, the number of surveys mailed during each year of the survey administration has increased with increased MLTC enrollment over time; however, except for 2017, response rates have been trending downward.

**Table 3. Number of Surveys Mailed and Response Rate, by Year**

| Year | Surveys Mailed | Completed Surveys | Response Rate |
|---|---|---|---|
| 2007 | 4,518 | 1,403 | 31.1% |
| 2011 | 5,742 | 1,845 | 32.1% |
| 2013 | 9,346 | 2,533 | 27.0% |
| 2015 | 17,804 | 4,592 | 25.8% |
| 2017 | 20,047 | 5,559 | 27.7% |
| 2019 | 20,007 | 4,639 | 23.2% |

NOTE: The data came from various annual New York State MLTC reports. (NYS DOH, 2010, 2012b, 2015, 2017a).

## Outcome Measures

For this analysis, we examined data pertaining to the questions listed below. Since Goal 3, Research Question 1, uses the survey data, its study design is described in this section.

*Goal 3: Demonstrate stability or improvement in quality of care*

1. *Percentage of MLTC enrollees who reported timely access to dental care within the last six months*

The outcome measure that most closely aligns with the research question pertains to dental care, and no reported measures on access to optometry and audiology are available in the data.

There was a slight change in how the measure was constructed: Prior to 2015, it was the percentage of MLTC enrollees who reported that within the last six months that they waited less than one month for access to routine dental care; from 2015 on, it became the percentage of members who reported that within the last six months they always got a routine dental appointment as soon as they thought they needed one. The item on the 2011 and 2013 satisfaction surveys that corresponded to the research question: "In the last 6 months, when you called for a regular appointment, how long did you generally have to wait between making an appointment and seeing providers?" This item used the following response categories: "Less than 1 month," "1 to 3 months," or "Longer than 3 months." The questions and response categories for this item changed in 2015 to "In the past 6 months, when you called for a regular appointment, how often did you get an appointment as soon as you thought you needed one?" The new response categories were: "Always," "Usually," "Sometimes," or "Never" (IPRO Corporate Headquarters Managed Care Department, 2011). The measure is available for the years 2011, 2013, 2015, 2017, and 2019, and no risk adjustment was made to the measure.

*Goal 5: To demonstrate stability or improvement in consumer satisfaction*

1. *Percentage of MLTC enrollees who rate their health plan as good or excellent*

The survey item is, "Overall, how would you rate your managed long-term care plan?" The response categories are "Excellent," "Good," "Fair," or "Poor." The measure is available for all the survey years and was risk-adjusted starting in 2013.

2. *Percentage of MLTC enrollees who rate their care manager as good or excellent*

The survey item is, "Please rate the providers and services you receive or have received within the last 6 months—even if the service is not covered, or paid for, by your health plan." The response categories are "Excellent," "Good," "Fair," "Poor," or "Not Applicable." The measure is available for all the survey years and was risk-adjusted starting in 2013.

3. *Percentage of MLTC enrollees who reported that within the last six months the home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse/registered nurse, or covering/on-call nurse services were usually or always on time*

This composite measure included four survey items: "In the past 6 months, please rate how often the following services were on time or if you were able to see the provider at the scheduled time: Home health aide, personal care aide (aide that comes to your house to take care of you); Care Manager/Case Manager (person who prepares your plan of care); Regular Visiting Nurse/Registered Nurse (comes to your house for regular visits); and Covering/On-call Nurse (comes to your house when regular nurse can't come." The response categories changed in 2015 from "Less than 1 month," "1 to 3 months," or "Longer than 3 months" to "Always," "Usually," "Sometimes," "Never," or "Not Applicable" (IPRO Corporate Headquarters Managed Care Department, 2011). The measure is available for all the survey years except 2007 and 2011 and was risk-adjusted for all years.

4. *Percentage of MLTC enrollees who rate the quality of home health aide/personal care aide/personal assistant services within the last six months as good or excellent*

The survey item is, "Please rate the providers and services you receive or have received within the last 6 months—even if the service is not covered, or paid for, by your health plan." The response categories are: "Excellent," "Good," "Fair," "Poor," or "Not Applicable." The measure is available for all the survey years and was risk-adjusted starting in 2013.

As stated above, the outcome measure under Goal 3 was an unadjusted prevalence measure. Beginning in 2013, all the plan outcome measures under Goal 5 were risk-adjusted, meaning they were adjusted by NYS DOH for age, education, and self-reported health status, as these were found to be important satisfaction survey control variables that are widely accepted and used in satisfaction survey analysis (NYS DOH, 2015 ).

### Analytic Approach

Descriptive statistics, specifically means, were generated for the three types of MLTC plans: Partial Capitation MLTC plans, PACE plans, and MAP plans. Satisfaction survey data for FIDA plans were not available. Means were calculated for each type by adding the outcome measure for each of the plans and then dividing the total by the number of plans under each type.[10]

We used the same multivariable modeling strategy as that for Goals 2–4; please refer to that section for details. The full statistical model is in the appendix.

## Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings for Long-Term Services and Supports

### *Goals 1–3: Individuals Moved from Institutional Settings to Community Settings*

#### *Research Questions*

- Goal 1, Research Question 1: For those who transition from an institutional setting to the community, did the percentage enrolling in MLTC increase over the demonstration?
- Goal 2, Research Question 1: Is the percentage of the HCBS expansion population without any emergency room visits in the last 90 days stable or improving over the course of the demonstration?
- Goal 2, Research Question 2: Is the percentage of the HCBS expansion population without any falls, as defined by the department's fall measure, stable or improving over the course of the demonstration?
- Goal 3, Research Question 1: For the HCBS expansion population who entered MLTC after transitioning from an institutional setting, what percentage return to the nursing home within a year of discharge, what was their average level of care need, and for those who return within a year, how long on average did they reside in the community?

[10] The MLTC satisfaction survey uses a similar sample size across plans: 600 enrollees from each plan are selected for each survey year.

- Goal 3, Research Question 2: Is the percentage of the HCBS expansion population accessing preventive care services such as the flu shot and dental care consistent or improving?

In Table 4, we summarize the measures, data sources, study design, and analytic approaches for each of the research questions under Domain 1, Component 2.

**Table 4. Study Design for Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings for Long-Term Services and Supports**

| Goal | Research Question | Measure | Data Source | Study Design and Analytic Approach |
|---|---|---|---|---|
| 1: Improve Access to MLTC for those who transitioned from an institutional setting to the community | 1. For those who transition from an institutional setting to the community, did the percentage enrolled in MLTC increase over the demonstration? | Percentage of the MFP population who enrolled in MLTC within one year post discharge | 2015–2018 UAS-NY Community Health Assessment Data, 2015–2018 MFP Master Data, 2014–2018 MDS Data | A single group, post-intervention design:<br>Delineated annual trends in the percentage of the MFP population who enrolled in an MLTC plan |
| 2: Stability or Improvement in Patient Safety | 1. Is the percentage of the HCBS expansion population having an emergency room visit in the last 90 days stable or improving over the course of the demonstration?<br><br>2. Is the percentage of the HCBS expansion population having a fall, as defined by the Department's fall measure, stable or improving over the course of the demonstration? | Percentage of the HCBS expansion population who did not have an emergency room visit in the last 90 days<br><br>Percentage of the HCBS expansion population who did not have a fall that required medical intervention or resulting in major or minor injuries in the last 90 days | 2015–2018 UAS-NY Community Health Assessment Data, 2015–2018 MFP Master Data | A single group, post-intervention design:<br>Delineate annual trends in the percentage of the HCBS expansion population who did not have an emergency room visit or a fall |
| 3: Stability or Improvement in Quality of Care | 1. For the HCBS expansion population who entered MLTC after transitioning from an institutional setting, what percentage return to the nursing home within a year of discharge, what was their average level of care need and, for those who return within a year, how long on average did they reside in the community? | Percentage of the HCBS expansion population who remained in the community for one year post-discharge; average residence time in the community for those who returned to a nursing home within one year | 2015–2018 UAS-NY Community Health Assessment Data, 2015–2018 MFP Master Data, 2014–2018 MDS Data | A single group, post-intervention design:<br>Describe annual rates stratified by level of care and delineated the trends in the percentage of the HCBS expansion population who remained in the community after one |

| Goal | Research Question | Measure | Data Source | Study Design and Analytic Approach |
|---|---|---|---|---|
| | 2. Is the percentage of the HCBS expansion population accessing preventive care services such as the flu shot and dental care consistent or improving? | Percentage of the HCBS expansion population who received an influenza vaccination in the last year; percentage of the HCBS expansion population who received a dental exam in the last year | | year post-discharge; average amount of time in the community among those who returned to a nursing home; and percentage of the HCBS expansion enrollees who received an influenza vaccination or a dental exam in the last year |

### Study Population and Data Sources

The study population for this analysis—that is, the HCBS expansion population—consists of individuals who were discharged from a nursing facility to the community and enrolled in MFP and MLTC during 2015–2018. To identify this population, the NYS DOH merged three data sets: the MFP master data, the MDS data, and the UAS-NY CHA data. In the MFP master data, there were 1,443 unique client identification numbers (CINs) with an MFP-start date in the years 2015–2018, after excluding 16 individuals discharged from a hospital or an intermediate care facility. From these 1,443 unique CINs, a total of 1,420 were found in the 2014–2018 MDS data,[11] among whom 1,314 were matched using MDS discharge assessments, 38 using non-discharge assessments, and 68 using names and birthdates. The 23 unmatched CINs were excluded from further analysis. Among the 1,420 unique CINs that were in both the MFP master data and the MDS data, 755 were matched to the 2015–2018 UAS-NY CHA data. The remaining 665 CINs without any MLTC assessment were considered not to have been enrolled in MLTC at any time between 2015 and 2018 because MLTC enrollees are required to have an assessment at least every six months.

Of the 755 unique CINs that exist in all three data sets, 629 unique CINs were associated with at least one MLTC assessment conducted either in the 45 days prior to the MFP enrollment date or after MFP enrollment during 2015–2018.[12] After limiting the population to those who had at least one MLTC assessment within 45 days before enrollment or 365 days after the MFP start date, there were 589 unique CINs. Finally, after removing multiple enrollment records for the same individual, there were 583 unique individuals who participated in the MFP program for the first time during 2015–2018 and who were enrolled in an MLTC plan either 45 days prior to MFP start or within 365 days post-MFP start date.

[11] NYS DOH also included the 2014 MDS data to identify individuals who were in a nursing home prior to 2015 and transitioned to the community in 2015 and onward. However, MLTC assessments should be done within 45 days prior to MFP participation and during

[12] The previous assessment instrument, the Semi-Annual Assessment of Members (SAAM), was valid for six weeks for MLTC enrollment (see NYS DOH MLTC Policy 13.09(b)). The window was later changed to 45 days.

In addition, for Goal 3, those who remained in the community one year post-discharge were identified using the MDS. First, the 589 unique CINs who had MLTC assessments between 45 days prior to and 365 days post-MFP start date were matched to the MDS data using nursing home discharge assessments based on CIN. To ensure that the MFP days overlapped to a large extent with the calendar days post-discharge, the sample was further limited to those with an MFP start date within 90 days of the discharge date. From this process, 421 participants were identified. For research questions that utilized assessment data, the sample was limited to 368 individuals with one or more assessments conducted after MLTC enrollment.

## Outcome Measures

In this analysis, we examined the following measures for each of the evaluation goals listed below for the HCBS population as described in the previous section. The MFP master data and the UAS-NY CHA data were used to construct Goal 1 measures, and the UAS-NY CHA data were used to construct the Goal 2 measures. The MDS data were primarily used to construct Goal 3 measures, supplemented with UAS-NY CHA data to construct the Goal 3 measures. In cases where an individual had multiple MLTC assessments in the UAS-NY CHA data within a 12-month period, the most recent assessment was used to produce aggregate data; all initial assessments around the time of MLTC enrollment were excluded because our aim was to examine the events that occurred *after* MLTC enrollment.

### *Goal 1: Improve access to MLTC for those who transitioned from an institutional setting to the community*

1. Percentage of MFP participants who were enrolled in MLTC within 365 days post-MFP start date, by calendar year
2. Percentage of MFP participants who were enrolled in MLTC any time during 2015–2018, by calendar year

### *Goal 2: Stability or improvement in patient safety*

1. Percentage of the HCBS expansion population without any emergency room visits in the last 90 days
2. Percentage of the HCBS expansion population without any falls that required medical intervention or resulted in major or minor injuries in the last 90 days (The measure was defined as falls requiring medical intervention in the 2015–2017 UAS-NY CHA data. The assessment question on falls changed in 2018, which is now defined as falls that result in major or minor injuries.)

### *Goal 3: Stability or improvement in quality of care*

1. Percentage of HCBS expansion population who remained in the community for one year post-discharge from a nursing facility, overall and by level of care (Re-institutionalization was defined as an entry date into a nursing home either on or after the MFP start date.)
2. Average level of care among those who returned to a nursing home within a year post discharge

3. Average residency time in the community for HCBS expansion population who returned to a nursing home within one year post discharge
4. Percentage of HCBS expansion population who received an influenza vaccination in the last year
5. Percentage of HCBS expansion population who received a dental exam in the last year.

#### Analytic Approach

The data analysis for this evaluation was descriptive in nature. Because of constraints on data sharing, NYS DOH completed the data merge and compiled the aggregate-level data with RAND's input. Descriptive statistics and figures were then generated based on the aggregate-level data. Pearson's $\chi^2$ tests were used to examine the trends in the measures (Manitoba Centre for Health Policy, 2008). Two-tailed Student's t-tests were used to compare continuous outcomes between two subgroups of the HCBS expansion population.

In some cases, the trend test was not conducted for either 2015 or 2018 because of small sample sizes and incomplete data, respectively, as noted. For example, because we examined whether an individual enrolled in MLTC within 365 days post-MFP start date, the data for 2018 participants did not include the new MLTC enrollment that occurred in the second half of 2019; the average residency time in the community and the return to a nursing home may be biased because of such incomplete data.

Because there were 28 individuals who died without re-entering a nursing facility, we conducted sensitivity analyses by excluding these individuals from the numerator, or both the numerator and denominator when examining the percentage of HCBS expansion population who remained in the community for one year post-discharge.

## Domain 2: Mainstream Medicaid Managed Care

### *Goal 1: Express Lane Eligibility*

#### *Research Questions*

- Goal 1, Research Question 1. How many recipients are enrolled in Express Lane eligibility?
- Goal 1, Research Question 2: Are there differences in the demographic and clinical characteristics of Medicaid beneficiaries enrolled through Express Lane–like eligibility as compared to those not enrolled through this mechanism?
- Goal 1, Research Question 3: What portion of the beneficiaries enrolled through Express Lane–like eligibility were later deemed not eligible for this coverage?

New York State did not make use of the Section 1115 authority related to Express Lane Eligibility, which determines temporary assistance for Medicaid. Express Lane Eligibility was instead implemented through a State PLAN amendment. Thus, these three questions for Domain 2, Goal 1, were dropped from this 1115 program evaluation. As a replacement, four new research

questions have been added to Domain 2, Goal 2. The four new research questions are aligned with the original evaluation design and Domain 2, Goal 2 (see below for details).

### *Goal 2: 12-Month Continuous Eligibility*

#### *Research Questions*[13]

- Goal 2, Research Question 1: What is the distribution of enrollees within select continuous enrollment categories, i.e., 12 months, 24 months, etc.?
- Goal 2, Research Question 2: Does the continuous enrollment differ by demographic or clinical characteristics?
- Goal 2, Research Question 3: Did Medicaid's average months of continuous enrollment increase following the implementation of continuous eligibility as compared to pre-implementation?
- Goal 2, Research Question 4: Was there an increase in the percentage of Medicaid beneficiaries continuously enrolled for 12 months following the implementation of continuous eligibility as compared to pre-implementation?
- Goal 2, Research Question 5: How do outpatient, inpatient, and emergency department visits compare pre- and post-implementation of this policy? How have costs been impacted because of the change in utilization?
- Goal 2, Research Question 6: How many of the beneficiaries covered under continuous eligibility would have been ineligible for coverage if not for the waiver?
- Goal 2, Research Question 7: Is overall fee-for-service (FFS) enrollment decreasing over time? (New Question 1)
- Goal 2, Research Question 8: Is short-term FFS enrollment decreasing over time? (New Question 2)
- Goal 2, Research Question 9: What percentage of Medicaid managed care (MMC) enrollees remain in the same MMC plan after 12-month recertification? (New Question 3)
- Goal 2, Research Question 10: What percentage of MMC enrollees are auto-assigned to any health plan? (New Question 4)

#### Study Population and Data Source

For questions 1–6, the population of interest will be the individuals who became newly covered by the 12-month continuous eligibility, including (1) individuals who were eligible for Medicaid prior to 2014 but were not covered by the 12-month continuous eligibility and (2) individuals who became eligible for Medicaid and the 12-month continuous eligibility after 2014. For questions 7 and 8, the analysis will cover all Medicaid enrollees. Questions 9 and 10 are about MMC enrollees only. The 2012–2018 Medicaid Data Warehouse will be used to answer all research questions under Domain 2, Goal 2 (Table 5). The Medicaid Data Warehouse

[13] Research Questions 7–10 were added later and do not aim to measure the impact of the 12-month continuous eligibility.

provides information on eligibility, enrollment, managed care enrollment status, medical conditions, utilization, and cost.

### Outcome Measures

- Goal 2, Research Question 1: The distributions of enrollment duration in months, by the year in which enrollment starts; percentages of enrollees with at least 12, 18, or 24 months of continuous enrollment.
- Goal 2, Research Question 2: Percentages of enrollees with at least 12, 18, or 24 months of continuous enrollment; the average number of continuous enrollment months, by enrollee characteristics such as sociodemographics and chronic medical conditions at the time of enrollment.
- Goal 2, Research Question 3: The average number of continuous enrollment months, by the year in which enrollment starts.
- Goal 2, Research Question 4: The fraction of enrollment episodes that last at least 12 months, by the year in which enrollment starts.
- Goal 2, Research Question 5: Annualized per member rates for inpatient, outpatient, and emergency room visits; annualized total health care cost per member.
- Goal 2, Research Question 6: The percentage of enrollment months in which enrollees would have been ineligible had the 12-month continuous eligibility been removed, by the year in which enrollment starts.
- Goal 2, Research Question 7: The count of individuals who were enrolled in FFS by month; the proportion of total Medicaid enrollment that was FFS by month.
- Goal 2, Research Question 8: The total count and the proportion of individuals enrolled in FFS for two or fewer months, among those with any MMC coverage in a year.
- Goal 2, Research Question 9: The proportion of MMC enrollees who remain in the same MMC plan after 12-month recertification, among individuals with at least 13 consecutive months of Medicaid enrollment and who are enrolled in MMC in the 12th month, by the year in which enrollment starts.
- Goal 2, Research Question 10: The proportion of MMC enrollees who are auto-assigned to any health plan at the start of MMC enrollment, by the year in which enrollment starts,

**Table 5. Study Design for Domain 2, Goal 2: To Limit Gaps in Medicaid Eligibility Due to Fluctuations in Recipient Income**

| Research Question | Measure | Data Source | Study Design and Analytic Approach |
|---|---|---|---|
| 1. What is the distribution of enrollees within select continuous enrollment cohorts (i.e., 12 months, 24 months, etc.)? | Percentages of enrollees with at least 12, 18, or 24 months of continuous enrollment | 2012–2018 Medicaid Data Warehouse | A pre-post design: Describe the distributions of enrollment months by enrollment start year and test for differences between the pre- and post-policy periods using the Kolmogorov-Smirnov test or a $c^2$ test as appropriate |
| 2. Does continuous enrollment differ by demographic or clinical characteristics? | Percentages of enrollees with at least 12, 18, or 24 months of continuous enrollment; average number of continuous enrollment months | 2012–2018 Medicaid Data Warehouse | A cross-sectional design: Describe the distributions of enrollment months by enrollee characteristics and test for differences using the Kolmogorov-Smirnov test or a $c^2$ test as appropriate |
| 3. Did Medicaid's average months of continuous enrollment increase following the implementation of continuous eligibility as compared to pre- implementation? | Average number of continuous enrollment months | 2012–2018 Medicaid Data Warehouse | A quasi-experimental design: Apply a difference-in-differences approach using a concurrent comparison (children who were enrolled with 12-month continuous eligibility both before and after the expansion of continuous eligibility) |
| 4. Was there an increase in the percentage of Medicaid beneficiaries continuously enrolled for 12 months following implementation of continuous eligibility as compared to pre-implementation? | Percentage of enrollees continuously enrolled for at least 12 months | 2012–2018 Medicaid Data Warehouse | A quasi-experimental design: Apply a difference-in-differences approach using a concurrent comparison (children who were enrolled with 12-month continuous eligibility both before and after the expansion of continuous eligibility) |
| 5. How do outpatient, inpatient and emergency department visits compare pre- and post-implementation of this policy? How have costs been impacted because of the change in utilization? | Annualized per member rates for inpatient, outpatient, and emergency room visits; annualized total health care cost per member | 2012–2018 Medicaid Data Warehouse | A quasi-experimental design: Apply a difference-in-differences approach using a concurrent comparison (children who were enrolled with 12-month continuous eligibility both before and after the expansion of continuous eligibility) |
| 6. How many of the beneficiaries covered under continuous eligibility would have been ineligible for coverage if not for the waiver? | Percentage of enrolled months in which enrollees would have been ineligible for coverage had the 12-month continuous eligibility been removed | 2012–2018 Medicaid Data Warehouse | A quasi-experimental design: Use the analysis results for Research Questions 3 and 4 to simulate what would have happened to enrollment had it not been for the 12-month continuous eligibility |
| 7. Is overall FFS enrollment decreasing over time? (NEW) | Percentage of individuals who were enrolled in FFS by month | 2012–2018 Medicaid Data Warehouse | A cross-sectional design: Describe the trends over time and test them using Pearson's $\chi^2$ test |

| Research Question | Measure | Data Source | Study Design and Analytic Approach |
|---|---|---|---|
| 8. Is short-term FFS enrollment decreasing over time? (NEW) | Percentage of individuals enrolled in FFS for two or fewer months, among those with any MMC coverage in a year | 2012–2018 Medicaid Data Warehouse | A cross-sectional design: Describe the trends over time and test them using Pearson's $\chi^2$ test |
| 9. What percentage of MMC enrollees remain in the same MMC plan after 12-month recertification? (NEW) | Percentage of MMC enrollees remaining in the same MMC plan after 12-month recertification, among those with at least 13 consecutive months of MMC coverage by enrollment start year | 2012–2018 Medicaid Data Warehouse | A cross-sectional design: Describe the trends over time and test them using Pearson's $\chi^2$ test |
| 10. What percentage of MMC enrollees are auto-assigned to any health plan? (NEW) | Percentage of MMC enrollees who are auto-assigned to any health plan at the start of MMC enrollment by MMC enrollment start year | 2012–2018 Medicaid Data Warehouse | A cross-sectional design: Describe the trends over time and test them using Pearson's $\chi^2$ test |

NOTE: Research Questions 7–10 do not aim to measure the impact of the 12-month continuous eligibility.

## Analytic Approach

### *Research Questions 1–6*

We will use a difference-in-differences study design and use a concurrent comparison group to measure the policy's impact on enrollment. For enrollment-related research questions, we will apply survival analysis techniques; for questions related to utilization, we will apply generalized linear models as appropriate. We will specify cost models as suggested by Manning and Mullahy, who outline a strategy for addressing the skewness and heterogeneity typical of health care cost data (Manning and Mullahy, 2001).

It is of paramount importance to define the policy intervention at a granular level to separate the intervention group from the comparison group. The state implemented the 12-month continuous eligibility for children in the Medicaid program prior to 2014—that is, children were covered by 12-month continuous eligibility in both the pre- and post-policy periods. We will differentiate individuals who were newly covered by the 12-month continuous eligibility starting in January 2014 from those who were previously covered and could therefore act as concurrent controls.

Specifically, we will use a comparison group consisting of children who were eligible for 12-month continuous eligibility both before and after the policy implementation. We acknowledge that the labor force and employment status of the parents of potential enrollees are likely very different from those of adult potential enrollees, which makes children a less than ideal control group. We did not consider non-MAGI individuals enrolled in Medicaid as a comparison group because these individuals are often very different populations—for example, those who are disabled or in foster care.

We will also address some specific issues about eligibility recertification and enrollment below and specify models that are sufficiently flexible to characterize the "fuzzy" eligibility period; alternatively, we will perform sensitivity analyses around the length of continuous eligibility (e.g., from 12 to 15 months). For instance, new Medicaid enrollees may be retroactively enrolled to cover medical bills for as many as three months prior to the month of the Medicaid application. Those months do not count against the 12-month period of continuous eligibility. Thus, the recertification month could be as late as the 15th month (that is, up to three months of retrospective eligibility followed by 12 months of continuous eligibility). In addition, individuals who submit recertification materials late, or for whom eligibility is not determined by the end of month 12, will not be dropped from coverage until eligibility is adjudicated. Thus, some may be enrolled for several months after the 12-month continuous eligibility period has ended.

*Research Questions 7–10*

For Research Questions 7–10, we will generate the measures and describe their trends during 2012–2018. Pearson's $\chi^2$ tests will be used to test such trends (Manitoba Centre for Health Policy, 2008).

# 4. Discussion OF Findings and Conclusions

## Domain 1, Component 1: Managed Long-Term Care

### *Goal 1, Research Question 1: MLTC Enrollment*

*Enrollment into MLTC will continue to grow and then stabilize as the program is mandatory across the state. At what point in the demonstration did the population stabilize in size?*

#### MLTC Mandate Rollout

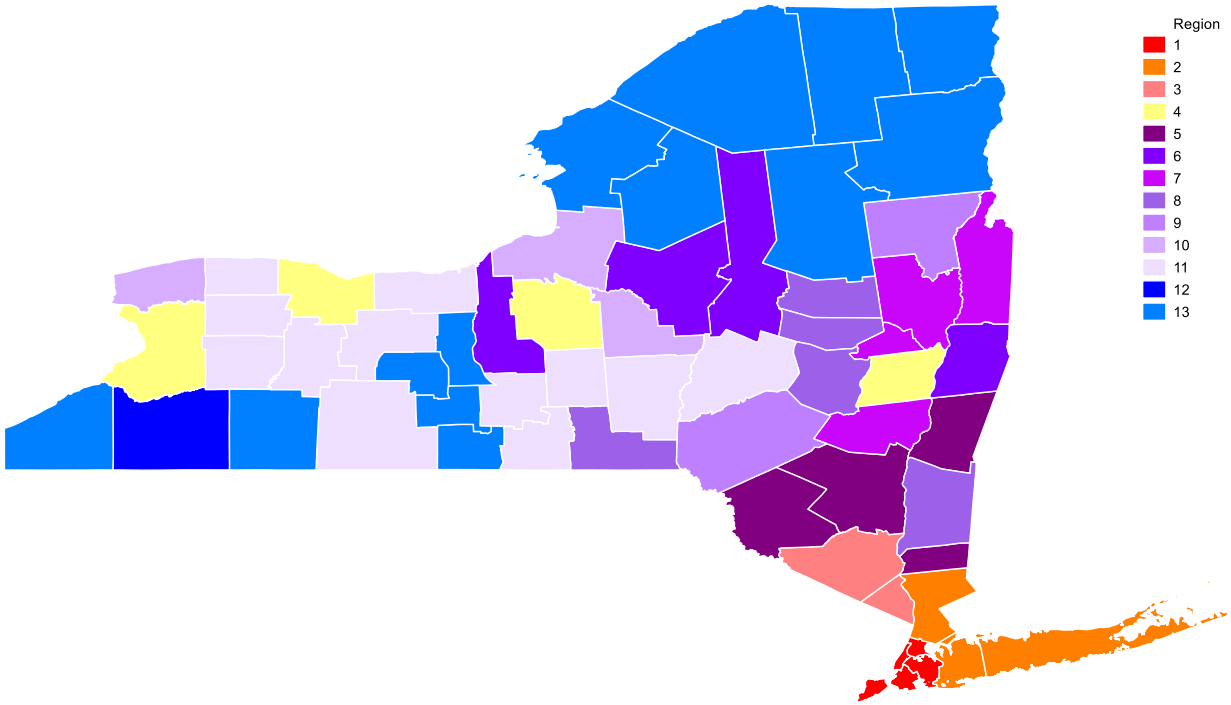
Table 6 presents the rollout region, the counties in each region, and the announcement letter date for each region. The rollout regions are also illustrated in Figure 1. The mandate started in New York City (Region 1), followed by three more populated regions (Regions 2–4), and then the remaining regions. The majority of regions (Regions 5–11) implemented the mandate in 2014. The last two regions (Regions 12–13) are less populated than the rest of the state.

**Table 6. List of Counties and the MLTC Mandate Rollout Dates**

| Region | Counties in Region | Announcement Letter Date |
|---|---|---|
| 1 | New York City (Bronx, Kings, New York, Queens, Richmond) | June 2012 |
| 2 | Nassau, Suffolk, Westchester | January 2013 |
| 3 | Orange, Rockland | June 2013 |
| 4 | Albany, Erie, Monroe, Onondaga | December 2013 |
| 5 | Columbia, Putnam, Sullivan, Ulster | April 2014 |
| 6 | Cayuga, Herkimer, Oneida, Rensselaer | May 2014 |
| 7 | Greene, Saratoga, Schenectady, Washington | June 2014 |
| 8 | Broome, Dutchess, Fulton, Montgomery, Schoharie | August 2014 |
| 9 | Delaware, Warren | September 2014 |
| 10 | Madison, Niagara, Oswego | October 2014 |
| 11 | Chenango, Cortland, Genesee, Livingston, Ontario, Orleans, Otsego, Steuben, Tioga, Tompkins, Wayne, Wyoming | December 2014 |
| 12 | Cattaraugus | March 2015 |
| 13 | Allegany, Chautauqua, Chemung, Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, Schuyler, Seneca, St Lawrence, Yates | June 2015 |

NOTE: The MLTC mandate was formally launched in September 2012. For our analytic purposes, we used the announcement letter date as the start date since some beneficiaries started to enroll in MLTC under the mandate after the letter date.

**Figure 1. The MLTC Mandate Rollout Regions by Announcement Letter Date**

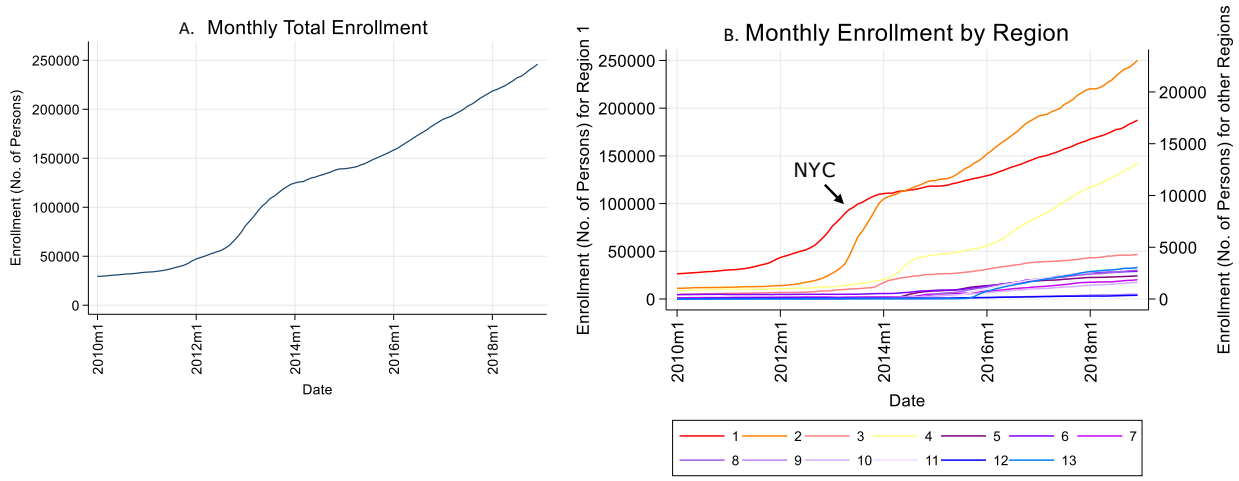



NOTE: This map depicts the clusters of counties by Announcement Letter date. Region numbers correspond to those in Table 6.

## MLTC Enrollment

The total enrollment over calendar time is presented in Figure 2A. MLTC enrollment increased rapidly from 54,479 in mid-2012 to 124,757 at the beginning of 2014, at which point the curve flattens slightly before resuming a continuing trend of increased enrollment compared to the pre-mandate period. The total enrollment reached 245,973 in December 2018. We also looked at enrollment by each region, over time. Most of the growth was driven by Region 1 (New York City), where enrollment accounted for 76 percent of total enrollment at the end of 2018; this is clearly presented in Figure 2B, in which the total enrollment trend mirrors that of New York City. The next two regions that contributed most to the total enrollment, but to a much lesser extent, are Regions 2 (Nassau, Suffolk, Westchester) and 4 (Albany, Erie, Monroe, Onondaga), accounting for 9 percent and 5 percent of the total enrollment in December 2018, respectively.

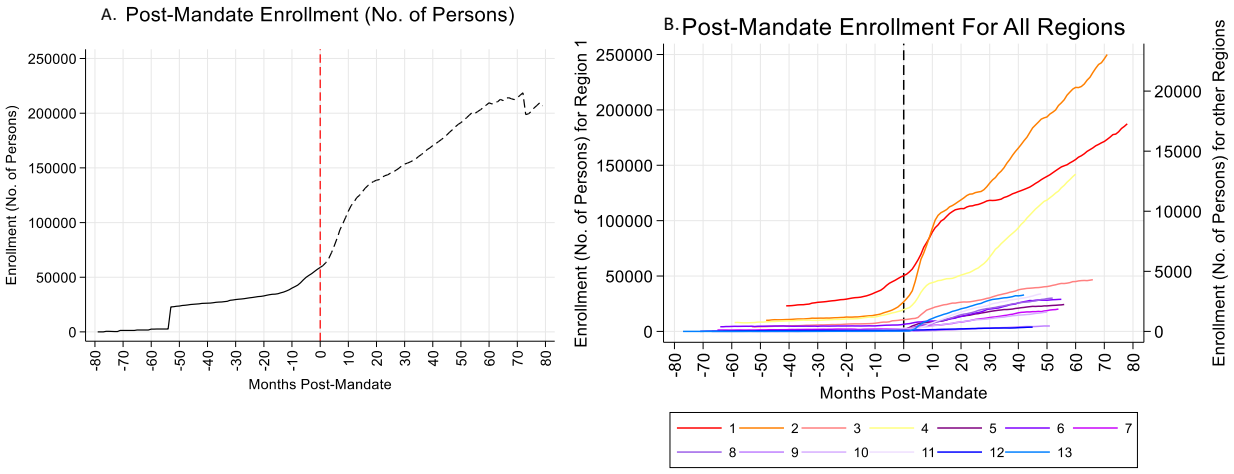
**Figure 2. Total MLTC Enrollment Over Calendar Time, Statewide and by Rollout Region**




The calendar time enrollment trend is confounded by the fact that the mandate started at different times. Each region has a different number of months in the pre- and post- mandate periods, depending on when the mandate was rolled out in that region. For example, Region 1 (New York City) has the fewest number of months (29 months) in the pre-period and the greatest number of months (79 months) in the post-period. As a result, we observed an upward calendar time trend simply because a few regions newly started to implement the mandate at that time. We therefore examined the trend by resetting a region-specific time index to 0 for the month during which each region implemented the mandate (i.e., "re-centering" the data).

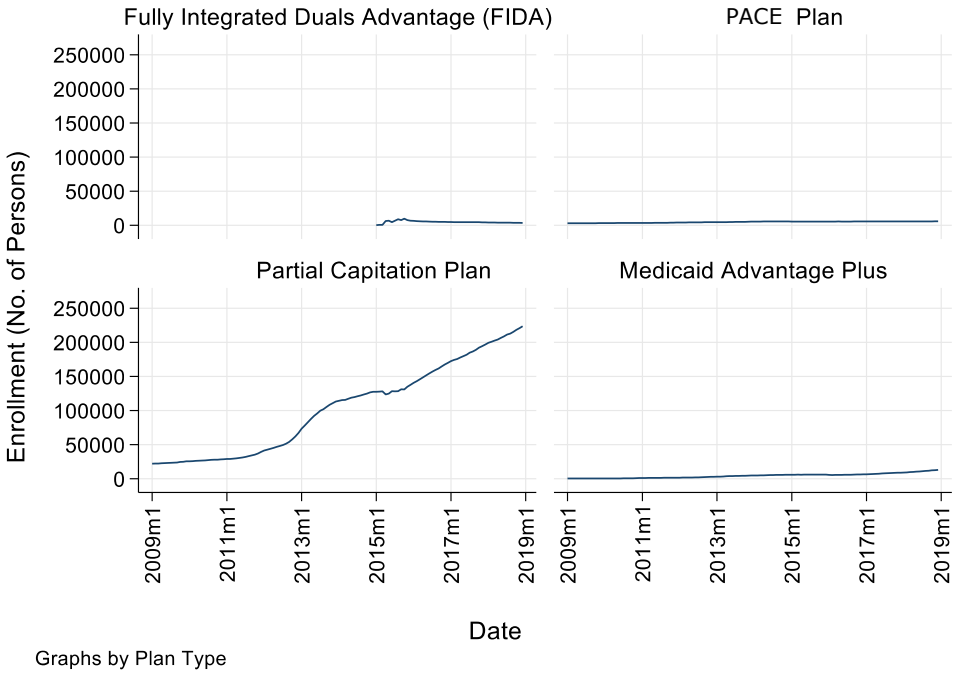
Once the data were re-centered, we find that the increases observed in the ten months prior to the mandate and those in the post-mandate period are more pronounced (Figure 3A) than those in calendar time trends (Figure 2A). The post-mandate enrollment trend increased very rapidly until month 19, at which point it started to flatten and stabilize. Note that, due to re-centering the data for each region, the total enrollment (213,852) at month 79, reflecting the enrollment in New York City in December 2018, is different from the statewide enrollment (245,973) in December 2018, as illustrated in Figure 2A. Similar to the enrollment trend by calendar time, Figure 3B shows the greatest enrollment (188,872 at month 79) in Region 1 (New York City), followed by Region 2 (Nassau, Suffolk, Westchester) and Region 4 (Albany, Erie, Monroe, Onondaga), 24,980 at month 79 and 14,786 at month 72, respectively.

**Figure 3. Total MLTC Enrollment Over Time Since Mandate, Statewide and by Rollout Region**




We next examined the enrollment by MLTC plan type. Four plan types were included in the analysis: Partial Capitation, PACE, MAP, and FIDA plans. The FIDA plans were part of a five-year demonstration and were limited to Regions 1 (New York City) and 2 (Nassau, Suffolk, Westchester); the program closed December 31, 2019. Figure 4 describes the number of MLTC enrollees by plan type. We find that most members enrolled in Partial Capitation plans (223,568, or 91 percent, in December 2018), followed by MAP (5 percent), PACE (2 percent), and FIDA (1 percent). The trends in Partial Capitation enrollment mirror that of the statewide enrollment presented in Figure 2A. MAP and PACE plans have a limited increase in enrollment over time and do not mimic the Partial Capitation trend curve.

**Figure 4. Total MLTC Enrollment by Calendar Time and Plan Type**




## MLTC Enrollment Rate

We next performed a similar descriptive analysis of enrollment rates. Figure 5 presents the statewide (A) and region-specific (B) rates. The statewide enrollment rate increased rapidly from 10–18 percent in the second half of 2012 to 35 percent in December 2013, after which it slowed. But the enrollment rate increased again in 2016 (Figure 5A) and reached 65 percent by 2018. The statewide enrollment rate is driven by Region 1 (New York City), with a rate of 88 percent in December 2018. Regions 2 (Nassau, Suffolk, Westchester) and 3 (Orange, Rockland) have the second-highest rates, with a similar pattern to that of Region 1 (Figure 5B), 62 percent and 66 percent at the end of 2018, respectively. The enrollment rates in other regions varied between 27 percent and 42 percent as of December 2018.

**Figure 5. MLTC Enrollment Rates over Calendar Time, Statewide and by Rollout Region**

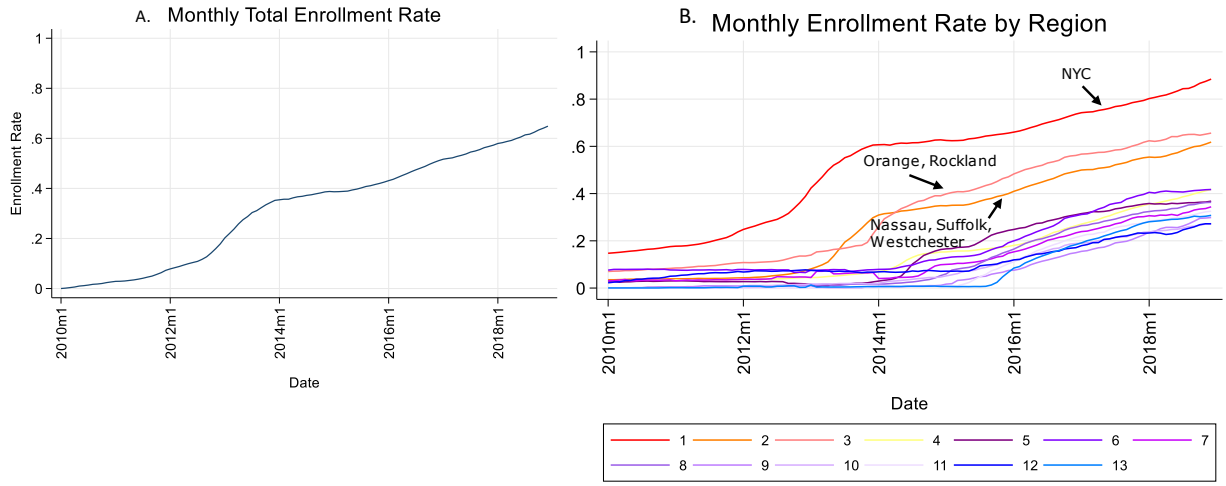
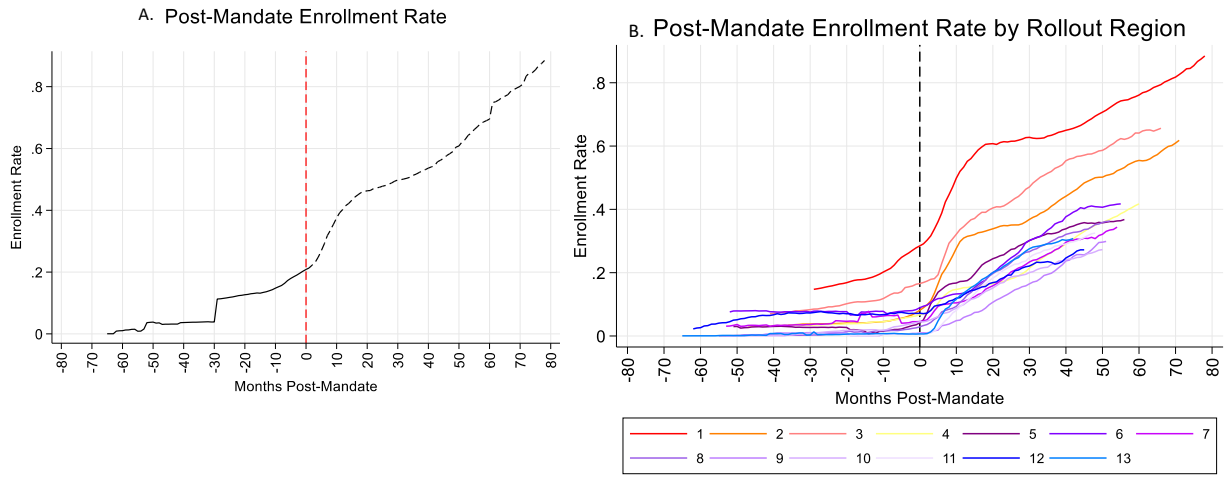



Figure 6 shows that, after the data are re-centered around the mandate start for each rollout region, the trend curves continued to increase during the post-mandate period, from 20 percent at month 0 to 88 percent at month 79, and are much steeper than calendar time trends as depicted in Figure 5. In particular, the ten months prior to the start of the mandate appear to have a marked increase in statewide enrollment rates compared to earlier months (Figure 6A). Note that, due to the re-centering of the data for each region, the overall rate in Figure 6A is different from that in Figure 5A.

A close examination of enrollment rates by region (Figure 6B) shows the highest rate at month 40 (65 percent) in Region 1 (New York City), followed by Regions 2 (44 percent) and 3 (55 percent). But even prior to the mandate, the enrollment rate in Region 1 was about 20 percent, much higher than in other regions. The acceleration in enrollment rates just prior to the mandate start was primarily driven by Regions 1 (New York City) and 3 (Orange, Rockland). Other than Regions 1, 2, and 3, rates in the remaining regions appear to have similar trends with similar values, varying between 24 percent and 38 percent at month 40.

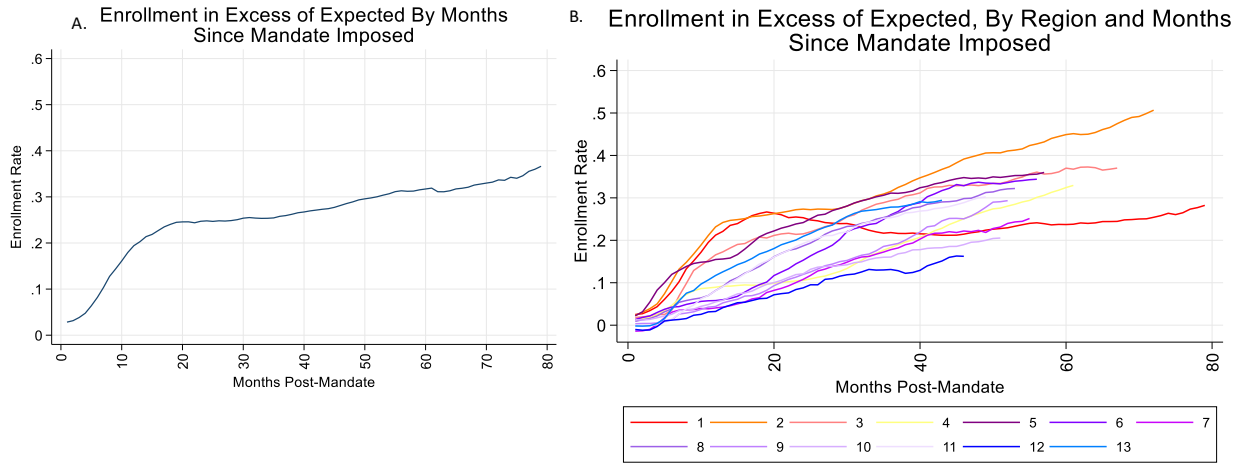
**Figure 6. MLTC Enrollment Rates over Time Since Mandate, Statewide and by Rollout Region**




## MLTC Mandate's Effect on Enrollment Rate

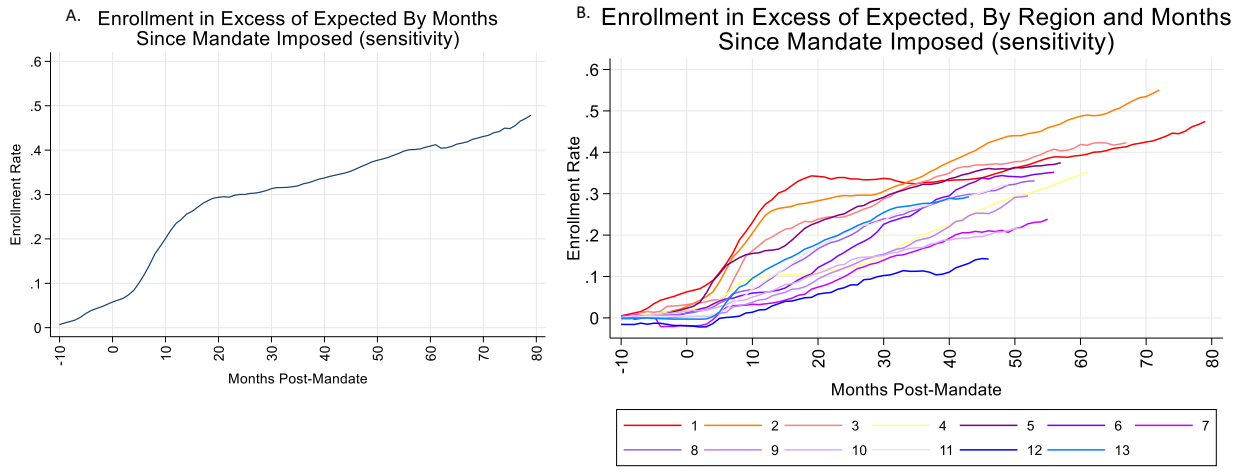
For the regression analysis, we determined the enrollment rate increase in excess of the expected rate based on prior trends in the data (Figure 7); that is, we controlled for the region-specific baseline calendar time trends that are assumed to continue regardless of the mandate. The MLTC mandate is associated with an increase of 37 percentage points in enrollment rates during the first 79 months post-mandate, with about two-thirds of the impact (a 24-percentage point increase) occurring in the first 19 months post-mandate (Figure 7A). Since month 20, the mandate's impact stabilized at about 0.21 percent per month, or 2.4 percent per year. Not surprisingly, the mandate's effect differs across regions. In New York City, the mandate's effect (28 percentage points) was largely realized in the first 19 months, and Regions 3 (Orange, Rockland), 5 (Columbia, Putnam, Sullivan, Ulster), and 6 (Cayuga, Herkimer, Oneida, Rensselaer) seem to stabilize at Month 42, 46, and 45, respectively. But in other regions, the mandate continued to increase its impact. At month 40, Regions 3, 5, and 2 seem to experience the largest impact from the mandate, with enrollment rates in excess of what was expected reaching 31 percent, 32 percent, and 35 percent, respectively.

**Figure 7. Trends In Excess of MLTC Enrollment Rates over Time Since Mandate, Statewide and by Rollout Region**




We noted that there seemed to be an increase in enrollment in the ten months prior to the mandate start; this trend was observed when looking at the number of enrollees, as well as enrollment rates. We therefore conducted a sensitivity analysis by explicitly modeling these ten months as part of the implementation period (Figure 8); that is, the reference group now becomes the time period of 11 months or more prior to the mandate. We found that both the level and the slope of excessive enrollment rates increased after explicitly modeling the ten months prior to the mandate start. For example, the mandate's impact on the statewide enrollment rate increases to 30 percentage points by month 19 (over 50 percent of the total impact by month 70, Figure 8A) from 24 percentage points (Figure 7A), and the impact at month 70 is 44 percentage points versus 37 percentage points in the main analysis. Since month 20, the mandate's impact stabilized at about 0.32 percent per month, or 3.9 percent per year. This change, admitting anticipatory effects, has a large impact on results for Region 1. First, in Figure 8B, we observe enrollment in excess of expected in the ten months prior to the mandate start (in contrast, this effect in Region 3 is small); second, the trend in Region 1 started to increase again at month 45, which is not present in the main analysis. Upon conducting a visual inspection, no other regions had stabilized their enrollment rates by 2018.

**Figure 8. Trends in Excess of MLTC Enrollment Rates over Time Since Mandate, Including the 10 Months Prior to the Mandate, Statewide and by Rollout Region**




Based on our tests of the changes in three-month average enrollment rates, the mandate's effect on enrollment rate stabilized statewide at month 19 post-mandate (comparing months 19-21 with months 16–18), and no significant increases are observed after month 19. The testing results are similar to those from the sensitivity analysis, in which the ten months prior to the mandate were included as an anticipatory effect of the mandate. The enrollment rate stabilized at month 20, and no significant increases appeared from that point forward.

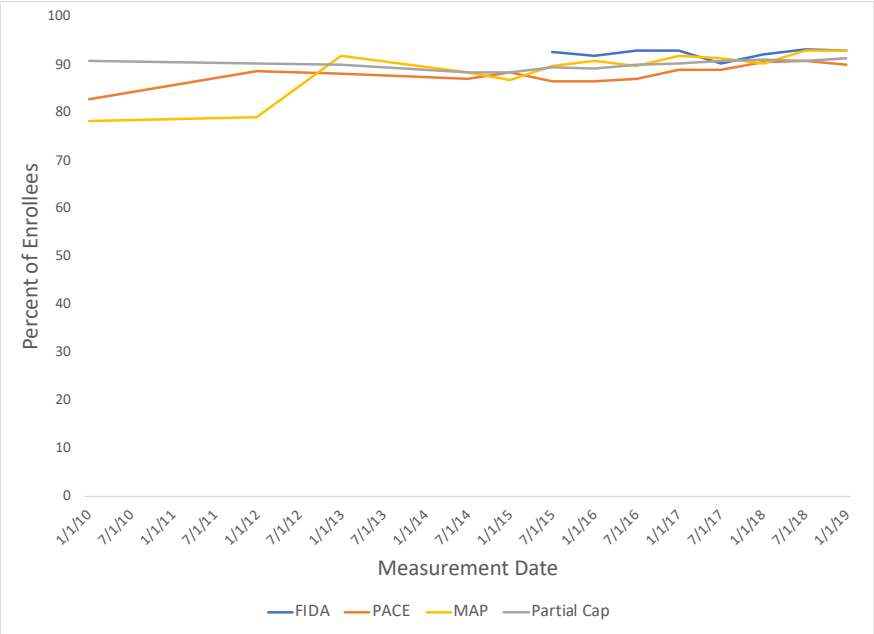
### *Goal 2, Research Question 1: Emergency Room Visits*

*Is the percentage of the MLTC population without any emergency room visits in the last 90 days stable or improving over the course of the demonstration?*

As illustrated in Figure 9, the percentage of enrollees without any emergency room visits remained largely unchanged[14] during 2010–2019 among Partial Capitation plans, which accounted for 91 percent of total MLTC enrollment in 2018. In comparison, the rates among MAP and PACE plans were lower than among Partial Capitation plans based on the data reported prior to July 2012 but similar in the later reporting years. FIDA plans had a relatively flat trend over the observation period, with a range from 93.1 percent to 90.1 percent of enrollees from July 2015 to January 2019, and FIDA rates were generally higher than those of other plan types. Note that the total enrollment of FIDA plans was relatively small, ranging from 1 to 2,978 during 2015–2019, and accounting for about 1 percent of total MLTC enrollment.

[14] Despite our adjustment for the reference period, rates in percentage without emergency room visits and percentage without falls may not be comparable over time because of measurement definitional issues and risk adjustment. We therefore did not conduct trend tests. But they are comparable within the same time period across different plan types.

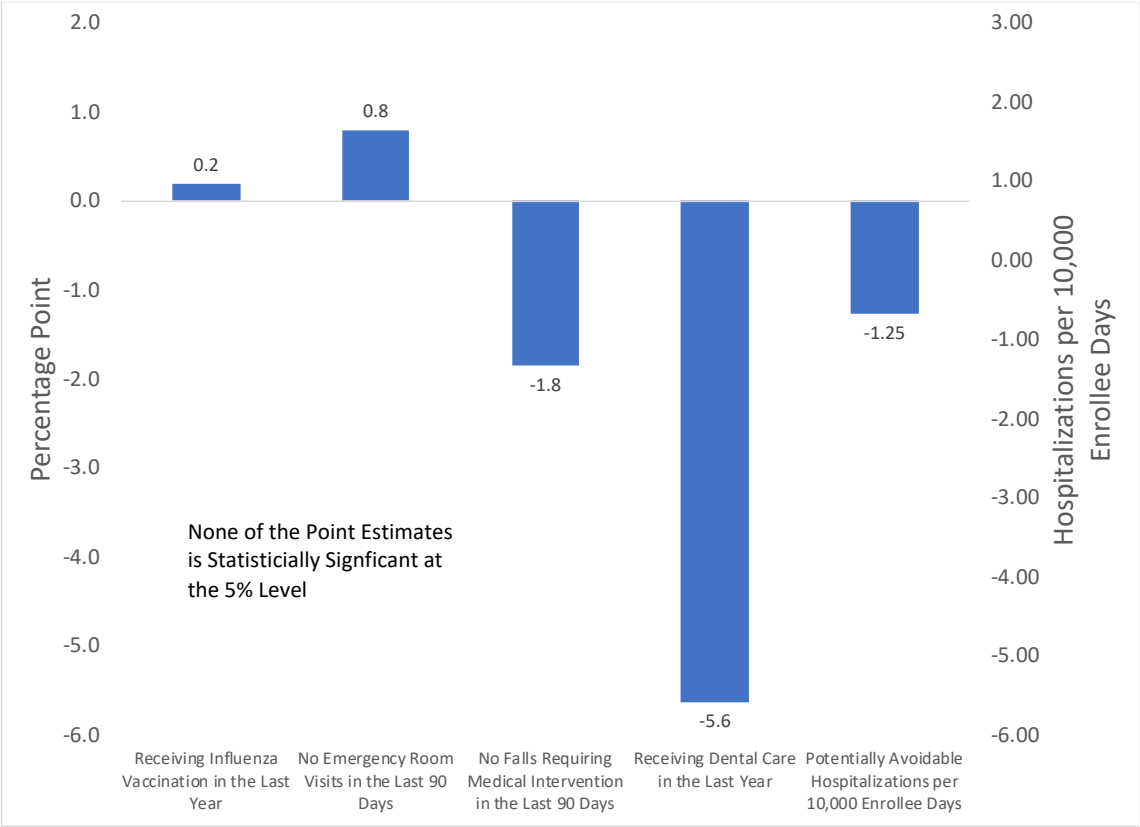
**Figure 9. Percentage of MLTC Enrollees without Any Emergency Room Visits in the Last 90 Days**




NOTE: The lookback period was adjusted from the last six months to the last 90 days for the 2010, 2012, and 2013 measures. The 2010 measure includes any emergent care received in a hospital emergency room, outpatient department, or physician's office. Starting in 2012, the measure includes only emergent care received in a hospital emergency room and is risk-adjusted.

Based on the multivariable regression analysis, we did not find a statistically significant association between the MLTC mandate and without emergency room visits (Figure 10).

**Figure 10. Effect of the MLTC Mandate on Patient Safety and Quality of Care Measures**



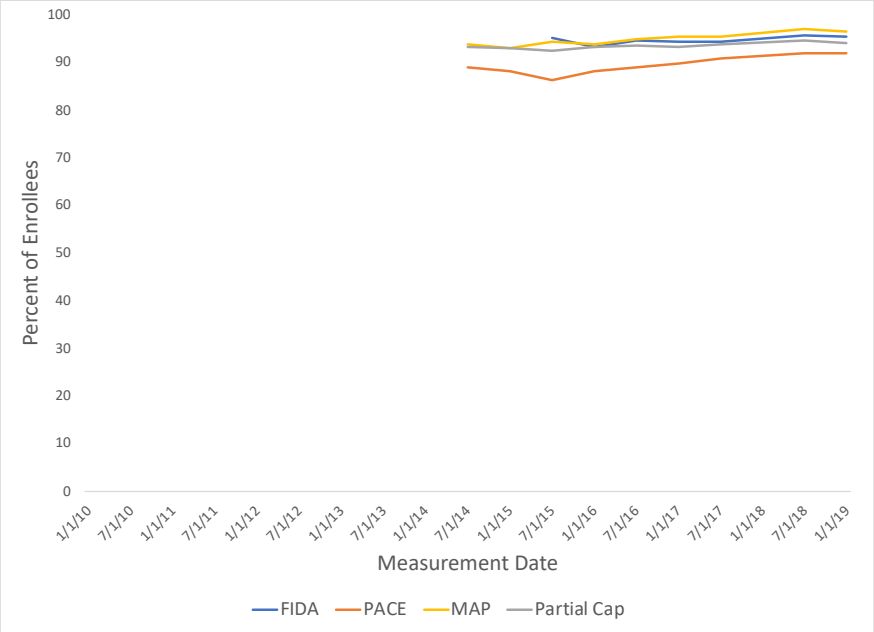

NOTE: The outcome measures for influenza vaccination (N=522), no emergency room visit (N=475), no falls requiring medical intervention (N=403), and dental exam (N=448) are in percentage points (left Y-axis). Potentially avoidable hospitalization rate (N=210) is defined as the number of such events per 10,000 MLTC enrollee days (right Y-axis). None of the estimates is statistically significant at the 5 percent level.

### *Goal 2, Research Question 2: Falls Requiring Medical Intervention*

*Is the percentage of the MLTC population without any falls requiring medical intervention in the last 90 days stable or improving over the course of the demonstration?*

Figure 11 shows the percentage of enrollees without any falls that required medical intervention in the last 90 days by plan type. Because the measure definition changed significantly in 2014, the data set is limited to July 2014 onward. Enrollee rates of without falls among both PACE and Partial Capitation plans were lowest in July 2015, at 85.4 percent and 92.5 percent, respectively. After an initial drop in the rate of falls, there was a general increase in the trends across all plan types. In 2019, 95.6 percent of FIDA, 91.0 percent of PACE, 94.2 percent of Partial Capitation, and 96.7 percent of MAP enrollees did not have any falls requiring medical intervention in the last 90 days. The multivariable regression analysis did not show a statistically significant association between the MLTC mandate and falls requiring medical intervention (Figure 10).

**Figure 11. Percentage of MLTC Enrollees without Any Falls Requiring Medical Intervention or Resulting in Major or Minor Injuries in the Last 90 Days**



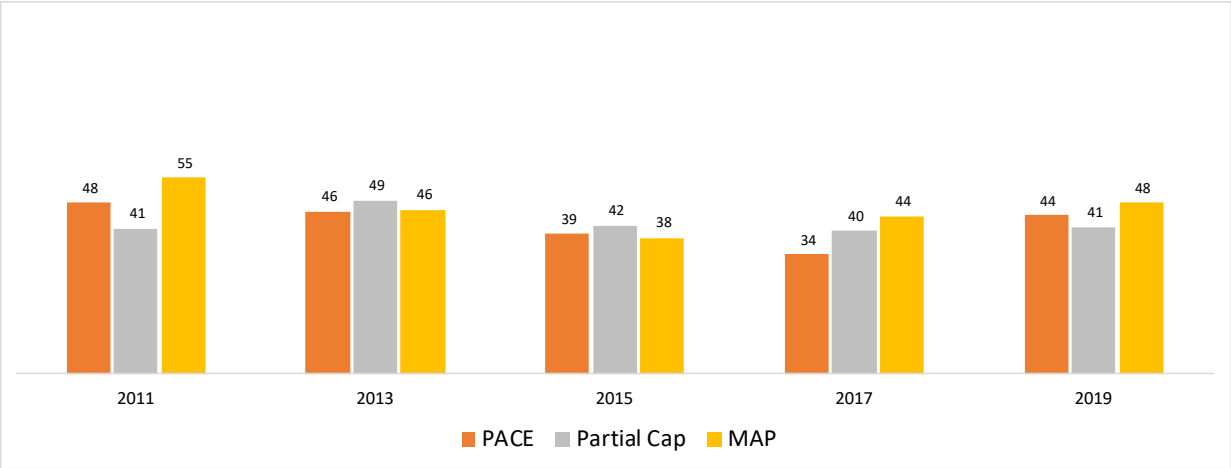

NOTE: The year 2014 is the first reporting period in which the risk-adjusted percentage of enrollees without any falls requiring medical intervention was reported. In 2010, the percentage of enrollees without any falls was reported; in 2012, the risk-adjusted percentage of enrollees without any falls was reported; in 2013, the risk-adjusted percentage of enrollees without any falls and the risk-adjusted percentage of enrollees without falls not requiring medical intervention was reported. We did not analyze the data reported prior to 2014 because the definition changed in 2014, and data were not available for January 1, 2018.

### *Goal 3, Research Question 1: Timely Access to Care*

*Are enrollees' perceived timely access to personal, home care, and other services such as dental care, optometry, and audiology stable over time or improving?*

Because of a lack of reported measures on access to optometry and audiology, we present results on access to dental care only. The percentage of enrollees who waited less than a month for routine dental care decreased from 2011 to 2013 for those in PACE and MAP plan types, and it increased slightly for those in the Partial Capitation (Figure 12). In 2015, the outcome definition changed and the percentage of enrollees who received access to routine dental appointments within PACE and MAP plan types increased from 2015 to 2019, while those in the Partial Capitation plans remained largely unchanged. Overall, on a statewide level, the trend is that more enrollees had similar wait times and access to routine dental care.

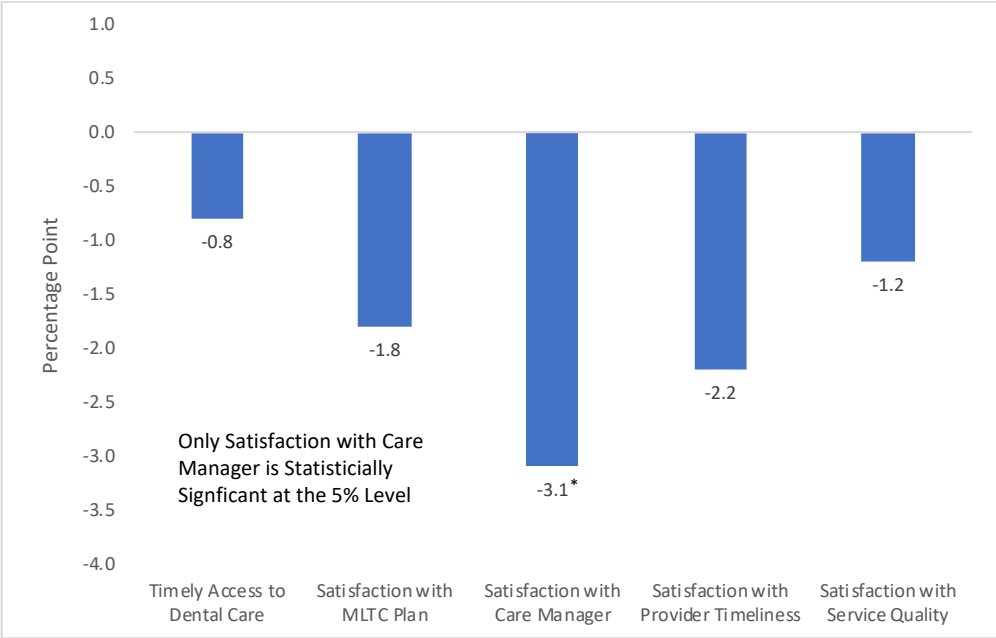
**Figure 12. Percentage of MLTC Enrollees Who Received Timely Access to Dental Care**




NOTE: The bars represent the percentage of MLTC enrollees who reported that within the last six months they waited less than 1 month for access to routine dental care (2011, 2013) or the percentage of members who reported that within the last six months they always got a routine dental appointment as soon as they thought they needed one (2015, 2017, 2019). Data from 2007 was not available from MLTC reports by individual plan; the outcome definition changed in 2015; the measure is not risk-adjusted.

Based on the multivariable regression analysis, no statistically significant association between the MLTC mandate and timely access to dental care was found (Figure 13).

**Figure 13. Effect of the MLTC Mandate on Access and Satisfaction Measures**




NOTE: *p < 0.05. The sample sizes for timely access to dental care, satisfaction with MLTC plan, satisfaction with care manager, satisfaction with provider timeliness, and satisfaction with service quality are 42, 45, 46, 45, and 47, respectively.

### *Goal 3, Research Question 2: Preventive Services*

*Is the percentage of the MLTC population accessing preventive care services, such as the influenza vaccination and dental care, consistent or improving?*

Figure 14 shows that the rate of influenza vaccination stayed relatively flat or increased slightly since the pre-mandate period (before 2013), with the exception of MAP enrollees, whose vaccination rate went from 77.1 percent in 2012 to 61.7 percent in 2013. Since 2013, the percentage of MAP enrollees who received an influenza vaccination in the last year increased to 83.5 percent as of the January 2019 measurement period. The percentage of enrollees in FIDA plans who received influenza vaccinations in the last year increased from 76.5 percent in July 2015 to 83.0 percent in January 2019. The percentage of PACE and Partial Capitation plan enrollees who received influenza vaccinations in the last year stayed relatively flat, at 87.2 percent to 86.3 percent and 80.9 percent to 78.8 percent, respectively, from January 2010 to January 2019. This measure is not risk-adjusted at the plan level. The multivariable regression analysis did not show a statistically significant association between the MLTC mandate and influenza vaccinations (Figure 10).

**Figure 14. Percentage of MLTC Enrollees Receiving an Influenza Vaccination in the Last Year**

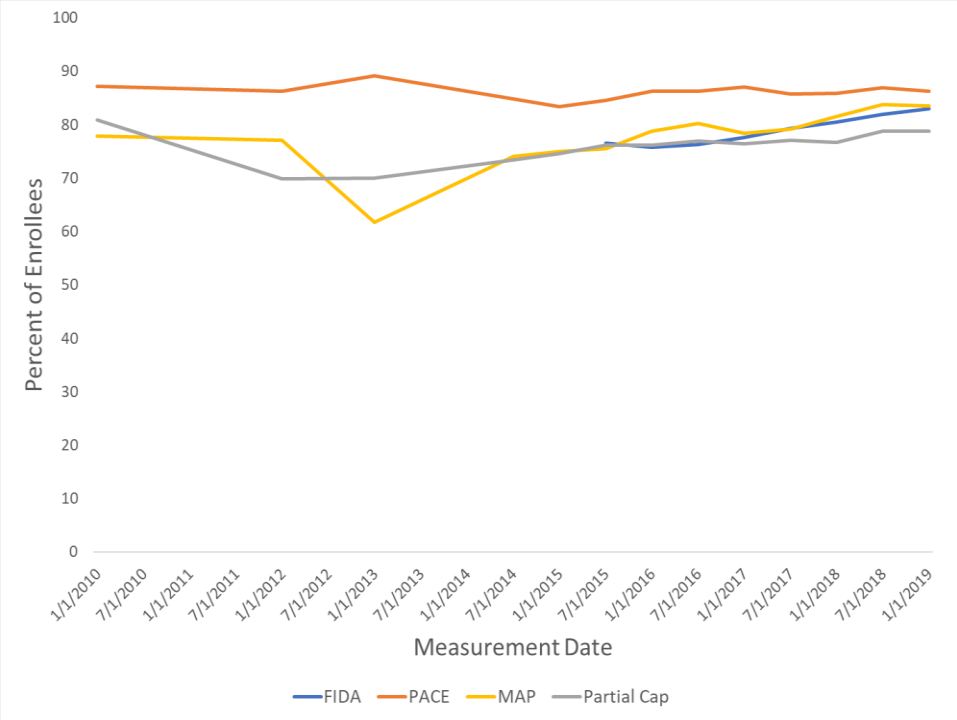
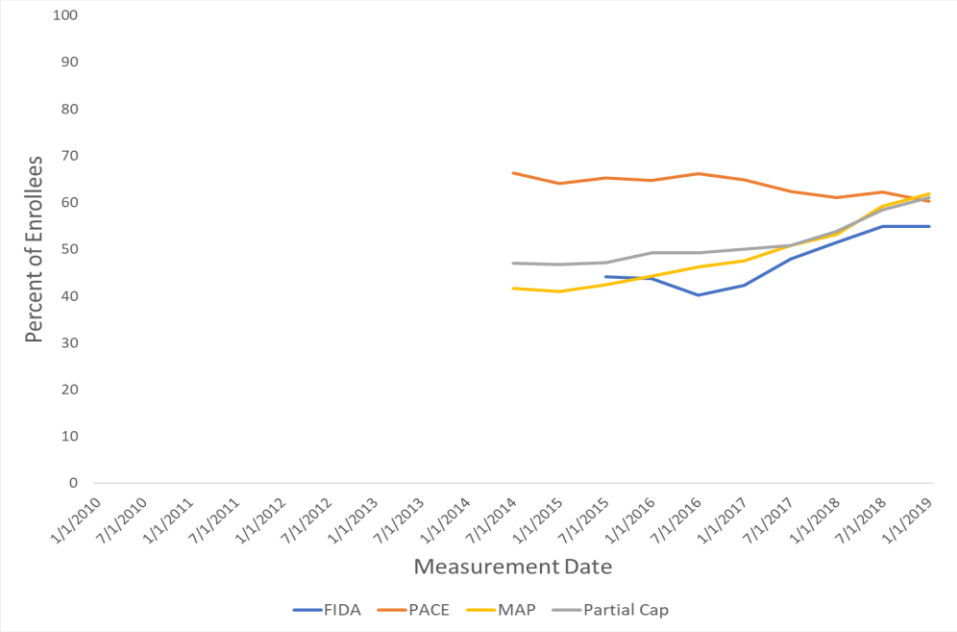



Figure 15 shows the percentage of MLTC enrollees receiving a dental exam in the last year by plan type; the measure was reported starting in July 2014. Overall, there was an upward trend over the available measurements, with the exception of PACE plan enrollees, who had a

downward trend from 66.3 percent in July 2014 to 60.3 percent in January 2019. The percentage of Partial Capitation and MAP plan enrollees receiving a dental exam steadily increased from 47.0 percent to 61.1 percent and from 41.6 percent to 61.8 percent, respectively, over the same time period. The percentage of FIDA plan enrollees who received a dental exam also increased, albeit over a shorter time period, from July 2015 to January 2019. This measure is not risk-adjusted at the plan level. The multivariable regression analysis did not show a statistically significant association between the MLTC mandate and receipt of dental exam (Figure 10), although the point estimate is sizable (–5.6 percentage points).

**Figure 15. Percentage of MLTC Enrollees Receiving a Dental Exam in the Last Year**

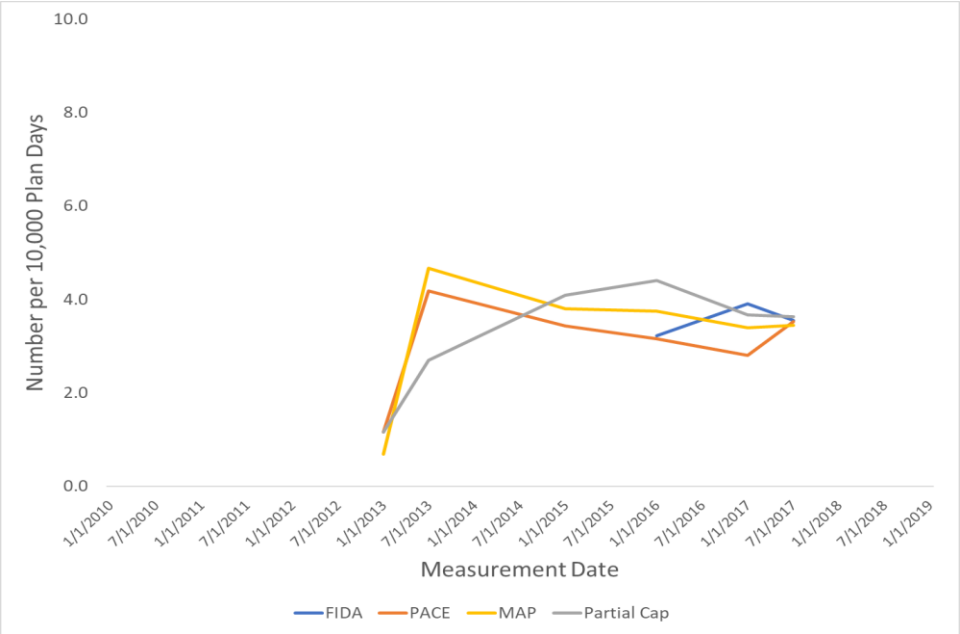



### *Goal 4, Research Question 1: Potentially Avoidable Hospitalizations*

*Is the MLTC population experiencing stable or reduced rates of potentially avoidable hospitalization?*

We descriptively examine the annual rate of potentially avoidable hospitalizations by plan type (Figure 16), measured as the number of potentially avoidable hospitalizations per 10,000 enrollee days. FIDA plans only reported for three measurement periods, and the rate is relatively flat at 3.219 to 3.910 hospitalizations per 10,000 enrollee days. For the other three plan types, the rates reported in January 2013 were relatively low; rates spiked in either July 2013 (4.176 for PACE, 4.670 for MAP) or January 2016 (4.404 for Partial Capitation), and then remained relatively stable (PACE) or decreased (Partial Capitation and MAP). The multivariable regression analysis did not show a statistically significant association between the MLTC mandate and potentially avoidable hospitalizations (Figure 16).

**Figure 16. Annual Rate of Potentially Avoidable Hospitalizations**



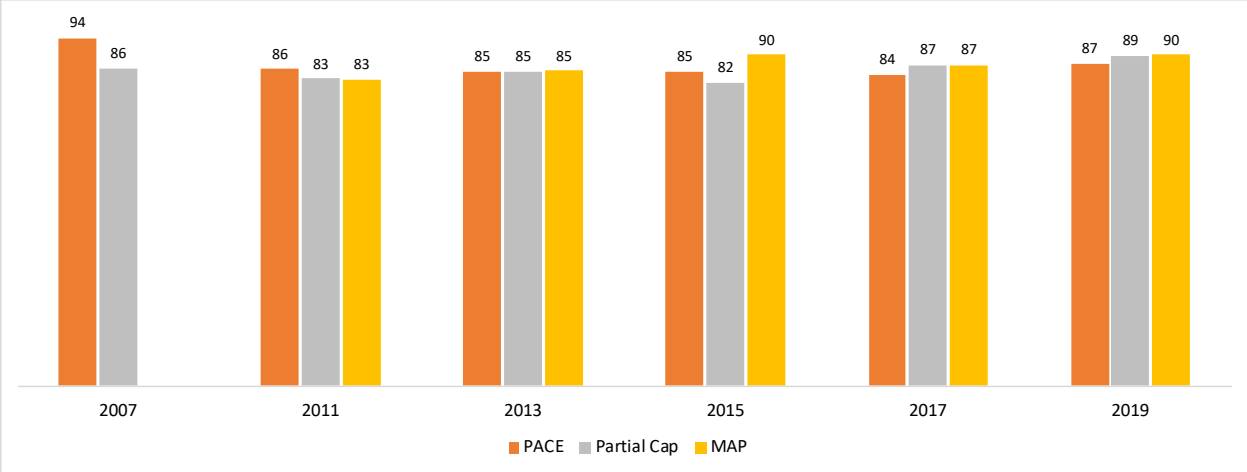

NOTE: SPARCS records were matched using SAAM data (2013) or UAS-NY data (2014 onward). After 2013, eligible enrollees were those with continuous enrollment periods of four months or greater in an MLTC plan. We did not analyze the January 1, 2013, data point in the regression analysis because, for some reason, it is about one-third of other data points.

### *Goal 5, Research Question 1: Satisfaction with MLTC Plans*

*What is the percentage of members who rated their managed long-term care plan within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration?*

Figure 17 shows how enrollees rated their health plan, by plan type and survey year. The percentage of participants who rated their health plan as good or excellent was initially quite high in 2011: 85.7 percent, 83.2 percent, and 83.0 percent for PACE, Partial Capitation, and MAP plans, respectively. Among PACE plans, ratings of health plan satisfaction remained rather stable over time except for a decline compared to 2007. Ratings of satisfaction in health plans among Partial Capitation and MAP plan enrollees did not experience the same dip and generally rose each year. The multivariable regression analysis did not show a statistically significant association between the MLTC mandate and satisfaction with MLTC plan (Figure 13).

**Figure 17. Percentage of MLTC Enrollees Who Rate Their Health Plan as Good or Excellent**



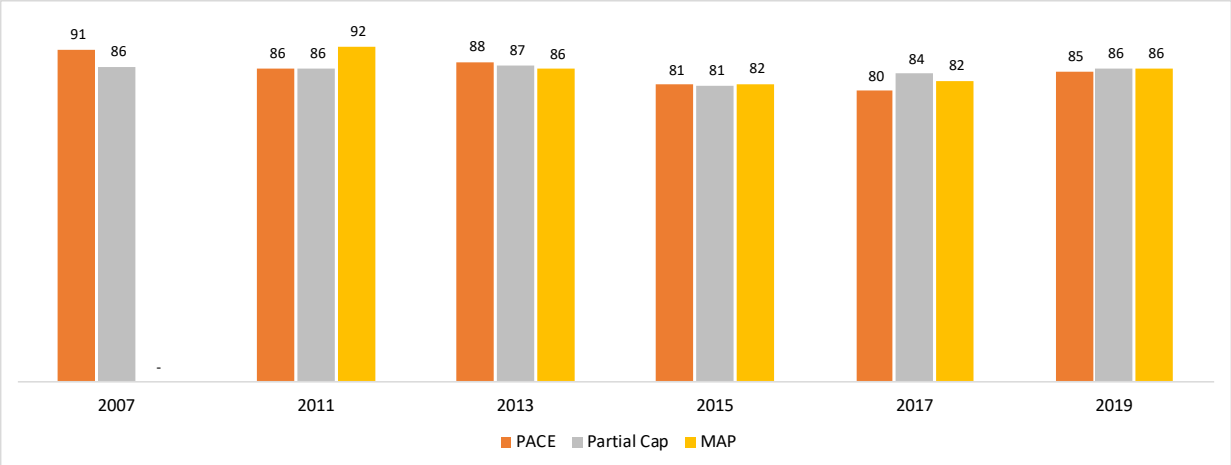

NOTE: The 2007 data for MAP plans are not available.

## *Goal 5, Research Question 2: Satisfaction with Care Managers*

*What is the percentage of members who rated the quality of care manager/case manager services within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration?*

Ratings for each plan type showed decreases in care manager satisfaction corresponding to the time that mandatory enrollment was implemented. While satisfaction increased in 2019, it remained below 2011 levels across all plan types (Figure 18). The multivariable regression analysis shows a 3.1 percentage drop in satisfaction with care managers associated with the MLTC mandate (Figure 18).

**Figure 18. Percentage of MLTC Enrollees Who Rate Their Care Manager as Good or Excellent**

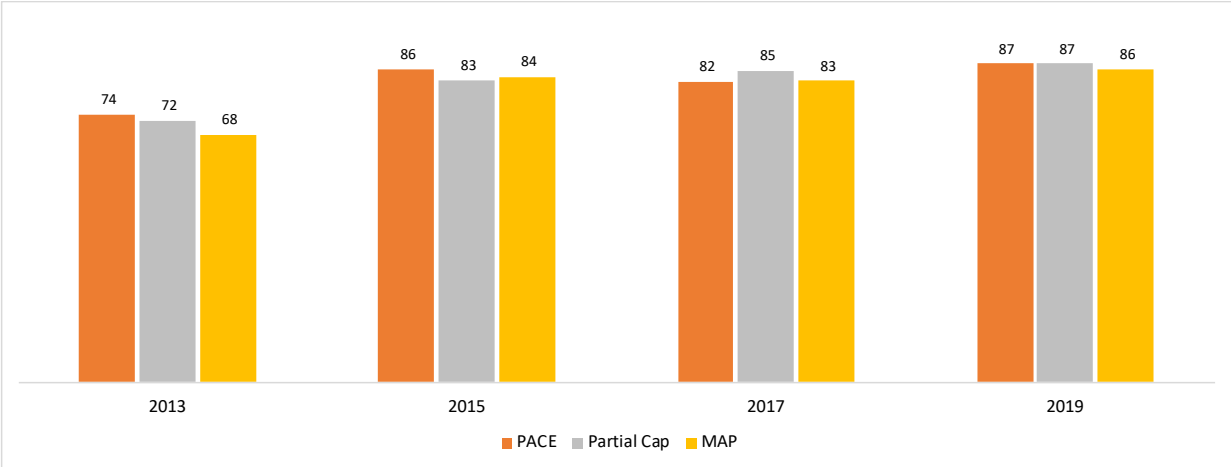


### *Goal 5, Research Question 3: Satisfaction with Services*

*What is the percentage of members who rated their home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse, or covering/on-call nurse services within the last six months as usually or always on time? Has this percentage remained stable or improved over the demonstration?*

The timeliness composite indicates the percentage of MLTC enrollees who reported that within the last six months the home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse/registered nurse, or covering/on-call nurse services were usually or always on time. The measure was implemented in 2013 and has increased across plan types from 2013 to 2019 (Figure 19). The multivariable regression analysis did not show a statistically significant association between the MLTC mandate and the timeliness of care providers (Figure 19).

**Figure 19. Percentage of MLTC Enrollees Who Rate Their Care Providers as Usually or Always on Time**




NOTE: The measure reflects the risk-adjusted percentage of MLTC enrollees who reported that within the last six months the home health aide/personal care aide/personal assistant, care manager/case manager, regular visiting nurse/registered nurse, or covering/on-call nurse services were usually or always on time. The outcome measure for this measure was not included on the survey in 2007 or 2011.

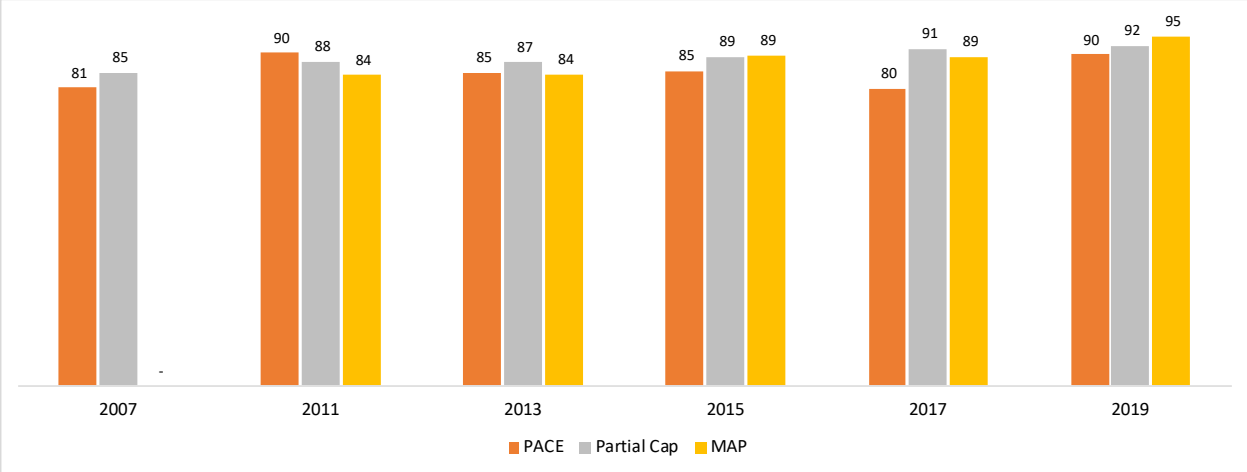
### *Goal 5, Research Question 4: Satisfaction with Service Quality*

*What is the percentage of members who rated the quality of home health aide/personal care aide/personal assistant services within the last six months as good or excellent? Has this percentage remained stable or improved over the demonstration?*

Satisfaction with home health aides for PACE plans showed an initial increase and then a dip in ratings; by 2019, satisfaction with home health aides had returned to 2011 levels (Figure 20). In contrast, Partial Capitation and MAP plan participant satisfaction increased from 2011 levels, 87.6 percent and 84 percent to 92 percent and 94.5 percent, respectively, in 2019. The

multivariable regression analysis did not show a statistically significant association between the MLTC mandate and the quality of LTSS (Figure 20).

**Figure 20. Percentage of MLTC Enrollees Who Rate Service Quality as Good or Excellent**




*Domain 1, Component 1: Managed Long-Term Care—Discussion and Conclusions*

MLTC Enrollment

The statewide MLTC enrollment increased rapidly after the mandate implementation, particularly during mid–2012 to 2014, reaching about 250,000 by 2018. The enrollment trend was dominated by New York City (Region 1), whose enrollment accounted for 76 percent of the statewide total enrollment in 2018. This is consistent with the size of New York City's population, which is over 40 percent of the state's population (calculated from the American Community Survey data using total population by county for New York). In addition, New York City had a much higher baseline enrollment rate even prior to the mandate start; this may reflect the enrollment capacity and/or a better awareness among New York City beneficiaries eligible for MLTC. By December 2018 (month 79 post mandate), New York City achieved an enrollment rate of 88 percent. Regions 2 (Nassau, Suffolk, Westchester) and 3 (Orange, Rockland) had the largest enrollment other than New York City: 62 percent and 66 percent in 2018, respectively.

Based on the descriptive results, it is not apparent that enrollment had stabilized by 2018. However, when controlling for the underlying time trend, and by identifying enrollment in excess of what was expected, we estimated that about two-thirds of the mandate's impact, a 24-percentage-point increase in enrollment rates, had materialized by month 19, and the overall trend in enrollment rates stabilized by month 19 post-mandate based on our statistical tests contrasting consecutive three-month average enrollment rates. Since month 20, the mandate's impact stabilized at about 0.2 percent per month, or 2.4 percent per year.

There was large regional variation in the mandate's impact on enrollment. Region 1 (New York City) dominated statewide trends and stabilized faster (month 19), driving the overall trend

for statewide stability by month 19. The enrollment in Regions 3 (Orange, Rockland), 5 (Columbia, Putnam, Sullivan, Ulster), and 6 (Cayuga, Herkimer, Oneida, Rensselaer) seemed to have stabilized by months 42 to 46. The mandate's impact in other regions had not stabilized by 2018. In addition, the magnitude of the mandate's impact also differs across regions. For example, Regions 2, 3, and 5 achieved a higher impact from the mandate in terms of enrollment rates by month 40 than the rest of the state, including New York City.

There are several possible explanations for this large regional variation. First, some regions may not have had long enough post-mandate horizons for enrollment to stabilize. For instance, Regions 7–13 had a horizon of 42 to 55 months post-mandate. Nonetheless, the post-mandate time required for enrollment rates to stabilize varied across regions. Regions 2 and 4 had 72 and 61 months post-mandate, respectively, but the mandate's impact continued to increase in each region, whereas enrollment rates in Regions 3, 5, and 6 stabilized by month 46. It is also possible that enrollment in regions with higher pre-mandate enrollment rates may have stabilized more quickly. Regions 1 and 3 are two such examples. A higher pre-mandate enrollment rate may also be associated with a smaller total mandate effect, at least in part because enrollment may be approaching a ceiling. New York City may be such an example. The mandate's impact there is lower than in many other regions, even though its post-mandate enrollment rate is high. Another possible explanation may lie in a region's MLTC enrollment capacity. Regions 1, 3, 5, and 6 may have leveraged the mandate better using their existing institutions and infrastructure.

We observe an increase in enrollment rate in the ten months prior to the mandate start. This trend was linear in nature and largely driven by Region 1 (New York City) and, to a lesser extent, Region 3 (Orange, Rockland). The MLTC program enrollment was largely concentrated in New York City prior to the mandate, and there may have been an anticipatory effect as MLTC plans prepared for the rollout and actively competed with each other to gain a larger market share. If we consider this anticipatory effect as part of the mandate's impact, as modeled in the sensitivity analysis, the overall impact becomes larger for Regions 1 and 3, but particularly for Region 1. It is very likely that enrollment capacity caused both the pre-mandate acceleration in enrollment and the more rapid stabilization of the mandate's impact.

There are limitations to our analysis. First, the denominator we used to calculate enrollment rates is not ideal. It is only a gross approximation of the actual eligible population. We will update this using Medicare and Medicaid dual eligible data in the final interim report. Second, we controlled for the underlying calendar time trend and consider the residual post-mandate trend as the impact of the mandate. There could be other omitted time-varying factors that coincide with the timing of the mandate's implementation, which could bias our estimates of the mandate's effect either up or down. The variation in the timing of the mandates across the state mitigates this concern but does not eliminate it.

### Patient Safety and Quality of Care

Our results show that during the study period, on average by plan type, about 87 to 93 percent of MLTC plan enrollees did not have any emergency room visits; 86 to 96 percent did not have falls requiring medical intervention; 60 to 90 percent received an influenza vaccination in the last year; 40 to 70 percent received a dental exam in the last year; and there were 3 to 5 potentially avoidable hospitalizations per 10,000 enrollee days. For the four outcomes measured in percentage points, the difference between an MLTC plan's outcome measure and the statewide average varied from –0.27 to 0.32 percentage points, whereas for potentially avoidable hospitalizations the difference varied from –3.4 to 9.3 hospitalizations per 10,000 enrollee days. Based on multivariable analyses, we found no statistically significant differences between MLTC mandatory enrollment and any of the outcomes.

The fact that we found no evidence of associations between mandated enrollment and the outcomes is particularly important given that such associations could have arisen because of changes in practice among existing MLTC plans or better management among new MLTC plans. In addition, MLTC creates financial incentives for plans. For example, to the extent that MLTC plans are responsible for health care costs not covered by Medicare, such as PACE, MAP, and FIDA plans, they have an incentive to minimize those health care events. The consequences of such incentives would have been captured by our key independent variable, the fraction of enrollees subject to the mandate. In our analysis, we applied plan-level fixed effects to control for time-invariant plan-level factors; to a large extent, this allowed us to capture a plan's underlying clinical management capabilities. But this approach did not address the time-varying plan-level factors that were not under the control of MLTC plans, such as concurrent policy or environmental changes during the mandate rollout period.

The fact that new enrollees under the mandate may differ from existing plan members who enrolled voluntarily in MLTC is another factor that may confound the association between the mandate and the outcomes. For example, if enrollees under mandatory enrollment are healthier in ways not captured by risk adjustment, then we might expect to observe an improvement in outcomes—for example, a decrease in emergency room visits or falls requiring medical intervention. Whether this is the case depends on the performance of the risk adjustment methodology employed by NYS DOH for its annual MLTC performance reports. The methodology utilizes enrollee demographics, chronic medical conditions, and physical and mental functions. If there are important unobserved factors that predict both clinical outcomes and individuals' enrollment in MLTC, the differences in outcome measures could potentially arise from those factors.

We did not find a significant association between the mandate and without emergency room visits, without falls requiring medical intervention, or potentially avoidable hospitalizations. Although these can be costly events, Partial Capitation plans do not cover medical costs, and for other plan types the costs are borne primarily by Medicare. As a result, MLTC plans may not have large financial incentives to improve the management of costly medical events. Financial

incentives associated with influenza vaccinations are mixed, with the costs of the vaccinations being offset by reductions in costs associated with influenza, many of which are also covered by Medicare. Dental services are covered by MLTC, so there may be a direct financial incentive to reduce visits, and we did find a negative association between MLTC mandatory enrollment and dental visits, but it was not statistically significant.

There are limitations to our analyses. First, we had to rely on the risk adjustment embedded in the outcome measures, and the data and risk adjustment methodology changed over time. In addition, influenza vaccinations and dental exams were not risk-adjusted. As a result, we were not able to control for risk selection that may have affected the outcomes. For example, the population of new enrollees under the mandate may have differed in ways that affect the outcomes, and those differences were not accounted for with risk adjustment.

Furthermore, there are several challenges in measuring outcomes over time. Without emergency room visits, without falls requiring medical intervention, and receiving an influenza vaccine were reported throughout our study period, but the definitions of emergency room visits and falls changed over time. These changes reflect decisions to improve the value of these measures, but they make it difficult to evaluate changes over time. In addition, annual risk adjustment may yield a fairer comparison of plans each year, but it also results in plan-level measures that are not comparable from year to year. We addressed these challenges by limiting our evaluation of changes to time periods for each outcome that are measured consistently and by focusing on each plan's performance relative to the statewide average each year.

### Consumer Satisfaction

This analysis examined customer satisfaction, or the extent to which customer's needs were fulfilled, namely accessibility of dental care and satisfaction in the overall health plan, care manager, and home health aide, and the timeliness of care provided. Overall, customer satisfaction, as measured by the outcomes of this analysis, is high among the respondents regardless of plan type across the years of the survey. While consumer satisfaction measures may have dipped slightly during the years of the implementation of the mandate, only satisfaction of quality of care manager/case manager services had a statistically significant decrease associated with the mandate.

This analysis had several limitations. First, there were many Partial Capitation plans but very few PACE and MAP plans. The small and uneven sample size likely reduced the statistical power, limiting our ability to detect the overall impact of the mandate, as well as our ability to make comparisons between plan types (PACE, MAP, and Partial Capitation). The ability to detect the mandate's impact was further compromised by the low variability in the outcome measures themselves. There was a high degree of satisfaction at the start of the survey in 2007 that remained relatively high throughout the years.

Another limitation of the analysis was the lack of comparability of data between different survey administrations. Areas of concern include changes in the survey items and inconsistent

implementation procedures. As mentioned earlier, the survey item for the measured outcome in Goal 3 changed the wording and response categories. In addition, in 2011, the survey was mailed in two waves, the first in February and the second in April, whereas in 2015, the first wave was mailed in December and the second in March. Ideally, the survey should have been administered on the same date each year to reduce possible confounders or impact on response rates.

Finally, the survey response rate fell over each of the years it was implemented, from 32.1 percent in 2011 to 23.1 percent in 2019, and thus may have increased potential bias in responses. It is also possible that satisfied MLTC enrollees were more likely to respond to the survey or, conversely, that dissatisfied enrollees were less likely to do so.

### Data Limitations

There are several limitations associated with the lack of individual-level data, as well as data for some study years. Individual-level data were not included within the RFP and not made available as part of the evaluation. To the extent that such data would have been requested and made available, it would have permitted us to be able to utilize a larger number of observations in the analysis, control for individual-level characteristics, apply risk adjustment directly to allow for comparisons over time, and, most importantly, identify outcomes for individuals by mandatory enrollment status.

In the absence of individual-level data, statistical power to detect the effects of MLTC is limited for two reasons. First, the outcome data are at the aggregate plan year level, with a limited number of observations; that is, the sample size for each analysis is small. Second, because of the limitations of existing aggregate data, a majority of available data points are for the time period after July 2015, when the mandate implementation was completed. Thus no variation in the key independent variable (the fraction of plan enrollees under the mandate) is available after July 2015. This further reduces the precision of our estimates of the impact of MLTC on outcomes.

The fact that we did not observe statistically significant results does not mean MLTC had no impact on the outcomes of interest. Because of the lack of statistical power, we are failing to reject the null hypothesis (i.e., no effect), but we are not accepting the null hypothesis either. For example, the 95 percent confidence interval of receipt of dental care includes a reduction of 19.7 percentage points, which is clearly a substantively important reduction, and the point estimate would have to be an increase of 8.6 percentage points in order to reject the null. In other words, the data generated particularly uncertain estimates.

Moreover, given that the aggregate data were risk-adjusted using a different model each year, we had to re-center outcomes in order to make relevant comparisons across years. That is, our approach was to compare how a plan's relative performance compared to all other plans changed each year. Although our approach allowed us to identify how relative plan performance is associated with mandatory enrollment, it prevented us from characterizing how overall quality

evolved over time. We were not able to control for the effect of other state initiatives on the outcomes whose variation could be captured by calendar time indicators.

Finally, to utilize the aggregate data for the causal inference, we were limited to the use of the fraction of enrollees under the mandate for each plan as the intervention variable. This involved an assumption that enrollees contributed uniformly to plan-level outcomes, which may or may not be true.

### Summary

Our results show that the MLTC mandate's effect on enrollment stabilized at month 19 after the mandate start (Table 7). The enrollment trends were dominated by Region 1 (New York City), but there is wide variation across the mandate rollout regions.

We find no evidence of increases or reductions in patient safety and quality of care among enrollees because of the MLTC mandate, as measured by without emergency room visits, without falls requiring medical intervention, potentially avoidable hospitalizations, influenza vaccinations, and dental exams.

Customer satisfaction was high across the years and across the measures, except for access to dental care. We found no evidence of increases or reductions in perceived access to dental care, satisfaction with MLTC plan, timeliness of services, or satisfaction with service quality due to the MLTC mandate. We did find, however, a statistically significant decrease in enrollees' satisfaction with their care manager associated with the MLTC mandate.

**Table 7. Summary of Evaluation Results for Domain 1, Component 1**

| Domain | Goal | Outcome | Results | |
|---|---|---|---|---|
| Domain 1, Component 1: Managed Long-Term Care (MLTC) | Goal 1: Expand access to MLTC for Medicaid enrollees in need of long-term services and supports (LTSS) | Time for the MLTC mandate's effect on enrollment to stabilize | ↑ | 19 months, stabilizing at +2.4 percentage points per year; a 37-percentage point increase in enrollment rates during the first 79 months post-mandate ($p<0.05$) |
| | Goal 2: Demonstrate stability or improvement in patient safety | Percentage without emergency room visits | — | +0.8 percentage points ($p>0.05$) |
| | | Percentage without falls requiring medical intervention | — | –1.8 percentage points ($p>0.05$) |

| Domain | Goal | Outcome | Results | |
|---|---|---|---|---|
| | Goal 3: Demonstrate stability or improvement in quality of care | Receipt of timely care | — | –0.8 percentage points (p>0.05) |
| | | Influenza vaccination | — | +0.2 percentage points (p>0.05) |
| | | Dental exam | — | –5.6 percentage points (p>0.05) |
| | Goal 4: Stabilize or reduce preventable acute hospital admissions | Potentially avoidable hospitalization | — | –1.3 hospitalizations per 10,000 enrollee days (p>0.05) |
| | Goal 5: Demonstrate stability or improvement in consumer satisfaction | Satisfaction with MLTC plans | — | –1.8 percentage points (p>0.05) |
| | | Satisfaction with care managers | ↓ | –3.1 percentage points (p<0.05) |
| | | Satisfaction with provider timeliness | — | –2.2 percentage points (p>0.05) |
| | | Satisfaction with service quality | — | –1.2 percentage points (p>0.05) |

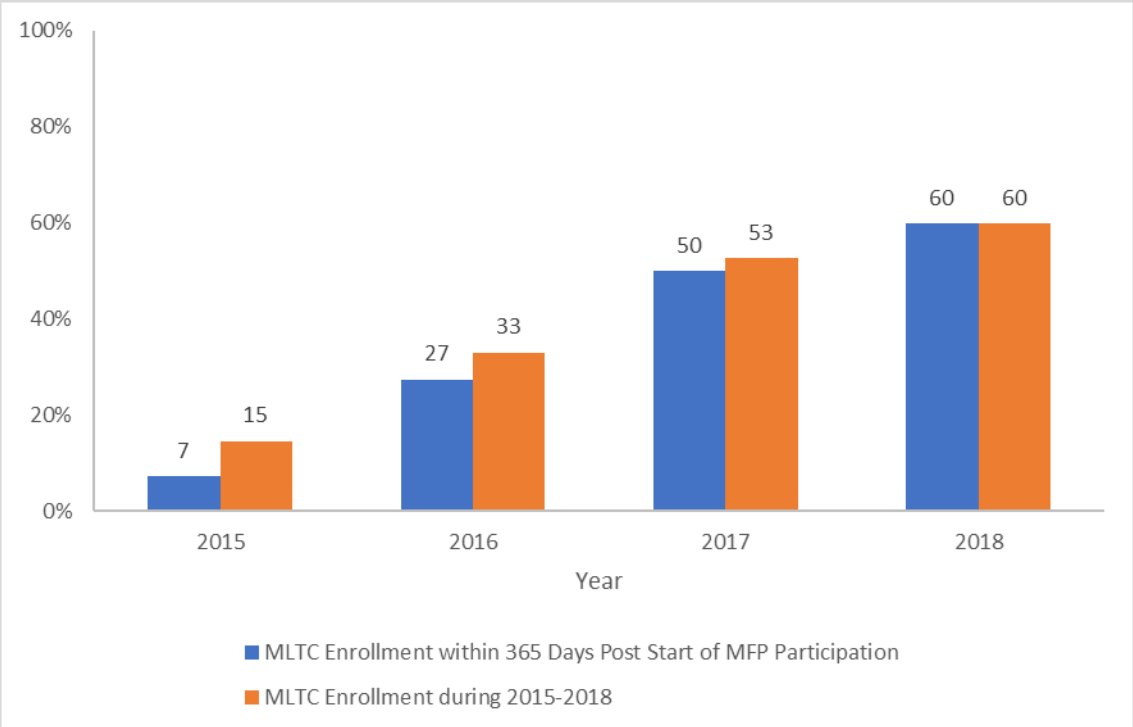
## Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings for Long-Term Services and Supports

### *Goal 1, Research Question 1: MLTC Enrollment Among MFP Participants*

*For those who transition from an institutional setting to the community, did the percentage enrolling in MLTC increase over the demonstration?*

The percentage of MFP participants who were enrolled in MLTC, by year, are presented in Figure 21. MLTC enrollment increased rapidly from 2015 to 2018, from 7 percent to 60 percent for enrollment within 365 days of MFP participation, and from 15 percent to 60 percent for enrollment anytime during the study window. For individuals newly participating in MFP during 2015–2017, we found a statistically significant trend in MLTC enrollment among those who enrolled for the first time in MLTC within 365 days post-start of MFP participation ($p<0.001$) and among those who enrolled in MLTC anytime during 2015–2018 ($p<0.001$). The sample size of MFP participants was relatively small in 2015 (220). Because some individuals who participated in MFP in 2018 may have enrolled in MLTC in the second half of 2019, for which MLTC enrollment data were not available, 2018 was excluded from the trend tests.

**Figure 21. Percentage of the MFP Population Enrolled in MLTC during 2015–2018**



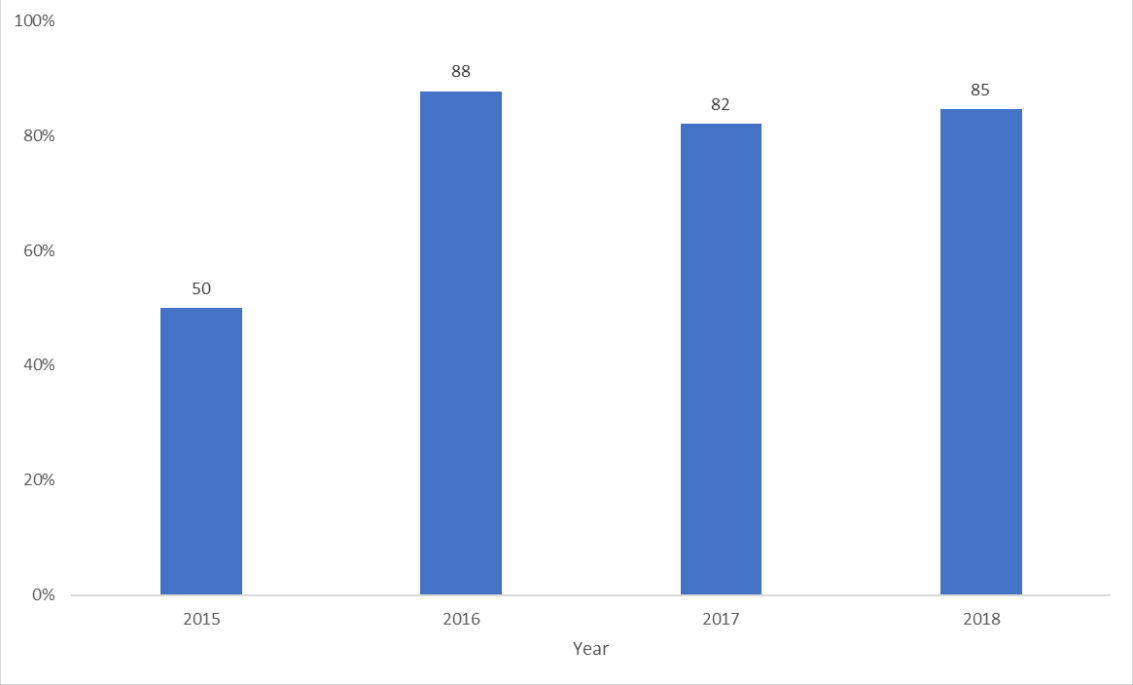

NOTE: The number of new MFP participants by year: 220 (2015), 354 (2016), 368 (2017), 478 (2018). A trend test was performed for 2015–2017 MLTC enrollment within 365 days post-start of MFP participation (Pearson's $\chi^2$ = 120.760, p = 0.0001) and MLTC enrollment during 2015–2018 (Pearson's $\chi^2$ = 89.384, p = 0.0001).

### *Goal 2 Research, Question 1: Emergency Room Visits among the HCBS Expansion Population*

*Is the percentage of the HCBS expansion population without any emergency room visits in the last 90 days stable or improving over the course of the demonstration?*

The percentage of the HCBS expansion population who did not have an emergency room visit in the last 90 days was stable at 82 percent to 88 percent in the years 2016–2018 (Figure 22). The 2015 rate was lower, at 50 percent, as was the sample size (4 non-initial assessments). We did not find a statistically significant trend in the percentage of MFP participants who did not have an emergency room visit (p=0.5892).

**Figure 22. Percentage of the HCBS Expansion Population without Any Emergency Room Visit in the Last 90 Days**




NOTE: The number of latest non-initial MLTC assessments among MFP participants for analysis by year: 4 (2015), 57 (2016), 206 (2017), 447 (2018). A trend test for the years 2015–2018 was performed for MFP participants who did not have an emergency room visit (Pearson's $\chi^2 = 0.292$, $p = 0.5892$).

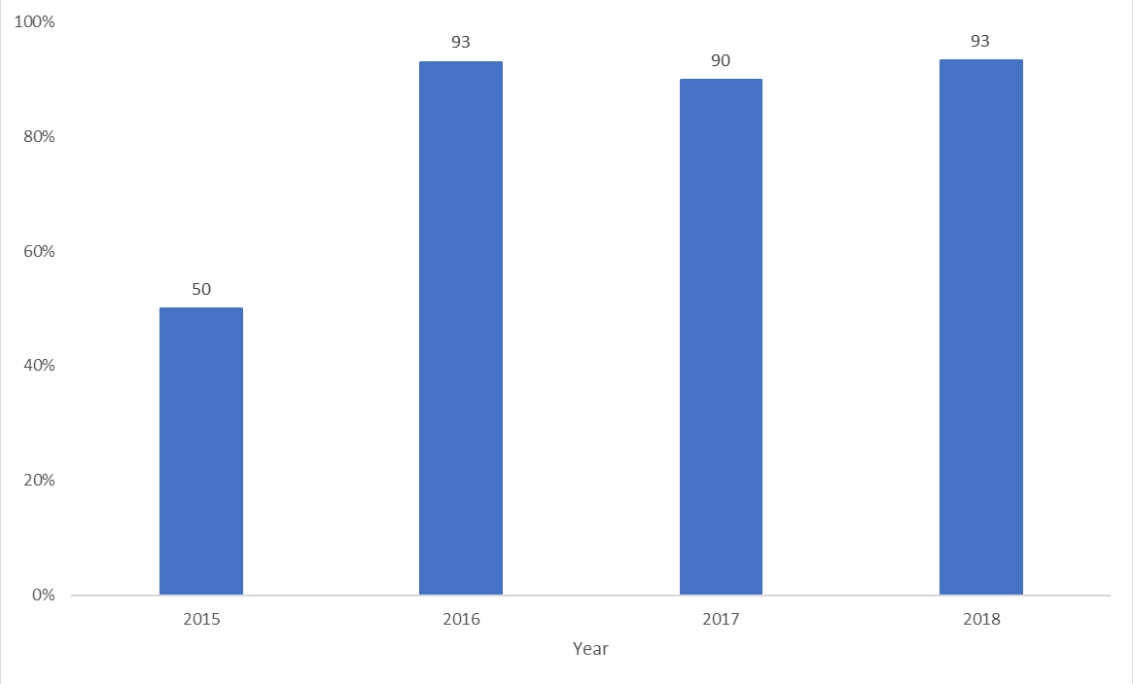
### *Goal 2, Research Question 2: Falls among the HCBS Expansion Population*

*Is the percentage of the HCBS expansion population without any falls, as defined by the department's fall measure, stable or improving over the course of the demonstration?*

The percentage of the HCBS expansion population who did not have falls requiring medical intervention or resulting in major or minor injuries in the last 90 days followed a similar pattern (Figure 23). The rates were also stable at 90 percent to 93 percent in 2016–2018, with a lower

rate of 50 percent in 2015. Although the measure definition changed from falls requiring medical intervention in the 2018 UAS-NY CHA data to falls resulting in major or minor injuries, we did not observe a significant change in the measure in 2018 compared to 2016–2017. We tested but did not find a statistically significant trend in the percentage of MLTC enrollees who did not have a fall requiring medical intervention or resulting in major or minor injuries (p=0.0777).

**Figure 23. Percentage of the HCBS Expansion Population without Any Falls Requiring Medical Intervention or Resulting in Major or Minor Injuries in the Last 90 Days**




NOTE: The number of latest non-initial MLTC assessments among MFP participants for analysis by year: 4 (2015), 57 (2016), 206 (2017), 447 (2018). A trend test for the years 2015–2018 was performed for MFP participants who did not have a fall requiring medical intervention or resulting in major or minor injuries (Pearson's $\chi^2 = 3.113$, $p = 0.0777$).

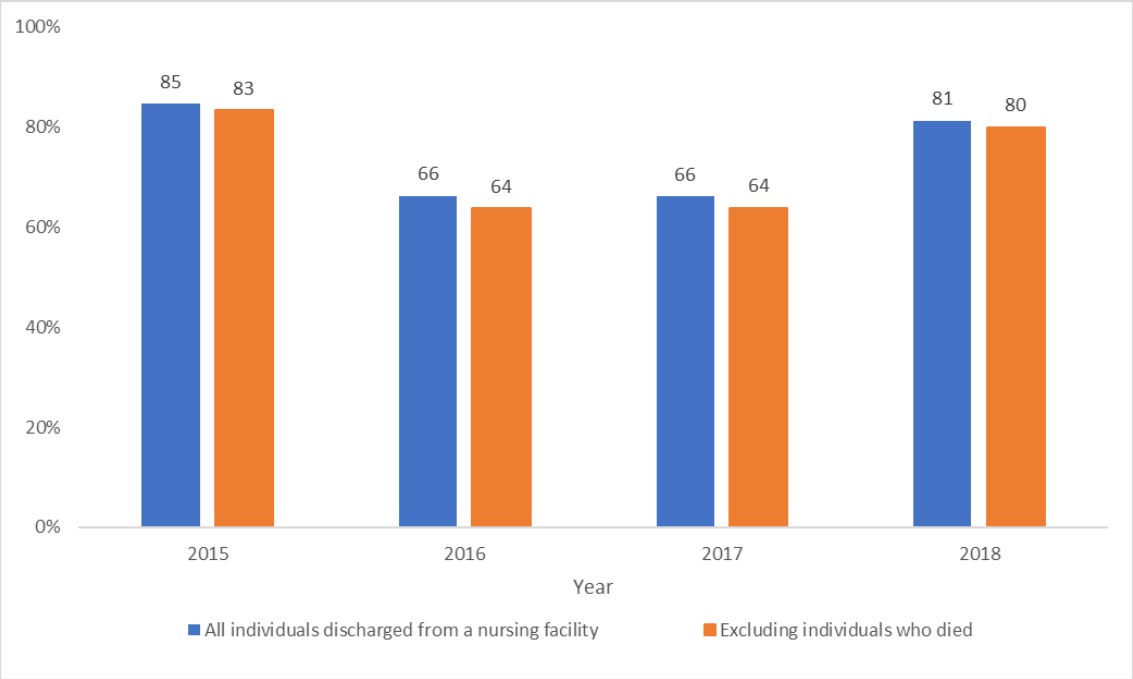
### *Goal 3 Research Question 1: Community Residence among the HCBS Expansion Population*

*For the HCBS expansion population who entered MLTC after transitioning from an institutional setting, what percentage return to the nursing home within a year of discharge, what was their average level of care need, and, for those who return within a year, how long on average did they reside in the community?*

Overall, we found that the percentage of the HCBS expansion population who remained in the community in 2015 was higher, at 85 percent, than in 2016 and 2017 (both at 66 percent), and we found another increase in 2018 (see blue bars in Figure 24). The 2015 result has a smaller denominator (13 MFP participants), and the 2018 data are not complete because individuals re-institutionalized in the second half of 2019 were not included in the data. The sensitivity analysis

excluding those who died but were not re-institutionalized showed a similar pattern. We did not find a statistically significant trend in the rates during 2015–2017 for the main analysis (p = 0.389) or for the sensitivity analysis excluding those who died but were not re-institutionalized (p=0.382). We also examined the results by including those who died but were not re-institutionalized in the denominator but not in the numerator, assuming they re-entered a nursing facility. The results are 77 percent, 59 percent, 60 percent, and 75 percent for each of the four years, respectively (data not shown, p=0.452).

**Figure 24. Percentage of the HCBS Expansion Population Who Remained in the Community for One Year Post Discharge from a Nursing Facility**



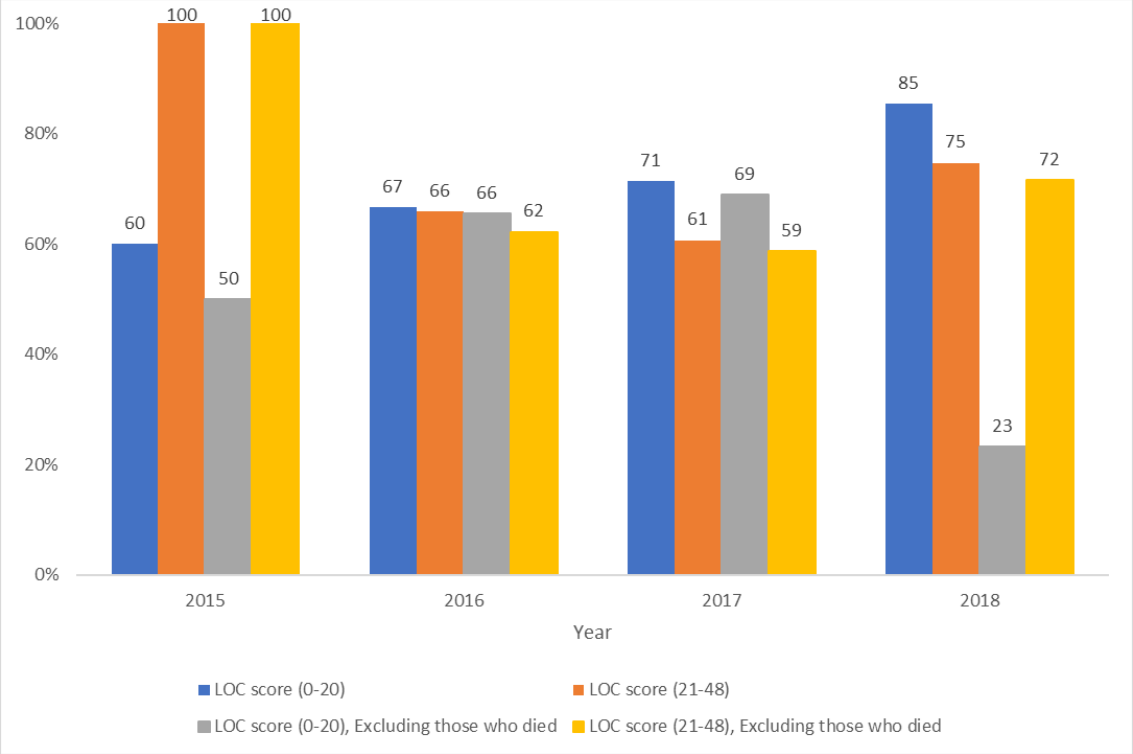

NOTE: The number of MFP participants for analysis by year: 13 (2015), 71 (2016), 124 (2017), 213 (2018), with the number of individuals who died before re-entering a nursing facility being: 1 (2015), 5 (2016), 8 (2017), 14 (2018). Trend test results for all individuals: Pearson's $\chi^2 = 0.805$, p = 0.3891; trend test results for the sensitivity analysis excluding those who died but were not re-institutionalized: Pearson's $\chi^2 = 0.765$, p = 0.3819. The year 2018 was excluded from trend analysis due to incomplete data.

Next, MFP participants who remained in the community for one year post-discharge were assessed by level of care (Figure 25). Trend tests were performed from 2015 to 2017 (2018 was excluded because of incomplete data) for all participants, as well as for the subgroup of participants excluding those who died prior to re-institutionalization.

MFP participants with a lower level of care score had a higher rate of remaining in the community during the study period, except for 2015; this is consistent in both the main analysis and the sensitivity analysis. There is large variation in the 2015 rates, which is likely due to small denominators. From 2016 to 2018, there may be an upward trend in the likelihood of remaining in the community; however, the 2018 data are incomplete, and this trend may not hold once the

data for the second half of 2019 are included. No statistically significant trends were found for each level of care category in either the main analysis or the sensitivity analysis.

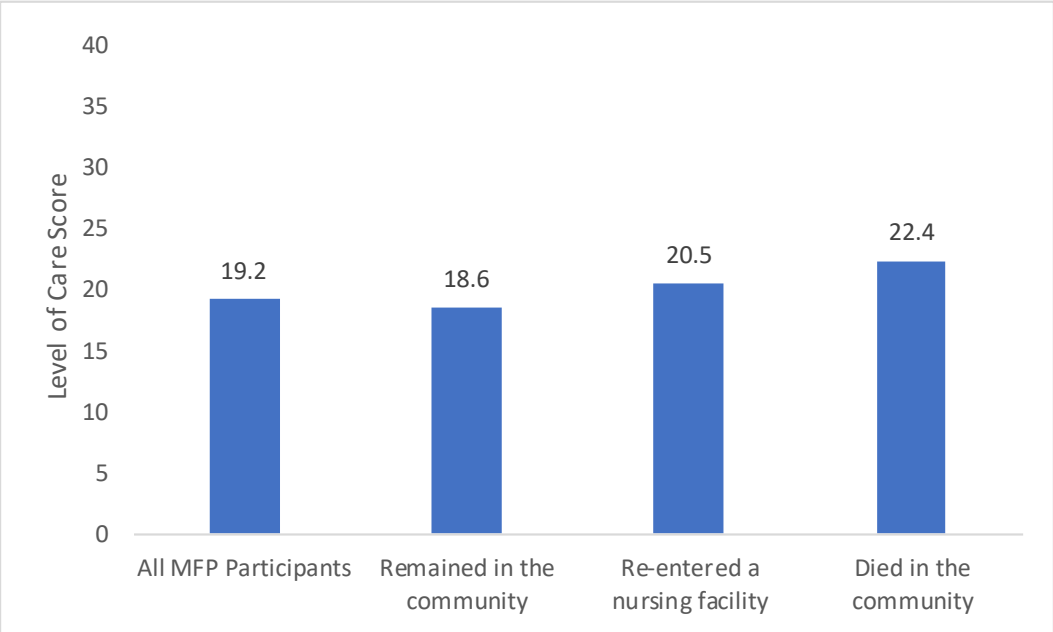
**Figure 25. Percentage of the HCBS Expansion Population Who Remained in the Community for One Year Post Discharge from a Nursing Facility, by Level of Care**




NOTE: LOC = Level of Care. The number of MFP participants for analysis by year: 13 (2015), 71 (2016), 124 (2017), 213 (2018), with the number of individuals who died before re-entering a nursing facility being: 1 (2015), 5 (2016), 8 (2017), 14 (2018). Trend tests performed for years 2015 through 2017 for LOC score 0–20 (Pearson's $\chi^2 = 0.667$, $p = 0.5117$); LOC score 21-48 (Pearson's $\chi^2 = 3.295$, $p = 0.0695$), LOC score 0–20 excluding those who died (Pearson's $\chi^2 = 0.491$, $p = 0.4836$), and LOC score 21-48 excluding those who died (Pearson's $\chi^2 = 3.174$, $p = 0.0748$).

As illustrated in Figure 26, overall, MFP participants had an average level of care score of 19.2. Participants who remained in the community for one year post-discharge from a nursing facility had the lowest average level of care score (18.6), whereas those who died but did not re-enter a nursing facility had the highest average level of care score (22.4). MFP participants who were re-institutionalized within one year post-discharge had an average level of care score between these two groups (20.5). The differences between different subpopulations are not statistically significant at the 5 percent level.

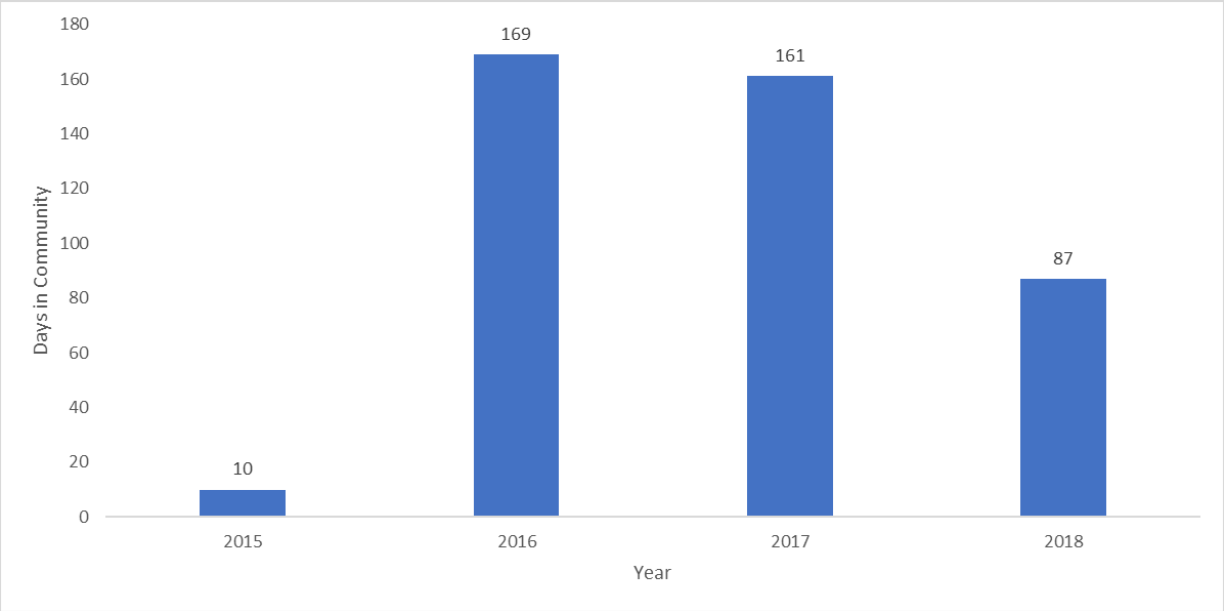
**Figure 26. Average Level of Care Score for Those Who Remained in the Community Compared to Those Who Did Not within One Year Post Discharge from a Nursing Facility**




NOTE: The number of MFP participants for analysis by group: 421 (all MFP participants), 313 (remained in the community for 365 consecutive days), 80 (re-entered a nursing facility within 365 days post discharge), 28 (died in the community). The standard deviation of level of care score is 8.9, 8.7, 8.6, and 10.6 for each of the four groups, respectively. Student t-tests were performed to compare those who remained in the community with those who re-entered a nursing facility ($t = 1.76$, $p = 0.0811$), those who remained in the community with those who died in the community ($t = 1.84$, $p = 0.0753$), and those who re-entered a nursing facility with those who died in the community ($t = 0.86$, $p = 0.3976$).

The average residency time in the community among MFP participants who were re-institutionalized was very small in 2015; there was only one participant who re-entered a nursing facility. The average residency time was similar between 2016 and 2017, at 169 and 161 days, respectively (Figure 27). The average residency time in the community was 87 days for 2018, but the data for that year were not complete. We tested and did not find a statistically significant trend in average residency time in the community for the years 2016–2017 among participants who returned to a nursing facility within one year post-discharge ($p=0.552$). The trend analysis excluded both 2015, due to sample size, and 2018, due to incomplete data.

**Figure 27. Average Residency Time in the Community for the HCBS Expansion Population Who Returned to a Nursing Facility within One Year**



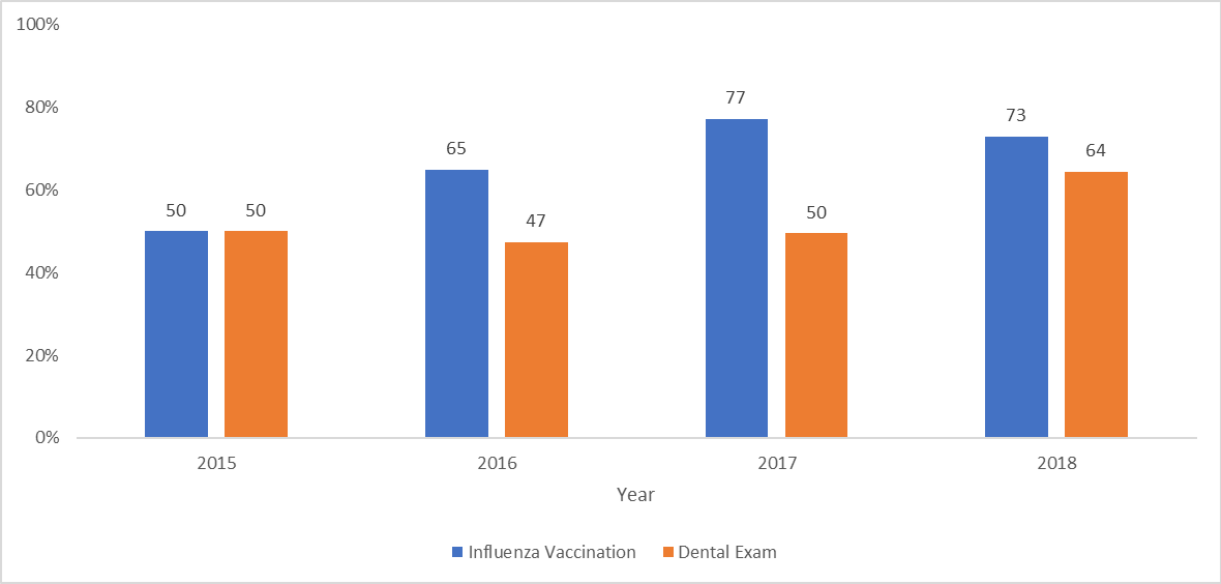

NOTE: The number of MFP participants included for analysis by year: 1 (2015), 19 (2016, standard deviation[SD] = 122 days), 34 (2017, SD = 107 days), 26 (2018, SD = 85 days). A trend test was performed for 2016–2017: Pearson's $\chi^2 = 0.354$, $p = 0.5519$. The year 2015 was excluded from the trend test due to its small sample size, and the year 2018 was excluded due to incomplete data.

### *Goal 3, Research Question 2: Preventive Services among the HCBS Expansion Population*

*Is the percentage of the HCBS expansion population accessing preventive care services, such as the flu shot and dental care, consistent or improving?*

While there was a general increase in the proportion of the HCBS expansion population who self-reported receiving an influenza vaccination in the past year, from 50 percent in 2015 to 73 percent in 2018, most of that increase occurred by 2016 (Figure 28). Overall, the trend was not statistically significant (p=0.553). However, the proportion of the HCBS expansion population who self-reported receiving a dental exam in the last year showed a statistically significant increase from 2015 to 2018, from 50 percent to 64 percent (p<0.001).

**Figure 28. Percentage of the HCBS Population Who Received an Influenza Vaccination or Dental Exam in the Last Year**




NOTE: The number of latest non-initial MLTC assessments among MFP participants for analysis by year: 4 (2015), 57 (2016), 206 (2017), 447 (2018). Trend tests for 2015–2018 were performed for influenza vaccinations (Pearson's $\chi^2 = 0.351$, $p = 0.5534$) and dental exams (Pearson's $\chi^2 = 14.083$, $p = 0.0002$).

### *Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings—Discussion and Conclusions*

Since 2015, the MFP program has assisted Medicaid beneficiaries with MLTC enrollment. The proportion of MFP participants who were enrolled in an MLTC plan within 365 days post-MFP participation increased rapidly from 7 percent in 2015 to 60 percent in 2018. The actual MLTC enrollment among the individuals newly enrolled in MFP in 2018 was likely larger than 60 percent because some participants may not have enrolled until the second half of 2019.

Of note, additional participants enrolled in MLTC even after the end of the 365 days post-MFP participation, at which point the assistance from MFP ended. This is apparent for new MFP participants in 2015: 7 percent enrolled in MLTC within 365 days, but an additional 8 percent enrolled after the end of MFP assistance. MLTC enrollment increased by 6 and 3 percentage points after 365 days among 2016 and 2017 MFP participants, respectively.

The MFP program's increasing impact on MLTC enrollment over time may have been a result of increased awareness of MLTC among both MFP transition specialists and Medicaid beneficiaries. It is conceivable that as transition specialists became more familiar with the MLTC program, they knew which individuals they should target. Similarly, individuals eligible for MLTC may have reached out to the MFP program as they became aware of its benefits.

Based on our communication with subject-matter experts on MFP and MLTC within the NYS DOH, aside from the inclusion of managed care as a qualified constituent program for MFP participation in 2015, there were no major policy changes during 2015–2018 regarding the MFP

implementation. But one relevant MLTC policy change could have played a role in the MLTC enrollment increase among MFP participants: the mandatory MLTC enrollment of new nursing home residents, which started in February 2015. From that point on, all individuals who were newly admitted to a nursing home after February 2015 had to enroll in an MLTC plan; when they were subsequently discharged, they were already in MLTC. This policy change could be associated with an increase in the proportion of MFP participants enrolled in an MLTC plan, although more evidence is needed to confirm such a hypothesis.

Overall, we did not observe a statistically significant change in patient safety measures during 2015–2018, including percentage without emergency room visits and percentage without falls that required medical intervention or resulted in major or minor injuries. The proportions of the HCBS expansion population without an emergency room visit or fall were about 85 and 90 percent, respectively, for 2016–2018, although these were lower in 2015, which could simply be due to the small number of members that year. The 2016–2018 results are consistent with our preliminary data for Domain 1, Component 1, of this 1115 Demonstration evaluation, which showed that among the general MLTC population, the proportion without an emergency room visit did not change significantly (89 percent in 2015 to 91 percent in 2018), nor did the proportion without falls (from 93 percent to 94 percent in 2015 and 2018, respectively).

The proportion of the HCBS expansion population remaining in the community seemed to be stable at about 66 percent during 2016–2017, and excluding participants who died without re-entering a nursing facility did not change the conclusions. It is possible that enrollment in MLTC is not necessarily associated with the community residence duration among individuals who transitioned from institutions to communities. Our evaluation has not addressed this, because of a lack of a comparison group and a lack of data prior to the inclusion of MLTC in MFP among this population.

When examining the results by the level of care needs, we found a non–statistically significant trend showing that a smaller percentage of MFP participants with a higher level of care needs stayed in the community compared with participants with a lower level of care needs. Conversely, when examining the level of care needs by subgroups, there was a non–statistically significant trend that MFP participants staying in the community for 365 days had the lowest level of care needs, followed by those re-entering a nursing facility and those who died without re-entering a nursing facility. But, likely due to small sample sizes, our statistical tests of these differences are not statistically significant at the 5 percent level. Compared with those with a lower level of care needs, it is not surprising that participants with a greater level of care needs are often more fragile, have a higher chance of re-entering a nursing facility, and have a higher mortality rate.

MFP participants who re-entered a nursing facility stayed on average slightly less than half a year in the community in both 2016 and 2017. The sample for 2015 MFP participants included only one observation, and the data for 2018 MFP participants were not complete. When the second half of the 2019 data are available, the number of days in the community could double,

reaching a level similar to that of 2016 and 2017. Thus, we found no evidence that the average residency time among the HCBS expansion population re-entering a nursing facility within one year post-discharge varied during the study period.

The proportion of the HCBS expansion population who reported the receipt of influenza vaccination in the last year was relatively stable at 65 percent to 73 percent during 2016–2018, whereas an increasing trend in the receipt of a dental exam was observed for the same time period, from 47 percent to 64 percent. Again, the denominator for 2015 was small, and thus the results are less reliable. The improvement in the dental exam measure may be attributed to the performance improvement project for MLTC enrollees during 2015–2018. This was a quality improvement initiative, implemented during this time period, that covered depression management, pain management, falls, advanced directives, emergency preparedness, and preventive screenings for eye, ear, and dental exams. MLTC plans had the option to choose one of the quality measures covered, but many of them selected preventive screenings for eye, ear, and dental exams. This initiative might be associated with the increased receipt of dental exams among MLTC enrollees.

There are two major limitations of our analysis. First, the results are descriptive in nature. Per the evaluation plan approved by CMS, the data were limited to state aggregated outcomes by plan, and we were therefore not able to estimate multivariable regression models to control for individual-level characteristics such as demographics and health status. Without multivariable analyses, the results we obtained may be biased by potential confounders. For example, we concluded that the proportion of the HCBS expansion population remaining in the community was similar across 2016–2017. If, hypothetically, the MFP participants in 2017 were sicker for some reason, the proportion in 2017 may be higher than what we observed after adjusting for participants' health status. Second, our data did not cover the pre-MLTC mandate period (prior to 2012) or the mandate implementation period (2012–2015). That is, we were not able to draw any conclusions regarding the association between the MLTC mandate and various outcome measures examined here. The results we observed were general time trends only, and they are limited by a small sample size in 2015 and incomplete data for 2018.

### Summary

From 2015 to 2018, the proportion of MFP participants enrolled in an MLTC plan increased rapidly, and we found no evidence of a decline in patient safety and quality of care measures (Table 8). These outcomes remained stable except for the significant increase in the proportion of the HCBS expansion population receiving a dental exam, which may be attributed to a quality improvement project with a focus on preventive screenings for eye, ear, and dental exams.

**Table 8. Summary of Evaluation Results for Domain 1, Component 2**

| Domain | Goal | Outcome | Results | |
|---|---|---|---|---|
| Domain 1, Component 2: Individuals Moved from Institutional Settings to Community Settings for LTSS | Goal 1: Improve access to MLTC for those who transitioned from an institutional setting to the community | Enrollment in MLTC within one year post discharge from an institution | ↑ | 7% in 2015; 60% in 2018 ($p<0.05$) |
| | Goal 2: Stability or improvement in patient safety | Percentage without emergency room visits | — | 50% in 2015; 85% in 2018 ($p>0.05$) |
| | | Percentage without falls requiring medical intervention or resulting in major or minor injuries | — | 50% in 2015; 93% in 2018 ($p>0.05$) |
| | Goal 3: Stability or improvement in quality of care | Percent in community within one year post discharge from an institution | — | 85% in 2015; 81% in 2018 ($p>0.05$) |
| | | Influenza vaccination | — | 50% in 2015; 73% in 2018 ($p>0.05$) |
| | | Dental exam | ↑ | 50% in 2015; 64% in 2018 ($p<0.05$) |

## Domain 2: Mainstream Medicaid Managed Care

There has been delay in completing the tasks under Domain 2, Goal 2: 12-month continuous eligibility. We have obtained access to all the data needed to answer the research questions except for health care utilization and cost data, and medical diagnoses required to answer Research Question 5. We are currently in the process of cleaning the data and constructing an analytic file. Domain 2 results will be presented in the final interim evaluation report, a complete draft of which is expected to be delivered in spring 2021.

The delay is mostly due to our inability to access the data. From March 2020 to date, the COVID-19 pandemic in NYS has consumed considerable time, attention, and resources at NYS DOH. As a result, there has been a delay in getting access to relevant data sources to complete the analysis on timelines proposed prior to the COVID-19 pandemic. Working with NYS DOH, we are continuing to make progress toward data sharing, analysis, and interpretation of all the remaining research questions. A proposed timeline to accomplish the remaining data access and analysis tasks is presented below.

| Proposed Timeline | Remaining Tasks |
|---|---|
| November 2020 | Complete data access |
| December 2020 | Data processing |
| January 2021 | Data analysis |
| February 2021 | Draft report to NYS DOH |
| March 2021 | Quality assurance |
| April 2021 | Final report to CMS |

# 5. Policy Implications

The broad goals of the Medicaid Section 1115 Waiver are to enroll a majority of Medicaid beneficiaries into managed care, increase access and service quality, and expand coverage to more low-income New Yorkers. Similarly, the MLTC program aims to increase managed care enrollment among individuals eligible for LTSS and improve patient safety and quality of care. Given the rapid increases in MLTC enrollment, there might be concerns over patient safety and quality of care, and this interim evaluation intends to shed some light on relevant questions. In this chapter, we discuss our findings on enrollment, patient safety, and quality of care and their implications for the overall MLTC population and for those who were transitioned from institutions to the community.

## MLTC Enrollment

The MLTC mandate increased enrollment with the program rapidly and dramatically. Within 20 months of the implementation of the mandate, its impact on statewide enrollment stabilized at a growth rate of about 0.2 percent per month, or 2.4 percent per year. Increases in enrollment and the time to enrollment stabilization differed across regions, however, suggesting that idiosyncratic factors may have affected implementation across the state. New York City, for which the mandate was implemented first, drove the results. Enrollment increases in each of the other regions occurred more slowly, which could be due to lower pre-mandate enrollment rates in these regions or differences in enrollment capacity across the state.

The very large and rapid increases in enrollment, particularly in New York City, show that the mandate was able to substantially expand MLTC. These large increases in enrollment could have stressed existing or new MLTC plans, raising concerns about the quality of services provided following the mandate. These concerns highlight the importance of the remaining components of the evaluation. Nevertheless, this evaluation found that mandating enrollment in MLTC successfully scaled up the MLTC program to include a large share of the potentially eligible population.

## Patient Safety and Quality of Care

Policymakers may have concerns over patient safety and quality of care given the large increases in MLTC enrollment. First, as mentioned above, it could be difficult for MLTC plans to manage the increased number of enrollees and ensure the quality of LTSS. Second, there was a change in the financial incentives as individuals transitioned from FFS to MLTC for LTSS. For example, plans have incentives to reduce the quality of care covered under MLTC, such as the receipt of dental services. Third, there might be spillover effects on medical utilization, such as

emergency room visits, medical interventions for falls, and potentially avoidable hospitalizations: Better management of LTSS may improve safety (e.g., reductions in falls) and health outcomes (e.g., fewer avoidable hospitalizations), but, among MLTC plans that are responsible for health care costs not covered by Medicare (e.g., PACE, MAP, and FIDA plans), there may be an incentive to reduce access to medical care services.

However, our examination of patient safety (without emergency room visits and without falls) and quality of care (influenza vaccinations, dental exams, and potentially avoidable hospitalizations) found no evidence of significant changes in these key measures. Such results may be affected by the annual public reporting of patient safety and quality of care measures by NYS DOH. For branding and reputation reasons—MLTC plans have to compete for enrollees—MLTC plans may want to ensure that their publicly reported measures look good.

The evidence from this evaluation, however, is weakened by important data limitations, which reduced statistical power and precluded stronger designs. For example, risk-adjusted outcomes data aggregated to the plan level by mandated enrollment status would have allowed a direct comparison of outcomes for those who enrolled via the mandate and those who voluntarily enrolled. Our models identified how risk-adjusted outcomes data aggregated to the statewide plan level varied by the percentage of the plan's enrollment that was mandated. Because of the importance of patient safety and quality of care, stronger empirical designs should be considered for future evaluations.

## Consumer Satisfaction

Changes in the marketplace resulting from the large increases in MLTC enrollment, including the consequences of altered financial incentives, as well as additional administrative burdens for the plans or for consumers, raise concerns about consumers' ability to obtain timely care and their satisfaction with MLTC plans, case managers, and care providers. Again, the same factors affecting patient safety and quality of care discussed above, including public reporting, can apply to consumer satisfaction as well. Overall, satisfaction measures remained high with MLTC, with little evidence of decline. Only satisfaction with case managers fell statistically significantly, and although each of the other measures declined, none were substantively or statistically significant. Thus, results indicate that MLTC plans were able to accommodate the large increases in enrollment without noticeably compromising consumer satisfaction with care. As above, statistical power and causal inference were limited by data availability for the evaluation. Nevertheless, this evaluation found very limited evidence that the large increase in MLTC due to the implementation of mandatory MLTC enrollment resulted in reductions in patient safety, quality of care, or consumer satisfaction with care.

## MLTC for the HCBS Expansion Population

The HCBS expansion population is a subset of MLTC enrollees who were transitioned from institutional to community settings. Because institutional care is often much more expensive than community-based care, this is an important population to examine, especially if the transition to the community can be facilitated by programs such as MFP. Concerns are legitimate over who should be eligible for transition, and whether patient safety and quality of care are affected after transition. In addition, enrollment in MLTC plans after transition adds an additional layer of complexity.

This evaluation only examined the trends among this HCBS expansion population after the policies were implemented and without a comparison group; therefore, our results are only descriptive in nature, and there are several important questions that remain unanswered. There were no significant changes in patient safety measures (without emergency room visits or without falls requiring medical intervention or resulting in major or minor injuries), and a significant majority or more (65–85 percent) of the HCBS expansion population remained in the community within one year post-discharge. Although we are unable to compare these results with those from an appropriate control group, the fact that residents were able to remain in the community for more than five months during 2016 and 2017, for which data were complete, is encouraging. Interestingly, there was a statistically significant increasing trend in receipt of dental exams, which might be a consequence of the performance improvement project for MLTC enrollees during the study period. Questions remain, however, about whether MLTC has affected patient safety and quality of care among this subpopulation of MLTC enrollees; whether such an effect differs from that in the overall MLTC population; the extent to which MFP has played a role in the results we observed; whether the combination of MFP and MLTC improved the efficiency in delivering LTSS; and how the performance improvement project interacted with MLTC.

## Policy Implications

An overarching question is whether the Medicaid Section 1115 Waiver Demonstration, specifically the mandatory MLTC enrollment, has achieved its three goals of broadening access, increasing quality, and expanding coverage to more low-income New Yorkers. This interim evaluation assessed the first two goals. We observed a large and rapid increase in MLTC enrollment during 2012–2018, with about two-thirds of the mandate's effect realized in the first 19 months post-mandate, but we did not find evidence of a decline in patient safety, quality of care, and consumer satisfaction. From a policymaker's perspective, increasing access without compromising care quality is certainly a win.

A further question is whether the MLTC program has improved efficiencies in spending. Although this third goal is not covered in this interim evaluation, this is an important question to policymakers. It is plausible that MLTC generates efficiencies in spending. Because MLTC

plans are paid on a capitated basis, they are incentivized to keep cost down. In particular, individuals newly admitted to nursing homes were required to enroll in MLTC during 2015–2018. MLTC plans would strive to keep nursing home eligible individuals in the community since nursing home care costs much more than HCBS does. If MLTC were more efficient in spending, the state would have more resources to expand coverage and access.

One possible unintended consequence of managed care is decreased quality of care, and the disclosure of quality measures could be one way to address the concern. In fact, the state publishes annual MLTC reports. Another approach is to utilize quality assurance programs. The performance improvement project is such an example. Every MLTC plan has to participate and work on one of the quality measures selected by NYS DOH. Public reporting of quality of care leverages the market mechanism to ensure the level of quality because plans have to compete for consumers; whether it can improve or stabilize quality of care hinges on the assumption that consumers need quality information to choose a plan and know where to find such information. In contrast, quality assurance programs utilize administrative processes, the success of which depends on their implementation. Of course, both public reporting of care quality and quality assurance programs could increase MLTC plans' operating cost. It is unclear to what extent public reporting of quality and quality assurance programs have affected patient safety and quality of care. Future evaluations may examine this question and give a definitive answer.

## Summary

Our analyses suggest that the MLTC program under the demonstration has achieved its goal of increasing access to LTSS via MLTC, as illustrated by the rapid expansion of MLTC across the state from 2012–2018. There is little evidence suggesting that the rapid expansion has led to a significant change in patient safety, as measured by without emergency room visits and without falls requiring medical interventions or resulting in major or minor injuries, and quality of care, as measured by timeliness of care access, preventive screenings, potentially avoidable hospitalizations, and consumer satisfaction. It is important to note, however, that the evidence from this evaluation's Domain 1 objectives is weakened by important data limitations, which reduced statistical power to detect the impacts of the MLTC mandate on outcomes.

In brief, the state has achieved the demonstration's first goal—expanding access. We did not find evidence to support the second goal—improving quality of care—but increasing access without compromising quality of care is a success in its own right. Questions remain about whether the MLTC mandate has achieved the third goal of the demonstration—generating efficiencies in spending—and the extent to which public reporting and quality assurance programs have affected quality of care. Future evaluations may be conducted to answer these questions to guide state policies.

# 6. Interactions with Other State Initiatives

## Other State Initiatives

### *The Performance Improvement Project for MLTC Plans*

The Quality Strategy for the New York State MMC program is a requirement of New York State's 1115 Waiver to ensure the quality of care of Medicaid managed care plans (NYS DOH, 2018). As part of the Quality Strategy Program, starting in 2015, each year, all MLTC plans are required to participate in the Performance Improvement Project (PIP). Plans can choose one of the approved PIP topics, work with an external quality review organization as well as NYS DOH, develop and conduct an intervention to improve the quality of care on the chosen topic, collect data, and submit a final report. PIP topics include both clinical and non-clinical areas. For example, the 2015–2016 PIP topics included depression management, pain management, falls, advanced directives, emergency preparedness, and preventive screenings such as eye, ear, and dental exams. Influenza and pneumonia immunizations, emergency room visit and hospitalization reduction, and diabetic care were added to 2017–2018 PIP topics, but pain management and emergency preparedness were dropped.

### *The Federal Money Follows the Person Rebalancing Demonstration Program*

In 2007, the federal Money Follows the Person Demonstration grants, authorized first by the 2005 Deficit Reduction Act and then by the 2010 Affordable Care Act, were secured by the state to shift LTSS delivery from institutional services to HCBS. This program helps Medicaid beneficiaries transition from institutions to communities by providing information about options for living in the community, identifying services and supports available in the community, and checking in with beneficiaries on a regular basis after the transition. See more details in Chapter 2 of this interim report.

### *The Long-Term Home Health Care Program*

The Long-Term Home Health Care Program is a 1915(c) waiver to provide HCBS to individuals who would otherwise stay in a nursing facility (NYS DOH, 2012a). The goal was to allow eligible individuals to stay in the community, prevent institutionalizations, and avoid costly medical events. The waiver was initially approved by CMS in 1983 and needed to be renewed every five years. The most recent renewal required new policies and procedures in place to improve care planning, participant choice and satisfaction, and quality of care, and to provide case management by registered nurses.

To qualify for the program, individuals were required to be eligible for Medicaid, need a nursing facility level of care, and obtain physician approval that they would be able to remain at home medically. The program was terminated in 2013, and all non–dually eligible participants in the program were required to be transitioned to a mainstream MMC or an MLTC plan if available (NYS DOH, 2013b). The dually eligible participants who were 21 years or older and needed LTSS for more than 120 days were required to join an MLTC plan.

### *Other HCBS-Related Initiatives*

There are several other HCBS-related state initiatives, including the Nursing Home Transition and Diversion Medicaid Waiver, the Traumatic Brain Injury Waiver, the Office for People with Developmental Disabilities Comprehensive Waiver, and the Community First Choice Option. The first three initiatives are 1915(c) waivers. The Nursing Home Transition and Diversion Medicaid Waiver provides HCBS services, including community transitional services, moving assistance, and home-delivered meals, to individuals 65 years and older or those age 18–64 with physical disabilities; the goal is to help beneficiaries transition to and stay in the community or avoid institutional services (diversion) (NYS DOH, 2008). The Traumatic Brain Injury Waiver provides HCBS to help individuals, age 18–64, upon application, with a traumatic brain injury transition from institutional care or stay in the community (NYS DOH, 2009). The Office for People with Developmental Disabilities Comprehensive Waiver provides community habilitation, live-in caregiving, and other supports to individuals with autism, intellectual disabilities, or developmental disabilities (NYS DOH, 2020c). However, the populations covered under these 1915(c) waivers are excluded from MLTC.

The Community First Choice Option was authorized by the Affordable Care Act and provides HCBS services to individuals eligible for the state plan, such as assistance with activities of daily living, improving and maintaining individual skills to accomplish activities of daily living, and care management (Centers for Medicare and Medicaid Services, 2015). Participants must need an institutional level of care and be eligible for HCBS under the state plan. Participants are not excluded from receiving services from other HCBS programs, but they should not receive duplicative services. So far, New York State has implemented only part of the waiver.[15]

### *Initiatives That May Affect Patient Safety, Quality of Care, and Consumer Satisfaction*

There are initiatives under the Affordable Care Act or the Medicare Access and CHIP Reauthorization Act that have likely affected patient safety and quality of care among individuals enrolled in MLTC, such as provisions that incentivize providers or insurers to improve quality of care. In particular, the state launched the Delivery System Reform and Incentive Payment Initiative, authorized by CMS as part of the state's Medicaid Section 1115 Waiver in 2014

[15] Based on our communication with NYS DOH as of October 23, 2020.

(Weller et al., 2019). The initiative aimed to invest $6.4 billion to reduce avoidable hospital use by 25 percent during 2014–2019. The initiative uses incentive payments to promote delivery system transformation and improve clinical quality of care and population health.

## Interactions with Other State Initiatives

All MLTC plans are required to participate in the PIP initiative, and these plans conduct various interventions to improve their operation through improving care coordination, increasing the utilization of assessment and home visits, and educating care managers (NYS DOH, 2018). These interventions could potentially affect the outcomes of interest in this evaluation. For example, during 2017–2018, according to our communication with NYS DOH, 6 (16 percent), 8 (22 percent), and 9 (24 percent) out of 37 plans selected falls, preventive screenings (eye, ear, and dental exams), and emergency room visit and hospitalization reduction, respectively. In other words, the PIP initiative could contribute to the data we observed. A visual inspection of the descriptive figures in Domain 1 does not indicate a significant trend in the improvement of outcome measures, except the dental exam among the HCBS expansion population, and neither do our regression results.

The MFP program provides assistance to individuals transitioning from an institution to the community and helps eligible individuals enroll in an MLTC plan or other qualified constituent programs. In this regard, the MFP program could increase MLTC enrollment. However, given the relatively small number of beneficiaries served (3,259 during 2009–2020)[16] and the large MLTC enrollment (245,973 as of 2018), the overall impact on MLTC might not be significant.

Since the MLTC mandate implementation started in September 2012—and the Long-Term Home Health Care Program was terminated in 2013, and all dually eligible participants in the program were required to transition to MLTC—we do not expect it to have affected the data we observed, except that MLTC enrollment increased during the transition period. Similarly, other 1915(c) waivers are unlikely to affect MLTC because the populations served do not overlap with that of the MLTC program. The Community First Choice Option initiative is unlikely to have affected MLTC because it has been implemented partially.[17]

Finally, the value-based care initiatives under the Affordable Care Act, the Medicare Access and CHIP Reauthorization Act, and the Delivery System Reform and Incentive Payment Initiative could have impacted outcomes related to patient safety and quality of care. For example, emergency room visits, potentially avoidable hospitalizations, and influenza vaccination could be part of value-based payment initiatives, although the impact of these initiatives on outcomes among the MLTC population is difficult to quantify. Given the MLTC data limitations, we were not able to tease out the effect of these initiatives in our estimates.

[16] Based on the unpublished materials provided by NYS DOH in June 2020.

[17] Based on our communication with NYS DOH in October 2020.

# Appendix

## Data Sources

| Data Source | Description |
|---|---|
| MLTC enrollment data | The data contain 2010–2018 MLTC enrollment by county, by month, and by plan name and plan type.[18] |
| American Community Survey population estimates | The American Community Survey provides 5-year rolling average population estimates for 2010–2018. To construct the denominator for the MLTC enrollment analysis, we used the population aged 65 and older living below 100% of the federal poverty level generated from the 5-year pooled files.[19] |
| Medicaid Data Warehouse[20] | This data set includes Medicaid eligibility data, managed care enrollment, and encounter and payment data. In addition, it includes Clinical Risk Group that reflects an individual's clinical risk. |
| Minimum Data Set (MDS 3.0) | MDS 3.0 is a federally required standardized, comprehensive assessment for all residents of long-term care facilities. It includes demographic information, as well as measures of health status and functional capability. |
| MLTC satisfaction data | In 2007, NYS DOH, in consultation with the MLTC plans, developed a satisfaction survey of MLTC enrollees. The survey was field tested and is now administered by NYS DOH's external quality review organization, Island Peer Review Organization. NYS DOH sponsors the biennial MLTC satisfaction survey, which contains three sections: health plan satisfaction; satisfaction with select providers and services, including timeliness of care and access; and self-reported demographic information. |
| Money Follows the Person (MFP) master data | In January 2007, CMS approved New York´s application to participate in the MFP Rebalancing Demonstration Program. The MFP Demonstration, authorized under the Deficit Reduction Act and extended through the Affordable Care Act, involves transitioning eligible individuals from long-term institutions, such as nursing facilities and intermediate care facilities, into qualified community-based settings. |

[18] 2009–2011 files: NYS DOH, 2013a. 2012–2018 enrollment files: NYS DOH, 2020b.

[19] U.S. Census Bureau, 2019.

[20] Descriptions are from the RFP for this work (NYS DOH, 2019a) Redesign Team, Section 1115 Demonstration.

| Data Source | Description |
|---|---|
| Semi-Annual Assessment of Members (SAAM)[21] | The MLTC plans were required to collect and report to the NYS DOH information on enrollees' levels of functional and cognitive impairment, behaviors, and clinical diagnoses. SAAM is a modified version of the Federal (Medicare) Outcome and Assessment Information Set (OASIS-B) and was utilized from 2005 to 2013. This information was collected at enrollment and then semi-annually thereafter or following any significant event. Effective October 1, 2013, the UAS-NY CHA replaced the SAAM. |
| Statewide Planning and Research Cooperative System (SPARCS) | SPARCS is an all-payer hospital database in NYS. UAS-NY records can be matched to SPARCS data. |
| Uniform Assessment System for New York (UAS-NY) Community Health Assessment Data (CHA) | MLTC plans are required to collect and report to NYS DOH information on enrollees' levels of functional and cognitive impairment, behaviors, and clinical diagnoses. The UAS-NY CAH is based on the InterRAI suite of assessment instruments. It is administered to MLTC enrollees in both facilities and in the community. This information is collected at enrollment and then semi-annually thereafter. |

## Regression Methods

### *Domain 1, Component 1, Goal 1: MLTC Enrollment*

For the regression analysis of the MLTC enrollment, we specified the following model. Let $Y_{jt}$ denote the enrollment for county $j$ in month $t$, where

$$Y_{jt} = \alpha_j I_j + q(t;\beta) + S(s;\gamma) \qquad \text{Equation (1)}$$

In the above equation, $Y_{jt}$ is the MLTC enrollment rate in region $j$ in month $t$; $I$ is a vector of indicator variables that identify regions, and the parameters $\alpha$ are the region-level fixed effects estimates; $q(t;\beta)$ is a flexible function of calendar time ($t$) and parameters ($\beta$). In our specification, calendar time was specified in months, which is a natural choice to delineate non-parametric trends given the nature of our data. $S(s;\gamma)$ is a function of time in months since MLTC enrollment became mandatory ($s$) and parameters ($\gamma$), allowing us to characterize the transition period from implementation until the policy's full effect (or steady state) is achieved. Note that the time at which MLTC became mandatory varied across the state, so $s$ and $t$ are not linearly dependent and the effects of each can be identified. For example, if $t$ is specified in months and the mandate became effective in a region in $t = 4$, then $s = 1$ in month 4 for that region, $s = 2$ in month 5, and so on. Note that indicators for mandatory regions vs. non-mandatory regions and for the post-mandate time period are not needed in Equation (1), because they are absorbed in $I$ and $S(s;\gamma)$, respectively. The parameter vector $\gamma$ characterizes the difference-in-differences estimate of the mandate's effect on the MLTC enrollment in $s$. By

[21] Description adapted from the NYS DOH webpages on MLTC Policy 13.09 (NYS DOH, 2019c) and 13.09(a) (NYS DOH, 2019d).

specifying $S(s;\gamma)$ as a flexible function of *s*, $\gamma$ can characterize the policy effect smoothly over time since implementation, allowing us to derive the length of time it took (on average) for the enrollment to stabilize.

### *Domain 1, Component 1, Goal 2–5: Patient Safety, Quality of Care, and Consumer Satisfaction Among the MLTC Population*

The statistical model for the analysis of patient safety, quality of care, and consumer satisfaction was specified as

$$Y_{jt} = \beta_M M_{jt} + \gamma_j + \epsilon_{jt} \qquad \text{Equation (2)}$$

where $Y_{jt}$ is the difference between a risk-adjusted outcome for plan *j* in time-period *t* and the statewide average outcome across all plans in time-period *t*; $M_{jt}$ is a measure of the fraction of a plan's total enrollment that is subject to mandatory enrollment in the six months prior to *t*; $\gamma_j$ is a fixed effect for plan *j;* and $\varepsilon_{jt}$ is an error term.

Because $Y_{jt}$, was constructed as the difference between the statewide average score across plans and a plan's score for each outcome and for each year, the mean of $Y_{jt}$ across plans in each year is zero by construction. Thus a meaningful time-effect cannot be identified in any comparisons of $Y_{jt}$ over time. In addition, we did not use analytic weights based on the plan size in terms of the number of enrollees. We aimed to examine how the variation in the fraction of enrollees under the mandate is associated with outcomes. Most of the enrollees are in the New York City region and plans in the region are large, so using analytic weights that account for the number of enrollees in each plan would lead to the dominance of New York City plans. Instead, the same weight for each of the observations should be used to allow the variation in the fraction of enrollment under the mandate in order to identify the mandate's effect on outcomes. One concern of not using analytic weights may be heteroskedasticity in the error term, which could result in incorrect standard error estimates. To resolve this concern, we estimated Huber-White standard errors, clustered at the plan level (Huber, 1964).

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