

## FIRST EVALUATION REPORT

# Evaluation of the Vermont All-Payer Accountable Care Organization Model

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PRESENTED TO:  
Franklin Hendrick  
Center for Medicare & Medicaid  
Innovation  
Centers for Medicare & Medicaid  
Services  
7500 Security Boulevard  
Baltimore, MD 21244

PRESENTED BY:  
Sai Loganathan  
Project Director  
NORC at the University of Chicago  
4350 East-West Hwy, Suite 800  
Bethesda, MD 20814  
301-634-9488

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## Contributors

This report reflects the contributions of the entire VTAPM Evaluation Team, including the following individuals:

### NORC at the University of Chicago

Brittany Branand  
Devi Chelluri  
Camille Cooley  
Erin Ewald  
Alexandra Gates  
Wen Hu  
Sai Loganathan  
Catherine Lamoreaux  
Kristina Hanson Lowell  
Jennifer Norris  
Shriram Parashuram  
Rebecca Freeman-Slade Rasky  
Christina Rotondo  
Jared Sawyer  
Rachel Friedman Singer  
Jenna Sirkin  
Lynne Page Snyder  
Karen Swietek

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## Executive Summary

### Key Takeaways

	<ul style="list-style-type: none"> <li>■ The Vermont All-Payer Accountable Care Organization Model (VTAPM) agreement lays out financial targets and benchmarks designed to bring health-care spending in line with Vermont’s overall economic growth and to achieve population health goals.</li> </ul>
	<ul style="list-style-type: none"> <li>■ The Model is designed to align payers, including all of Vermont’s public and commercial insurers, by shifting some financial risk for patient care to hospitals through participation in a risk-bearing accountable care organization (ACO).</li> </ul>
	<ul style="list-style-type: none"> <li>■ In PY2 (2019), only 8 of the 15 hospitals in the OneCare provider network participated in all of the VTAPM’s ACO payer initiatives (Medicare, Medicaid, and commercial).</li> </ul>
	<ul style="list-style-type: none"> <li>■ Stakeholders agree that the VTAPM provides an important, unifying forum for providers, payers, and the state to engage in meaningful discussions about health-care reform and set goals.</li> </ul>
	<ul style="list-style-type: none"> <li>■ The VTAPM Medicare ACO initiative has seen favorable impacts, including statistically significant gross spending reductions in total Medicare Parts A &amp; B spending over 2018 and 2019, significant decreases in acute care stays and days in 2019, and significant decreases in specialty evaluation and management (E&amp;M) visits in 2019. Additionally, statewide, there were significantly fewer beneficiaries with unplanned 30-day readmissions.</li> </ul>

The Centers for Medicare & Medicaid Services (CMS), through the Center for Medicare & Medicaid Innovation (CMMI), designed the Vermont All-Payer ACO Model (“VTAPM” or the “Model”) to test whether scaling an ACO model across all major payers in the state would incentivize broad care delivery transformation, and ultimately reduce statewide spending and improve population health outcomes.<sup>1</sup> The VTAPM builds on nearly two decades of payment and delivery system reform initiatives, including Vermont’s Global Commitment to Health Section 1115 waiver, the Blueprint for Health, and a multi-payer ACO Shared Savings Program (SSP) pilot under Vermont’s State Innovation Models (SIM) Testing Grant. The VTAPM launched in 2017 (Performance Year [PY0]) with the Medicaid Next Generation ACO pilot, which represented Medicaid’s participation in the All-Payer ACO Model. The Model expanded in PY1 (2018) to include Medicare and commercial beneficiaries, aligning with some of the requirements and payment arrangements used in the Medicare Next Generation ACO Model.<sup>2,3</sup>

NORC at the University of Chicago is conducting an independent evaluation of the VTAPM to assess the implementation and impact of the Model. Findings on implementation are based on thematic analysis of semi-structured interviews with state officials, OneCare leaders, Blueprint

project managers in each of the state’s health service areas (HSAs),<sup>a</sup> and representatives from provider organizations conducted during an in-person site visit in June 2019 and a series of virtual interviews conducted between June and September 2020. Findings on Model participation and enrollment scale are based on descriptive analyses of program participation data, Medicare fee-for-service (FFS) claims, and Medicare provider enrollment data. To assess impacts on Medicare spending, utilization, and quality of care, we used a quasi-experimental difference-in-differences (DID) impact analysis design. Claims-based outcomes in this report are limited to FFS Medicare beneficiaries and include findings from PY1 (2018) and PY2 (2019). We present findings for ACO-attributed beneficiaries and for the statewide population in order to reflect the VTAPM’s accountability for outcomes at both the ACO and state levels.

## Design of the Vermont All-Payer ACO Model

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The VTAPM aims to bring health-care spending in line with Vermont’s overall economic growth. Under the VTAPM, CMS and the state Medicaid agency provide Vermont flexibility in designing a state-specific, all-payer ACO initiative. In exchange, the state is accountable for meeting financial, enrollment scale, and population health targets designed to curb health-care spending growth and to encourage participating providers to work together in achieving population health goals.<sup>4</sup> The Model’s scale targets—attributing a minimum percentage of the Medicare, Medicaid, and commercial populations to the all-payer ACO initiative in each Model PY—are designed to encourage broad payer, provider, and practitioner participation across the state. Setting targets to increase the Model’s scale and participation aims to encourage investments in care delivery redesign, thereby helping the state commit to statewide care delivery transformation.<sup>1</sup>

Vermont developed a unique multi-layered accountability structure among CMS, state agencies, payers, and the state’s health-care delivery system. The Green Mountain Care Board (GMCB) is an independent, nonpartisan, regulatory body that regulates commercial health insurance rates, individual hospital budgets, major health-care capital spending, and ACO budgets. The All-Payer ACO Model Agreement charges the GMCB with developing benchmarks for the Medicare’s Vermont ACO initiatives and producing data and reporting to CMS on progress toward the Agreement’s targets. The Vermont Agency of Human Services (AHS) is responsible for coordinating health care reform initiatives across the state’s government. The Director oversees health care reform collaborations among executive branch agencies, departments, and offices; and the GMCB.<sup>5</sup> The Model Agreement charges AHS with developing and implementing the Medicaid ACO initiative and ensuring that Vermont Medicaid participates and acts as a reliable payer.

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<sup>a</sup> OneCare’s definition of HSA refers to one or more counties that are relatively self-contained with respect to the provision of routine hospital care as defined by the Dartmouth Atlas methodology. The Blueprint uses a different HSA definition, and includes only 13 HSAs.

The VTAPM aims to align payers through an all-payer ACO, by offering risk-based payments tied to provider performance on quality and spending measures and encouraging practitioners to participate in an ACO and move from FFS to value-based payment. OneCare Vermont is currently the sole ACO operating in the state. Participating payers in PY1 (2018) and PY2 (2019) included Medicare, Medicaid, and Blue Cross Blue Shield of Vermont (BCBSVT) through qualified health plans offered in the state's health insurance marketplace and a self-insured plan covering University of Vermont Medical Center employees. The design allows for both payer-specific attribution methods across payers and for the flexibility to experiment with them. The Model also includes mechanisms to support risk-sharing arrangements and population-based payments that flow through OneCare Vermont to participating hospitals.

## Model Participation in PY1 and PY2

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Although the VTAPM aims to achieve all-payer alignment across payment and incentive structures, participating hospitals are not required to participate with all participating payers. Furthermore, because hospitals are the primary risk-bearing entities in the Model, other providers—including individual practitioners and non-hospital institutional providers—in each of Vermont's 15 HSAs<sup>b</sup> are eligible to participate in an ACO payer initiative (Medicare, Medicaid, commercial) only if the “home” hospital in the HSA opts to participate. In PY2 (2019), only 8 of the 15 hospitals in the OneCare provider network participated in all of the VTAPM's ACO payer initiatives (Medicare, Medicaid, and commercial). The Model has been most successful in increasing participation in the Medicaid payer initiative, with 13 of the 15 hospitals participating.

The Medicare ACO initiative has limited presence in Vermont's more rural areas, as only two of eight critical access hospitals (CAHs) in the state participated. For CAHs not affiliated with an academic medical center, concerns about taking on additional risk in the face of thin operating margins was the primary barrier to participation in the Medicare ACO initiative. There was also a lack of guidance for CAHs about how the Medicare's All-Inclusive Population-Based Payment (AIPBP) mechanism aligned with CAH cost-based reimbursement and payment benefits.

**For both PY1 (2018) and PY2 (2019), the VTAPM did not meet the all-payer and Medicare-specific scale targets.** In PY2 (2019), 47 percent of the eligible insured Vermont population was attributed to the Medicare ACO initiative, falling short of the scale target goal of 75 percent. However, due to the large percentage of Medicare beneficiaries who did not seek care within Vermont (27 percent in PY2), stakeholders reported that the scale target goals were not attainable. Excluding Medicare beneficiaries who did not seek care in Vermont in PY2

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<sup>b</sup> OneCare's definition of HSA refers to one or more counties that are relatively self-contained with respect to the provision of routine hospital care as defined by the Dartmouth Atlas methodology. The Blueprint uses a different HSA definition and includes only 13 HSAs.

(2019), the Model's Medicare scale target performance improved to 65 percent, albeit still short of the 75 percent goal.

**While the VTAPM is designed to include Vermont's major public and commercial insurers, BCBSVT was the only commercial payer in the Model in PY1 (2018) and PY2 (2019).** GMCB and OneCare view increasing commercial payer participation as the biggest opportunity for reaching the Model's all-payer scale targets. However, the consensus is that, this will require additional buy-in from self-insured employers in the state.

## VTAPM Implementation

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While the Model builds on several previous and ongoing initiatives, it entailed changes to roles, novel payment mechanisms, increased financial risk, and the implementation of new programs. The first two years of the five-year performance period were largely a ramp-up period and implementation is still in process.

### State Oversight

The GMCB's ACO budget review process has been key to fostering investments in population health and GMCB leaders noted that the hospital budget review has encouraged hospital investments in population health in particular. While the GMCB has required the ACO to invest a certain amount in population health programs through budget orders, the Board also earmarks a percentage of the ACO's overall revenues for population health programs while granting flexibility in how the ACO invests in specific population health initiatives over time.<sup>c</sup>

Because the GMCB's role has evolved with the VTAPM, aligning pre-existing regulatory processes to support the Model's goals has been a challenge.<sup>6</sup> GMCB is working to streamline regulatory processes, revamp how it provides budget guidance and collects data, and align activities internally through cross-team collaboration.

### Implementation of the Payment Model

FFS incentives continue to drive care delivery given limited commercial participation across the state and the lack of predictability of AIPBPs, which are reconciled with FFS. Medicaid's fixed, prospective payment, rolled out with the pilot in PY0 (2017), is widely supported across the state.<sup>7,8</sup> Medicaid sets the rates in advance of each calendar year to provide predictability for OneCare and participating providers. By contrast, the Medicare AIPBP is reconciled annually

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<sup>c</sup> In PY1 (2018) and PY2 (2019), GMCB required OneCare to fund population health management and payment reform investments at set percentages of their total budget. OneCare must also fund the SASH and Blueprint for Health programs at 2018 Medicare levels plus a specified growth rate (PY1 +3.5%; PY2 +3.8%) in risk and non-risk communities ([GMCB's FY19 Accountable Care Organization Budget Order](#)). GMCB did not require OneCare to fund population health management and payment reform at set percentages in 2020 and 2021...

with FFS claims. When negotiating with CMS, state leaders expected that the Medicare payment mechanism would be similar to the Medicaid capitated payment. Hospital administrators would have preferred the predictability of a Medicare fully capitated payment similar to that of Medicaid. They voiced frustration about the continued need to submit and track FFS claims for attributed Medicare beneficiaries with the AIPBP, which has posed a challenge for achieving the administrative efficiencies they had anticipated. Due to the reconciliation process, hospitals are reluctant to invest the AIPBP in population health initiatives because they expect CMS to recoup a portion of the funds in the settlement phase.

In the absence of formal guidance from CMS, CAHs participating in the Medicare ACO initiative struggled to clarify how to report ACO-related expenses and payment as part of their cost report through PY2 (e.g., whether to carve out ACO beneficiaries). CAHs also faced unique challenges with respect to the timeline for submitting cost reports, which does not align with the timeline for AIPBP reconciliation. This in turn makes it challenging for CAHs to hold reserves for both AIPBP and performance-based reconciliation.

## Population Health Initiatives

OneCare, hospitals, and the state are investing resources in population health initiatives to impact population health, quality-of-care targets, and total costs of care (TCOC). OneCare used the upfront funding from CMS and provider contributions to fund population health initiatives, many of which serve not only ACO-attributed beneficiaries, but the entire community.<sup>2,9</sup> These investments include new initiatives as well as the continuation of existing programs (e.g., the Blueprint's patient-centered medical homes [PCMH] and the Support and Services at Home [SASH] program). Notably, OneCare introduced systematic risk stratification to enhance care coordination for high- and very high-risk patients, expanded RiseVT (a primary prevention initiative), and is piloting capitated payments for primary care practices. Hospitals are beginning to invest in local population health initiatives, such as by expanding mental health and care coordination capacity; hiring RiseVT staff; improving health information technology capabilities; and improving access to primary, hospice, and dental care. PY1 (2018) and PY2 (2019) payments were intended to build capacity for care coordination, but provider and community organizations were reluctant to hire staff without more certainty around the future of the Model.

## Provider Engagement

In the first two PYs, OneCare struggled to engage CAHs, federally qualified health centers (FQHCs), and independent practitioners. OneCare was founded by two academic medical centers, the University of Vermont Medical Center (UVMHC) Health Network and the Dartmouth-Hitchcock Medical Center. Most FQHCs and independent practitioners previously participated in two ACOs that ceased operations at the outset of the VTAPM, which may have

posed challenges for OneCare in building trust among those particular providers. Stakeholders shared their concerns that OneCare was not adequately positioned to support CAHs, FQHCs, and independent practices in the Model's financial structure; non-hospital providers, including individual practitioners and other institutional providers, have limited financial incentives to transform care delivery. Under the State Innovation Model (SIM) grant, the state provided support to physician practices for clinical transformation through several learning collaboratives. Under the VTAPM, some of these trainings have continued under the ACO in a limited capacity, albeit without direct funding from the state.<sup>10</sup>

## VTAPM Impact on Medicare Spending, Utilization, and Quality of Care

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We assessed the impact of the VTAPM on Medicare spending, utilization, and quality of care in and across the first two performance years. We focused on both beneficiaries attributed to OneCare's participating practitioners (i.e., for the ACO-level analysis) and those residing in Vermont and receiving a meaningful level of care within Vermont or from OneCare's participating practitioners (i.e., for the state-level analysis).

Due to Vermont's distinct sociodemographic characteristics, health-care market, and health-reform history, identifying a comparison group was methodologically challenging for a number of reasons, including the following:

- **Meaningful differences in sociodemographic, health insurance, and health-care market characteristics.** Vermont had significantly greater upside-risk Medicare SSP ACO penetration and lower Medicare Advantage penetration rate than did comparison states in the baseline period. To address this, the comparison group for the ACO-level analysis was limited to Medicare beneficiaries attributed to Track 1 Medicare SSP ACO providers. We also explored the use of an alternative comparison group that matched Vermont counties to comparison state counties. However, due to sizeable differences in key characteristics (e.g., educational attainment, uninsured rates), we could not determine a consistent matching approach across all Vermont counties.
- **Delayed impacts of Vermont's ongoing health-reform initiatives in the baseline years.** As the VTAPM builds on a long history of health-reform efforts in Vermont, our evaluation findings may be due in part to delayed impacts from other previous and ongoing initiatives in the state. To mitigate this effect, we selected comparison states with a similar history of health-reform efforts (e.g., PCMH and multi-payer reform initiatives).
- **Varying trends in outcomes in the baseline years for VTAPM and the comparison groups.** Although our analytic model assumes common trends in the baseline period between the treatment and comparison groups, we did not observe common trends for all outcomes. To address this, we used a flexible DID model framework in our analysis that allows for differing baseline trends in outcomes.

- The magnitude of our findings was sensitive to the baseline period definition.** There is uncertainty associated with our estimate of the group-specific baseline trends because the baseline period included only three points in time (2014-2016). To assess how a different definition of the baseline period would affect our impact findings, we conducted a sensitivity analysis that included PY0 (2017) as a fourth baseline year. Across the different baseline approaches, results for PY2 consistently showed reductions in Medicare spending, although the magnitude of the reduction varied by approach.

We provide additional detail on how we addressed these challenges in Section 5.1 and Appendix E of the main report.

### Impacts on Medicare Spending

Cumulatively, both the ACO- and state-level analyses showed significant gross savings relative to the comparison group, driven in part by large reductions in PY2 (2019) (Exhibit ES.1). Observed reductions in Medicare spending—for both the Medicare ACO and statewide Medicare populations—reflect rising spending in the comparison groups and relatively flat spending in the VTAPM groups that began in the baseline period and continued into the first two PYs.<sup>d</sup> Additionally, after taking into account the shared savings and pass-through payments from Medicare, the VTAPM achieved a cumulative net spending reduction at the state level.

**Exhibit ES.1.** Gross and Net Impacts on Medicare Spending in the First Two VTAPM Performance Years

	Gross Impact		Net Impact	
	Estimate	Percent	Estimate	Percent
<b>ACO-Level Analysis</b>				
<b>Cumulative (PY1 and PY2)</b>	▼	<b>-5.5</b>	▽	-4.7
PY2 (2019)	▼	<b>-6.9</b>	▼	<b>-6.5</b>
PY1 (2018)	▽	-3.4	▽	-2.2
<b>State-Level Analysis</b>				
<b>Cumulative (PY1 and PY2)</b>	▼	<b>-6.8</b>	▼	<b>-6.5</b>
PY2 (2019)	▼	<b>-10.0</b>	▼	<b>-9.9</b>
PY1 (2018)	▽	-3.4	▽	-2.9

NOTE: 'Gross impact' represents the impact on gross Medicare Parts A & B spending, as estimated by a difference-in-differences (DID) model. 'Net impact' accounts for CMS incentive payments to the VTAPM and comparison group in the baseline (CY2014-2016) and performance (CY2018-2019) periods. CY2017 was considered a ramp-up year for the VTAPM and thus is excluded from the findings presented here. 'Estimate' indicates the directionality and significance of the per-beneficiary-per-year DID impact estimate; arrows signify the direction of the impact (e.g., an arrow pointing downward indicates savings relative to the comparison group), filled arrows indicate that an estimate is significant at p<0.10, and unfilled arrows indicate non-significant findings. 'Percent' is the impact relative to expected average Medicare spending for VTAPM beneficiaries in performance year(s) absent the model.

<sup>d</sup> Spending in the treatment group has remained relatively flat since 2016.

## Impacts on Medicare Utilization and Quality of Care

**Both statewide and for the Medicare ACO, hospital-based utilization (acute care stays and days) decreased in PY2 (2019).** We observed decreases of 17.9 percent and 14.7 percent for acute care stays and acute care days, respectively, for the Medicare ACO initiative, and statewide decreases of 9.3 percent for both acute care stays and acute care days. Statewide, there were also significantly fewer beneficiaries with unplanned 30-day readmissions, a decrease of 22.4 percent. As hospital spending represents approximately one-third of total Medicare spending, these significant reductions likely contributed to the observed gross spending reductions.

**Specialty E&M visits significantly declined in PY2 (2019), both for the statewide Medicare population and for VTAPM's Medicare ACO,** with decreases of 10.2 percent and 7.7 percent, respectively.

Given the limited occurrence of some types of utilization (e.g., acute-care stays) relative to others (e.g., E&M visits) at the ACO level, impact estimates should be interpreted with caution, especially those that are not statistically significant.

## Discussion

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While the Vermont All-Payer Model failed to achieve its all-payer and Medicare scale target goals, it achieved statistically significant, cumulative Medicare spending reductions over the first two PYs at both the ACO and state levels. These decreases in utilization and spending reflect rising spending in the comparison groups and relatively flat spending in the VTAPM groups that began in the baseline period and continued into the first two PYs. They may also reflect the Model's continuation of primary care and population health investments in Vermont and a statewide culture of reform. The continuation of existing population health initiatives may contribute to state-level impacts through Model spillover beyond the attributed beneficiaries.

Stakeholders agree that the VTAPM provides an important, unifying forum for providers, payers, and the state to engage in meaningful discussions about health-care reform and goal setting. The VTAPM is also strengthening relationships among hospitals, community organizations, designated mental health agencies, primary care practices, and other providers. However, the complexity of the Model, perceived lack of transparency, and distrust have contributed to challenges with engaging practitioners and the public.

Widespread care delivery transformation will take time and require a more comprehensive transition to value-based payment among participating providers. The VTAPM intended to transition away from FFS by providing an avenue for health-care organizations to receive prospective monthly payments. The Model has not yet reached its goals of broad participation across all major payers, due in part to CAHs' hesitancy to participate in the Medicare ACO initiative and limited commercial participation. As a result, providers report having their feet "*in*

*two canoes*”—with capitated payments comprising a very small portion of their revenue and FFS incentives still driving care delivery for a sizeable share of patients.

Increasing participation and progress toward Model scale, including bringing in more self-funded employers and Medicare Advantage plans, and increasing participation in the Medicare ACO initiative, is a focus for the state and OneCare alike. Achieving all-payer scale requires increasing commercial participation, particularly among self-funded employers and Medicare Advantage plans, and increasing participation in the Medicare ACO initiative. The State Employees’ Health Care Plan joined OneCare in PY4. One of the larger hospitals in the state began participating in the Medicare ACO initiative in PY4 (2021), adding approximately 7,500 beneficiaries.<sup>e,f</sup> In future reports, we will conduct subgroup analyses to examine outcomes by provider participation across payer programs to further examine the association between payer participation and Model outcomes.

The findings in this report provide an early picture of the implementation and impact of the VTAPM. Future reports will include impact findings for the Medicaid population, which we will use to synthesize and expand our understanding of the VTAPM’s impact; we will also descriptively assess Model participation for individuals attributed through commercial payers. However, we anticipate that the effects of the COVID-19 public health emergency may limit our ability to draw meaningful inferences based on 2020 data in future reports.

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<sup>e</sup> See [December 10, 2020, letter from State of Vermont Office of the Governor to CMS](#) in response to warning notice of Vermont’s non-compliance with ACO scale targets.

<sup>f</sup> CMS adopted MSSP’s Extreme and Uncontrollable Circumstances policy for the Vermont Medicare ACO Initiative, reducing 2020 downside risk by reducing shared losses by the proportion of months during the COVID-19 pandemic ([June 24, 2020, memo from CMS to Michael K. Smith, Secretary, Agency of Human Services, and Kevin Mullin, Chair, Green Mountain Care Board](#)). GMCB requested that this reduction in downside risk continue through the duration of the PHE in 2020 ([December 23, 2020, memo from Kevin Mullin, GMCB to CMS](#)).

## Chapter 1: Introduction

The Centers for Medicare & Medicaid Services (CMS), through the Center for Medicare & Medicaid Innovation (CMMI), designed the Vermont All-Payer Accountable Care Organization Model (“VTAPM” or the “Model”) to test whether scaling an ACO structure across all major payers in the state would incentivize broad care delivery transformation and ultimately reduce statewide spending and improve population health outcomes.<sup>1</sup> Under the Model, CMS provided Vermont flexibility in designing a state-specific, all-payer ACO program. In exchange, the state is accountable for meeting statewide scale population targets (i.e., Model participation), financial targets, and population health targets.<sup>4</sup>

CMMI selected NORC at the University of Chicago to conduct an independent evaluation of the Model. This is the first of a series of reports for CMMI as part of NORC’s evaluation. We describe our evaluation approach and aims in the following sections.

### 1.1 Overview of Evaluation

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The Model’s underlying aim is to increase value-based payments across major payers using an ACO structure to accelerate care delivery transformation in Vermont.<sup>11</sup> NORC’s five-year evaluation will answer questions about how stakeholders at various levels implemented the Model, associated challenges, and lessons learned. Initiated in 2017, the VTAPM is scheduled to end in performance year (PY) 5 (2022) with six distinct performance years, PY0–PY5, beginning on January 1 of each year; PY0 (2017) is considered a transition period. In PY0, CMS provided \$9.5 million in startup funding to support care coordination activities, make connections to community-based resources, and support practice transformation for Medicare fee-for-service (FFS) beneficiaries.<sup>4</sup> Beginning in PY1 (2018), the Vermont Medicare ACO initiative went into effect and Vermont became responsible for meeting statewide targets (described in **Section 2.3**).<sup>4, 12</sup> Across the five PYs, our evaluation will examine the impact of the Model on population health outcomes; statewide spending by payer (Medicare and Medicaid<sup>§</sup>); delivery system and process measures; and other measures of health-care utilization, spending, and quality of care.

### Conceptual Framework and Research Questions

**Exhibit 1.1**, adapted from Damberg et al.,<sup>13</sup> presents the conceptual framework that informs our understanding of the Model and our approach to evaluating the VTAPM’s implementation effectiveness and impact. Key framework constructs include **contextual factors**, such as Vermont’s history of health-care reform efforts led by the Governor’s office and Agency for Human Services (AHS), and the regulatory role of the Green Mountain Care Board (GMCB), an independent entity with a five-member board appointed by the governor for six-year terms. To

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<sup>§</sup> Assessment of the Model’s impact on the Commercial payer population is not part of this evaluation’s scope.

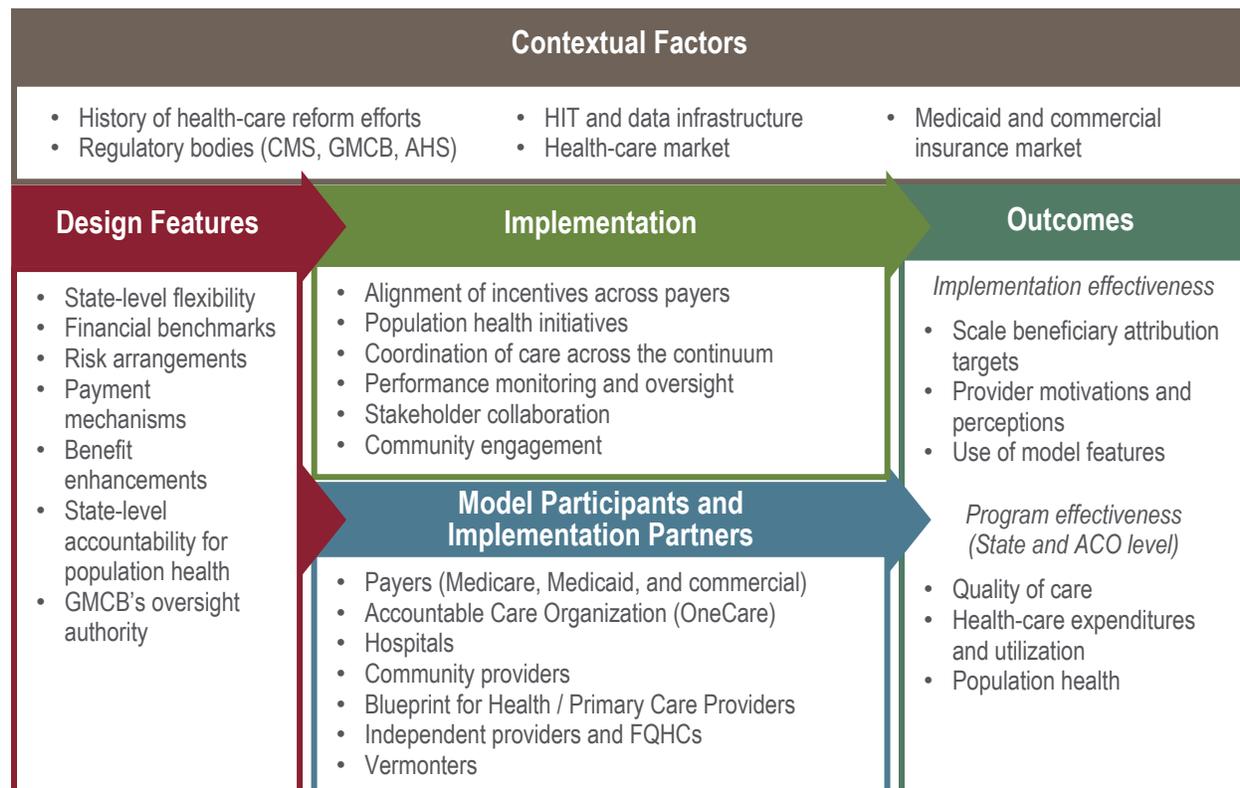
understand the context in which the ACO is implementing the Model, the evaluation also addresses the characteristics of the markets, organizations, provider networks, and ACO beneficiaries during the implementation period. We also consider VTAPM **design features**, such as the GMCB's regulatory and implementation oversight authority for the Model and Vermont's flexibility to determine ACO outcomes, set ACO benchmarks, structure risk arrangements and payment mechanisms, invest in care management and monitoring, and enhance benefits. We explore how stakeholders and participating providers implement these design features in their local communities.

Additionally, we assess stakeholder, hospital, and practitioner perspectives on the **implementation** of the Model, including alignment of incentives across payers, population health initiatives, coordination of care across the continuum, performance monitoring and oversight, stakeholder collaboration, and community engagement. Understanding implementation experiences and progress informs our interpretation of the **implementation and program effectiveness (state and ACO level) outcomes**. Implementation effectiveness measures focus on ACO scale targets<sup>h</sup> and usage of model features, while program effectiveness measures focus on spending, utilization, and quality of care.

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<sup>h</sup> Scale targets are goals for scaling the model to all Vermonters through staged participation of payers and practitioners.

## Exhibit 1.1. Conceptual Framework



SOURCE: Adapted from Damberg, Sorbero, Lovejoy, Martsolf, Raaen, and Mandel, 2014, *Measuring Success in Health Care Value-Based Purchasing Programs: Findings from an Environmental Scan*. [https://www.rand.org/pubs/research\\_reports/RR306.html](https://www.rand.org/pubs/research_reports/RR306.html).

In this report, we begin to address a subset of the research questions (RQs):

### Program Design Features

- How ACO program design features compare across payers and to other Medicare ACO programs (RQ1)
- Key issues for the GMCB when setting the trend factor for the benchmark of the modified Next Generation ACO/Vermont Medicare ACO initiative (RQ5)

### Implementation

- How the health-care delivery and public health systems are collaborating to reach the population-level health goals (RQ4)
- How the GMCB uses its regulatory authority to influence ACO care management programs and organizational structure (RQ6)
- Influence of the Model's key design features on care delivery transformation; challenges participating providers are encountering (RQ7)

- How program design features impact implementation at the community level (RQ8)

### **Participation**

- Characteristics of beneficiaries and providers in the Model across PYs (RQ2/RQ9)
- How the state, ACO, and payers are working together to reach the statewide ACO targets and barriers they are encountering (RQ3)

### **Model Impact: Spending, utilization, and cost of care**

- Change in population health measures during the performance period (RQ13)
- Impact of the Model on statewide Medicare spending, utilization, and quality of care outcomes (RQ14)
- Impact of the Model on spending, utilization, and quality-of-care outcomes for Medicare beneficiaries attributed to the VTAPM (RQ15)

**Appendix A** provides a list of the Model’s common terms and acronyms. **Appendix B** includes the complete list of RQs cross-walked with the conceptual framework domains for this evaluation.

## **1.2 Methods**

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Our evaluation employs an embedded, mixed-methods design that enables qualitative and quantitative analyses to inform one another across the PYs. The design facilitates an iterative approach to data collection and analysis. Below we provide an overview of the methods informing the findings in this report.

### **Impact analysis methods**

We employed a difference-in-differences (DID) design to assess the impact of the VTAPM on Medicare spending, utilization, and quality of care in PY1 (2018) and PY2 (2019). In the DID analysis, we compared the change in outcomes between the baseline and performance period for the VTAPM group to the change in outcome between the baseline (2014-2016) and performance period in a comparison group.

Because the VTAPM aims to improve outcomes for Vermont’s entire statewide population by redesigning the care delivery system across all major payers and geographic areas, we deemed a within-state comparison group to be infeasible. Therefore, we drew the comparison group from 26 states with similar health-care reform histories as Vermont, emphasizing areas within those states that were most similar to Vermont, and persons within those areas who were similar to Vermonters. We included similar health-care reform history as a criteria for selecting comparison group states because we hypothesized that Vermont’s focus on population health and

health-care reform during the baseline period may affect outcomes in the VTAPM performance period.<sup>i</sup>

For estimating the VTAPM's treatment effects, we employed a flexible DID specification<sup>j</sup> that allowed for linear deviations in baseline period outcomes trends between the treatment and comparison groups.<sup>14</sup> Recognizing the multi-tiered accountability and incentive structure inherent in the VTAPM, we assessed the Model's impact on all eligible Medicare FFS beneficiaries at the state and ACO levels:

- **ACO-level analysis:** We assessed whether the VTAPM Medicare ACO initiative (i.e., OneCare Vermont, LLC, ("OneCare") the sole all-payer ACO in the state) is achieving spending, utilization, and quality of care goals for the Medicare beneficiaries attributed to the VTAPM- participating practitioners. The comparison group for the ACO-level analysis comprised FFS Medicare beneficiaries attributed to upside-risk Medicare Shared Savings Program (MSSP) participating practitioners in comparison states.
- **State-level analysis:** We assessed whether Vermont is achieving spending, utilization, and quality-of-care goals statewide for the Medicare population. The comparison group for the state-level analysis comprised FFS Medicare beneficiaries residing in comparison states.

The unique context in Vermont posed several methodological challenges with respect to constructing a comparison group to assess the Model's impact on Medicare spending and utilization. Few areas outside Vermont have similar sociodemographic and health insurance market characteristics and such an extensive history of health-care reform (see **Appendix Exhibit E.1.2**). To address these methodological challenges, we employed several mitigations strategies, including constructing alternative comparison groups, employing a flexible DID framework that allowed groups to have differing baseline trends for outcomes, and prioritizing area-level characteristics that were most likely to influence outcomes in the weighting stage. For a more detailed account of the methodological challenges posed by Vermont's unique context and the strategies used to mitigate these challenges, see **Appendix E**. The Model participation and impact analysis findings reflect only PY1 (2018) and PY2 (2019) and present data only on Medicare beneficiaries and the comparison group relative to baseline. The analyses do not include data on Medicaid recipients, as those data were unavailable for this report. Additional information regarding the quantitative methods is available in **Chapter 5** and **Appendix D**.

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<sup>i</sup> Refer to **Appendix Exhibit D.2.1** for the list of the 26 comparison states.

<sup>j</sup> The baseline covariates included in the entropy balancing models were also included in the DID models to address any residual differences between the treatment and weighted comparison groups.

## Qualitative methods

We reviewed existing documents, such as state- and ACO-level budget documents, as well as a wide array of public information available on the state and the GMCB websites. Specifically, the GMCB annual reports, the ACO performance year budgetary documentation, and Model overview presentations provided a significant amount of background to inform a comprehensive understanding of the Model's design and implementation to date.

We conducted two rounds of semi-structured interviews (June 2019 and July-September 2020) with state officials, OneCare leaders, Blueprint project managers in each of the state's health service areas (HSAs),<sup>k</sup> hospital leaders, physicians, and representatives from designated mental health agencies and federally qualified health centers (FQHCs). In total, we conducted 49 interviews with representation from 12 of 15 HSAs. We based the interview guides for each stakeholder group on the evaluation RQs (see **Appendix B**), conceptual framework, and document review; interview guides captured the overall background on value-based initiatives, relationships among stakeholders, and new or existing activities occurring at the state and community levels. After transcribing each interview, we analyzed and coded the transcripts and our notes using NVivo software (QSR International Pty Ltd., Melbourne, Australia). We systematically reviewed and sorted the qualitative data, using a deductive and inductive approach to identify themes and important concepts. Additional information regarding the qualitative methods is available in **Appendix C**.

Qualitative findings are integrated throughout Chapters 2 through 4 to understand the experiences and perspectives of stakeholders implementing the Model and in Chapters 5 and 6 to interpret findings from the impact analysis.

### 1.3 Overview of This Report

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As noted previously, this report is the first in a series of public reports summarizing evaluation findings. Its purpose is to provide information on implementation experiences, state- and ACO-level Model impacts on Medicare spending, utilization, and quality of care in PY1 (2018) and PY2 (2019). **Exhibit 1.2** presents the organization of the remainder of this report.

The discussion in Chapter 6 triangulates our findings on implementation progress, the Model's impact on outcomes, and the contributing factors. Future reports will incorporate data from the planned qualitative interviews, survey of eligible practitioners, and Medicaid claims to add to the key findings from the PY1-PY2 impact analysis in the context of stakeholders and providers

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<sup>k</sup> OneCare's definition of HSA refers to one or more counties that are relatively self-contained with respect to the provision of routine hospital care as defined by the Dartmouth Atlas methodology. The Blueprint uses a different HSA definition, and includes only 13 HSAs.

implementing the Model and assess the Model’s cumulative impacts on the Medicare and Medicaid populations during the performance period (PY1-PY5).

**Exhibit 1.2. First Evaluation Report: Early Findings on Implementation Experience and Impact**

Chapter 2: Overview of VTAPM	Chapter 3: Implementation of VTAPM	Chapter 4: Model Participation	Chapter 5: Impact of VTAPM	Chapter 6: Discussion
<ul style="list-style-type: none"> <li>■ How VTAPM builds on prior payment and delivery reform initiatives</li> <li>■ Model aims and key program design features [RQ1, RQ5]</li> <li>■ Comparison with other Medicare ACO models [RQ1]</li> </ul>	<ul style="list-style-type: none"> <li>■ Statewide oversight and monitoring [RQ6]</li> <li>■ Implementation of the payment model, provider engagement, and efforts to address population health goals [RQ2-4; RQ7-9]</li> </ul>	<ul style="list-style-type: none"> <li>■ Characteristics of hospitals, practitioners, and beneficiaries [RQ2, RQ9]</li> <li>■ ACO and statewide scale targets [RQ3]</li> </ul>	<ul style="list-style-type: none"> <li>■ Change in population health measures [RQ13]</li> <li>■ ACO and statewide impacts on spending, utilization, and quality for the Medicare population in PY1 (2018) and PY2 (2019) [RQ14,15]</li> </ul>	<ul style="list-style-type: none"> <li>■ Triangulation of key findings</li> <li>■ Evaluation limitations and challenges</li> <li>■ Next steps</li> </ul>

NOTE: RQ = research question. See Appendix B for a complete list of RQs for this evaluation.

## Chapter 2: Overview of the VTAPM—Context and Model Design

### Key Takeaways

#### Context



- The VTAPM builds on two decades of health reform in Vermont, facilitating Vermont’s capacity to leverage lessons learned from stakeholder, provider, and payer experiences for Model design and implementation.

#### Key Model Stakeholders



- Vermont developed a multi-layered accountability structure among CMS, state agencies, payers, the ACO, participating hospitals, and community providers.
- The Model currently includes one private-sector, statewide ACO: OneCare Vermont (OneCare).
- The GMCB oversees OneCare and regulates health insurance rates, individual hospital budgets, and major health-care capital spending.
- The Vermont Agency of Human Services (AHS) is responsible for coordinating health care reform initiatives across the state government. The Model agreement charges AHS with developing and implementing the Medicaid ACO initiative.

#### Program Design Features



- The VTAPM agreement lays out financial targets and benchmarks designed to bring health-care spending in line with Vermont’s overall economic growth and to achieve population health goals. Vermont is also responsible for meeting scale targets for Model participation, namely attributing a minimum percentage of Medicare and insured Vermont beneficiaries to the VTAPM across each performance year.
- CMS holds Vermont accountable to achieve the financial and scale targets, while providing the state with flexibility to tailor the VTAPM to the state’s distinctive health-care environment.
- The Model is designed to align incentives across payers by shifting some financial risk for patient care to hospitals and practitioners through participation in a risk-bearing ACO. Participants may elect to receive prospective payments through the ACO for payer programs in which they participate where prospective payments are offered. The ACO distributes the prospective payments to participating providers within a given HSA.
- The VTAPM employs a prospective attribution methodology to attribute Vermonters to the ACO initiatives.
- Similar to other Medicare ACO models with higher two-sided risk, such as the Next Generation ACO (NGACO) Model, the VTAPM uses prospective beneficiary attribution. However, it has relatively higher shared-savings/loss rates and relatively lower shared-savings risk limits than do other Medicare ACO initiatives.

In this chapter, we discuss the evolution of reforms that led to the VTAPM, state accountability and Model oversight among key Model stakeholders, and the Model's aims and key design features. Finally, we compare the VTAPM Medicare ACO initiative to other Medicare ACO initiatives. Our analysis draws from a systematic document review of state documents (e.g., GMCB budget presentations, meeting minutes, and legislative briefings); the Model agreement; CMS materials (e.g., Shared Savings Program [SSP] ACO Public Use Files, NGACO benchmarking methodology); GMCB public reports; other gray literature; and prior evaluation reports from state initiatives that preceded the VTAPM.

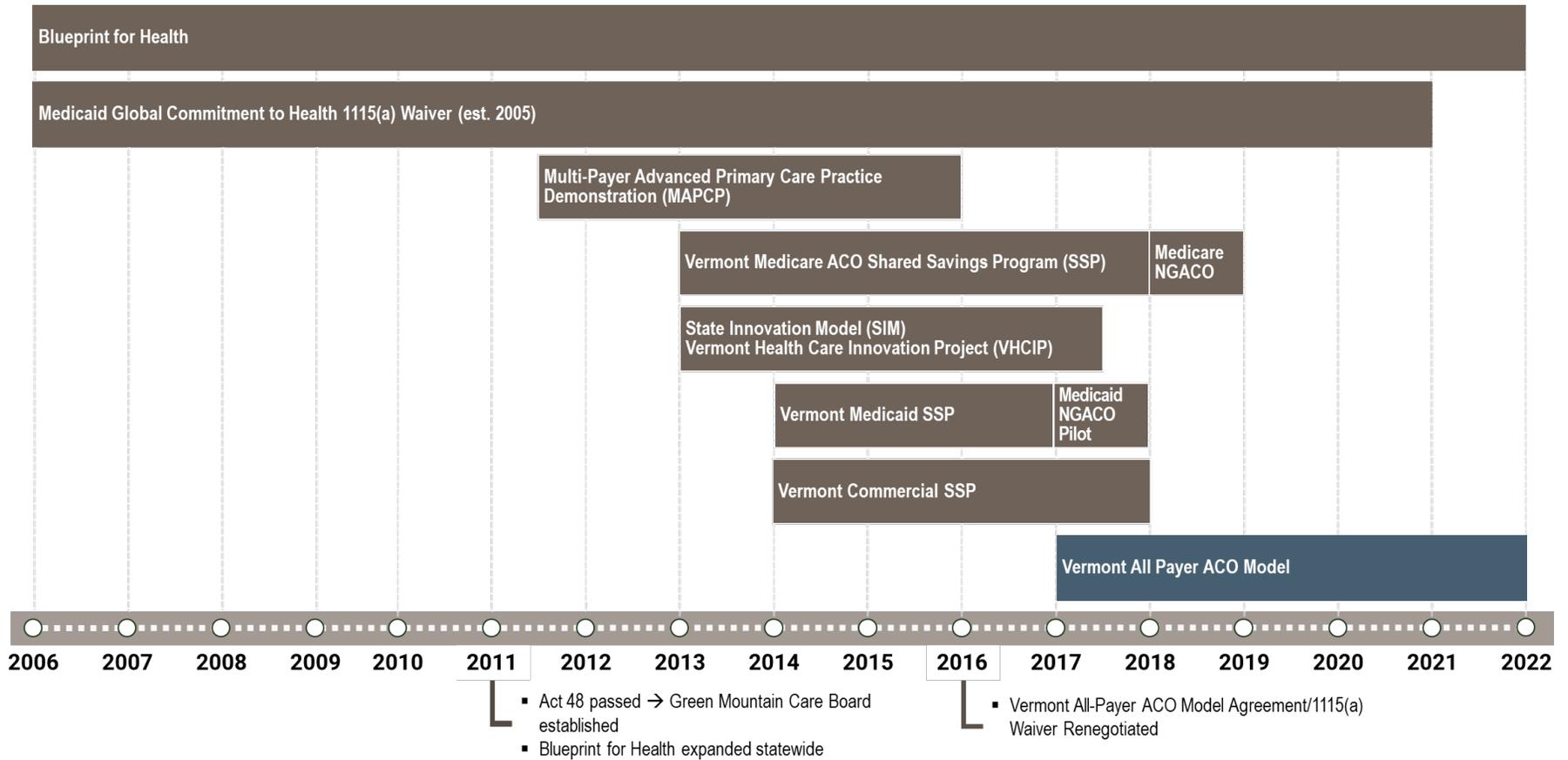
## **2.1 How Does the VTAPM Build on Prior Payment and Delivery System Reforms?**

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The VTAPM builds on nearly two decades of innovation in the state, facilitating Vermont's capacity to leverage lessons learned from stakeholder, provider, and payer experiences for Model design and implementation. This is also CMMI's first evaluation of a model in which all major payers within an entire state aim to improve value and quality with a focus on population health outcomes.<sup>1</sup> **Exhibit 2.1** illustrates the timeline of Vermont's health-care payment and delivery system reform initiatives leading up to the launch of the VTAPM.<sup>10</sup>

First approved in 2005, Vermont's Medicaid Section 1115 waiver, known as the Global Commitment to Health,<sup>15</sup> laid the groundwork for future health-care delivery/payment reforms.<sup>16</sup> Under this waiver, the state agreed to a cap on federal Medicaid funding. In return for the state taking on the risk of operating under a capped funding arrangement, the waiver allowed Vermont to use federal Medicaid funds to pay for non-Medicaid health programs and provided the state with more financial and programmatic flexibility to restructure benefits, increase beneficiary cost sharing, and cap enrollment for Medicaid enrollees.<sup>17</sup>

### Exhibit 2.1. Timeline of Vermont’s Payment and Delivery System Reforms



Launched in 2003 as a governor’s initiative and codified into Vermont statute in 2006, Vermont’s Blueprint for Health served as a precursor to the VTAPM, with a focus on “integrating a system of health care for patients, improving the health of the overall population, and improving control over health-care costs by promoting health maintenance, prevention, and care coordination and management.”<sup>18,19</sup> The Blueprint supports primary care practices across Vermont in achieving and maintaining PCMH certification through the National Committee for Quality Assurance (NCQA).<sup>20</sup> In addition, the Blueprint operates community-led strategies to improve health and well-being (see **Exhibit 2.2**).<sup>19</sup>

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## Exhibit 2.2. Blueprint for Health Programs

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**Accountable Communities for Health/Community Collaboratives:** Initially funded through the SIM grant, the community collaboratives are community-level groups designed to bolster population health planning and identify local priorities. Accountable Communities for Health are mature community collaboratives that take on governance roles and responsibility in HSAs.

**Community Health Teams (CHTs):** Multi-disciplinary care coordination teams employed to support PCMHs and manage patients’ complex illnesses across providers. CHT members may include registered nurse (RN) care/case coordinators/managers, social workers, dietitians, behavioral health providers, and community health workers/lay navigators.

**Hub and Spoke:** This primary care-based initiative is the state’s medication-assisted treatment (MAT) referral program for Vermonters with an opioid use disorder. (2015–present)

**Integrated Communities Care Management Learning Collaborative:** Initially funded through the SIM grant, this is an HSA-level, rapid-cycle quality improvement initiative to improve cross-organization care coordination and care management.

**PCMHs:** NCQA-certified primary care practices using team-based approaches for care coordination and care management.

**Supports and Social Services at Home (SASH):** Coordinates social service agencies, community health providers, and nonprofit housing organizations to support Medicare seniors in living independently.

**Women’s Health Initiative:** Women’s specialty providers that deliver psychosocial risk factor screenings, offer access to birth control, connect women with treatment, and link community organizations and participating practices with referral protocols.

In 2011, Medicare joined Medicaid and commercial payers in supporting primary care practices through the Blueprint under the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration. Medicare, Medicaid, and Vermont’s major commercial insurers provided primary care practices with NCQA recognition with a per member per month (PMPM) payment.<sup>211</sup> All payers also supported regional community health teams (CHTs), multi-disciplinary care coordination teams that support PCMHs and manage patients’ complex illnesses across providers.<sup>18</sup> In addition to supporting PCMHs and CHTs, Medicare provided funding under MAPCP for the Supports and Services at Home (SASH) program, which

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<sup>1</sup> This began with a 2008 pilot program in two communities and expanded under MAPCP.

coordinates services to help seniors continue living independently at home.<sup>22</sup> Through this demonstration, Medicare and other participating payers provided funding to practices, CHTs, and SASH, and extended the PCMH model to 133 primary care practices by 2019.<sup>23</sup> Through this demonstration, participating practices also expanded access to care through after-hours phone access, extended weekday hours, telemedicine, and same-day appointments.

The state's passage of Act No. 48<sup>24</sup> in 2011 laid a multi-year plan to launch Green Mountain Care, a statewide single-payer health-care system aimed at providing coverage to all Vermonters.<sup>25</sup> Act No. 48 also created the independent GMCB to oversee creation of the single-payer system and to regulate health-care entities.<sup>26</sup> Due to the implementation of the Patient Protection and Affordable Care Act, the 1332 State Innovation Waiver necessary to create this single-payer system was not available until 2017.<sup>25</sup> Ultimately, the need for \$2.5 billion in additional tax revenue to launch the single-payer initiative led then-Governor Peter Shumlin to announce that the state would no longer proceed with Green Mountain Care in December 2014.<sup>27-29</sup>

In the interim, the state pursued other types of innovation in health-care delivery. In 2013, CMS approved and awarded the state's \$45 million State Innovation Model (SIM) initiative, the Vermont Health Care Innovation Project (VHCIP), which facilitated stakeholder convening throughout the state for communities to develop their own priorities within an ACO framework. The GMCB collaborated with the Department of Vermont Health Access (DVHA) to operationalize all aspects of the state's SIM VHCIP initiative.<sup>10</sup> Vermont's early SIM VHCIP focus was on the creation and implementation of value-based payment models, including episodes of care, pay-for-performance programs, and ACOs.<sup>30</sup>

Also in 2013, Vermont providers organized and began participating in the Medicare SSP through two ACOs—OneCare and HealthFirst's ACO.<sup>m</sup> Led by the GMCB, Vermont also engaged in multi-payer payment and delivery reform pilots, establishing parallel Medicaid and commercial SSPs with Blue Cross Blue Shield of Vermont (BCBSVT) as the sole participating commercial payer.<sup>31</sup> Each ACO had a unique leadership structure and network of providers. The University of Vermont Medicare Center (UVMCC) (formerly Fletcher Allen Health Care) and Dartmouth-Hitchcock Medical Center (DHMC) in New Hampshire established OneCare Vermont in 2012. OneCare participated in the Medicare, Medicaid, and BCBSVT SSPs with a network that included 13 Vermont hospitals and their employed physicians, five rural health clinics, two federally qualified health centers (FQHCs), the state's sole private psychiatric hospital, and 58 provider practices.<sup>10</sup> HealthFirst's ACO was the first Medicare SSP contract in Vermont and included an independent practice association network of eight independent primary care and specialty physician practices; the ACO only participated in the Medicare and BCBSVT SSPs.<sup>10</sup>

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<sup>m</sup> HealthFirst is the independent practice association and its ACO was known as both the Vermont Collaborative Physicians (VCP; commercial SSP) and the Accountable Care Coalition of the Green Mountains (ACCGM; Medicare SSP).

Beginning in 2014, many of the state's FQHCs formed a third ACO, Community Health Accountable Care (CHAC), which emphasized primary care and participated in the Medicare and Medicaid SSPs. SIM provided startup funding to all three ACOs.

To continue the community-driven and primary care focus, as well as to mitigate provider fatigue stemming from reform efforts, Vermont concentrated on ensuring that ACO SSPs aligned with other state initiatives, including the Blueprint.<sup>32</sup> SIM funding contributed to Blueprint programs, including the Integrated Communities Care Management (ICCM) Learning Collaborative, that furthered care coordination through a variety of learning sessions and reference materials.<sup>30</sup> The SIM VHCIP also supported health information technology (HIT) infrastructure development and care delivery transformation by encouraging health-care providers, social service providers, and community-based organizations to work together.<sup>10</sup>

The SIM VHCIP evaluation found that for ACO-attributed Medicaid beneficiaries, relative to a comparison group, total PBPM expenditures decreased during the first two years of the SIM VHCIP implementation and increased during the third year (at a slower rate).<sup>10</sup> However, rates of emergency department (ED) visits that did not lead to a hospitalization declined. There was no difference in the rate of ED visits or total PBPM expenditures for statewide Medicare beneficiaries, and both the rate of ED visits and PBPM expenditures increased for the statewide commercial population.<sup>10</sup> The evaluation found that SIM VHCIP funding accelerated the adoption and use of HIT, which increased data-sharing capability and capacity to track patient data from specialty and community providers, particularly those focused on behavioral health.<sup>10</sup>

As the state began to renegotiate its Global Commitment to Health waiver in 2016, officials sought to align the waiver with VTAPM goals. This included continuing existing Medicaid coverage of essential services for vulnerable populations, securing Medicaid participation in the Model, and maintaining flexibility in using Medicaid funds to invest in population health and other health-care initiatives. CMS made over \$200 million in Delivery System Reform (DSR) funds available through the 2017 waiver, subject to matching state funding,<sup>n</sup> which was to be dedicated to supporting infrastructure and programming for participating providers.<sup>15</sup>

The VTAPM launched in 2017 with the Medicaid NGACO pilot, which represented Medicaid's participation. In 2017—PY0 of the Model—four HSAs participated. OneCare was the only ACO to participate; HealthFirst's ACO and CHAC had ceased operations. In 2018, the Model expanded to include Medicare and commercial beneficiaries, with some requirements and payment arrangements closely aligned with the Medicare NGACO Model.<sup>2,3</sup>

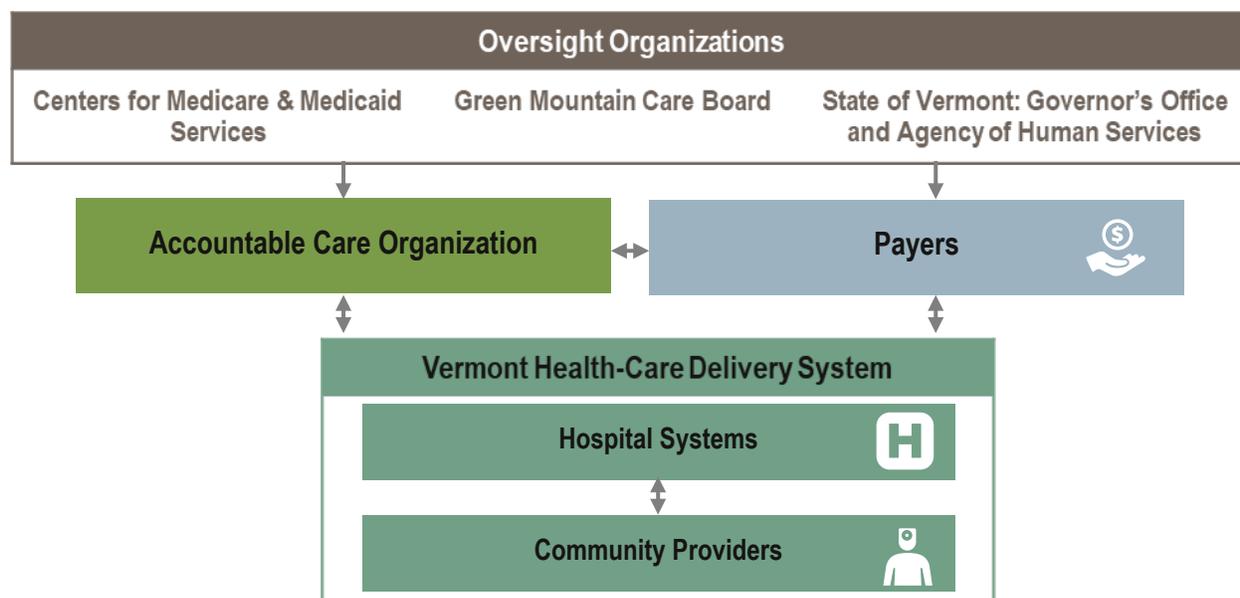
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<sup>n</sup> State leaders noted that this new category of funds was available within a larger category of investments allowed by the Global Commitment to Health waiver. Total investments were subject to a cap, meaning that new investments would compete for funding with established investments. Ultimately, the availability of state matching dollars and the restrictions of the investment cap limited the startup funds to significantly less than \$200 million.

## 2.2 State Accountability and Oversight—Key Model Stakeholders

Vermont developed a unique multi-layered accountability structure among CMS, state agencies, payers, and the health-care delivery system in the state (see **Exhibit 2.3**). Multiple stakeholders developed and negotiated the VTAPM agreement with CMS, including the governor of Vermont, the GMCB, and the AHS.<sup>12</sup>

**Exhibit 2.3.** Accountability Structure of the VTAPM



### Oversight Organizations

CMS provided Vermont with flexibility to tailor the VTAPM to the state’s distinctive health-care environment, along with startup funds to support care coordination and collaboration among physician practices and community-based providers. CMS holds the state of Vermont accountable for achieving statewide financial, quality, ACO scale targets, and population health targets.

The GMCB oversees OneCare and regulates health insurance rates, individual hospital budgets, and major health-care capital spending. In 2011, the Vermont legislature passed legislation<sup>24</sup> to create the GMCB, an independent, nonpartisan, regulatory body. The GMCB is charged with moderating health-care spending growth through hospital and insurance rate regulation, innovation, and evaluation<sup>7</sup>; bolstering statewide HIT initiatives; and improving the health of Vermonters by overseeing health-care reforms, including Vermont’s unsuccessful attempt to implement a single-payer health-care system.<sup>1</sup>

The GMCB’s role also includes the additional authority to regulate ACOs, granted by Act 113 in 2016.<sup>34</sup> GMCB certifies ACOs (if required) when they begin operating in Vermont and annually

confirms their eligibility for continued certification. GMCB also annually reviews, modifies, and approves ACO budgets.

The GMCB is an All-Payer Model signatory, in partnership with the Governor and Agency of Human Services. Under the All-Payer ACO Model Agreement, the GMCB is charged primarily with developing benchmarks for Vermont’s Medicare’s ACO initiatives (Vermont Modified Next Generation ACO Initiative in PY1 and Vermont Medicare ACO Initiative in PY2) and producing data and reporting for CMS on progress toward the Agreement’s targets.<sup>34</sup> The GMCB is required to coordinate with OneCare to achieve the Model’s ACO scale beneficiary attribution targets, statewide financial targets, and statewide health outcomes and quality-of-care targets.<sup>12</sup>

The Vermont AHS is responsible for coordinating health care reform initiatives across state government. Act 48 of 2011 created the Director of Health Reform position<sup>o</sup> to oversee collaborations for health care reform among executive branch agencies, departments, offices, and the GMCB.<sup>5</sup> Under the Model agreement, the AHS is responsible for developing and implementing the Medicaid ACO initiative and ensuring that Vermont Medicaid participates and acts as a reliable payer. The AHS, the state’s umbrella agency for all human service activities, has an intergovernmental agreement with the DVHA to administer Vermont’s Medicaid program. DVHA offers a scale target qualifying ACO program.<sup>35</sup> To facilitate Model participation, DVHA sets ACO program rates prospectively for each calendar year to provide predictability for OneCare and participating providers.<sup>7</sup> The AHS supported the alignment of Medicaid ACO requirements with Medicare ACO standards, including modifying ACO-level quality and performance measures to harmonize measures across payers and reduce administrative burden for providers.<sup>7</sup>

## Accountable Care Organization

Vermont’s Model currently includes one private-sector, statewide ACO: OneCare.<sup>p</sup> OneCare negotiates contracts and aligns Model features across payers, supports implementation in the delivery system, and sets provider-specific financial and quality targets. Participating payers in PY1 (2018) and PY2 (2019) included Medicare, Medicaid, and BCBSVT through qualified health plans offered in the state’s Health Insurance Marketplace and a self-insured plan covering UVM Medical Center employees.

GMCB certification requires ACOs to have mechanisms and care models to execute the following activities: provide, manage, and coordinate high-quality health-care services for patients; receive and distribute payments to participating providers; and promote evidence-based

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<sup>o</sup> The Director of Health Reform role, originally in the Governor’s office under the Agency of Administration, shifted to AHS in 2017.

<sup>p</sup> In 2010, three ACOs operated in the state. At the end of 2017, two ACOs suspended operations, leaving OneCare as the sole ACO operating in the state. CHAC, a primary care association, and Vermont Collaborative Physicians, LLC (VCP), an independent practice association, did not ultimately join the Model.

health care, patient engagement, coordination of care, and use of HIT to promote integrated, efficient, seamless, and effective health-care services across the continuum of care.<sup>36</sup>

## Health-Care Delivery System

The key implementation partners for the Model include organizations in the Vermont health-care delivery system—participating hospitals and community providers—that are situated within each of the state’s 15 HSAs. The following sections describe the design features that align Model targets and financial incentives, so hospitals and community providers transform health-care delivery within their local communities to reduce spending and achieve population health outcomes.

### 2.3 Model Aims and Key Program Design Features

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The VTAPM aims to align payers through an ACO by offering risk-based payments tied to provider performance on quality and spending measures and encouraging practitioners to participate in an ACO and move from FFS to value-based payment. The Model offers several benefits to Vermonters, including the Medicaid Next Generation Agreement Prior Authorization Waiver; Medicare benefit enhancements<sup>9</sup> (e.g., post-discharge home visits, admission to a skilled nursing facility [SNF] without a three-day hospital stay, and telehealth services); and a common set of health improvement goals to encourage a cross-sector, coordinated approach to improving access and quality.<sup>12,37</sup>

As part of the GMCB’s oversight of the Model, the Board must ensure that the payers’ ACO initiatives “reasonably align” in their design. The GMCB oversees alignment across payers for the beneficiary attribution methodology, ACO quality measures, payment mechanisms, and risk arrangements.<sup>12</sup> This key Model tenet is based on the assumption that alignment across payers will ease the administrative burden on providers and facilitate provider behavior change toward delivering high-quality and efficient care.<sup>38</sup> According to the GMCB’s first annual report on Vermont’s progress toward achieving alignment of ACO initiatives:

ACO initiatives in 2018 were well aligned on most components. All initiatives used prospective attribution methodologies, included services akin to Medicare Part A and B coverage, worked to use similar sets of quality measures, and included similar approaches to risk. The biggest opportunity for increasing alignment going forward relates to the payment mechanisms employed.<sup>4</sup>

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<sup>9</sup> For more information about these benefit enhancements, see the [Next Generation ACO Model page on the CMS website](#).

Below we provide an overview of program design features across Medicare, Medicaid, commercial, and self-insured employer plans.<sup>†</sup>

## Model Targets

The VTAPM agreement lays out financial, enrollment scale, and population health targets designed to curb health-care spending growth and to encourage participating providers to work together in achieving population health goals.<sup>12</sup> The VTAPM aims to bring health-care spending in line with Vermont's overall economic growth. The Model targets are based on the hypothesis that broad ACO participation across the state will enable Vermont providers to reach the tipping point where redesigning the entire care delivery system will be a rational business strategy for providers, thereby helping the state to commit to statewide care delivery transformation.<sup>1</sup>

### *Financial targets and benchmarks*

One of the Model's primary goals is to reduce health-care spending growth. Stakeholders interviewed explained that the Model's spending growth targets were driven by a desire to bring health-care spending in line with growth in the state's overall economy. While health-care spending is relatively low in Vermont, it is growing at a higher rate than Medicare spending nationally.<sup>2</sup>

**Medicare ACO initiative benchmarks.** Vermont developed a customized approach to calculate its Medicare ACO initiative benchmarks, which is distinct from other state and Medicare ACO models. The GMCB must prospectively develop the Medicare ACO Benchmarks for PY1-PY5.<sup>12</sup> The GMCB calculates these benchmarks in relation to each PY's Annual Projected National Medicare Total Cost of Care (TCOC) per Beneficiary Growth rate. However, for PY1, the benchmark was set with a floor to ensure that it would not be too low and to reasonably account for population health investments.<sup>39</sup> The PY1 Annual Projected National Medicare TCOC per Beneficiary Growth rate was 2.74 percent, resulting in the initial benchmark, which limits growth to 3.5 percent. Each subsequent PY will be set at 0.2 percent below each new projection (see **Appendix F.1**).

**Statewide financial targets and benchmarks.** The population used to calculate the statewide performance metric is dependent on the PY—i.e., the PY1 and PY2 calculations relied on the

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<sup>†</sup> A self-insured employer plan retains the financial risk of providing health benefits to workers, in contrast to a fully insured plan where the employer and employees pay a premium to an insurance carrier that assumes financial risk for covering the cost of health benefits for covered workers. Self-insured plans are regulated by the federal government and are exempt from state insurance regulation.

Medicare ACO-aligned population in those respective PYs.<sup>5</sup> Vermont has the following statewide financial targets:

- 1) The All-Payer TCOC per Beneficiary Growth Target, which limits the growth rate to 3.5 percent
- 2) The Medicare TCOC per Beneficiary Growth Target, which limits growth to 0.2 percent below the PY's Annual Projected National Medicare TCOC per Beneficiary Growth rate<sup>12,39</sup>

Given concerns about an achievable target, the Model agreement does not require a corrective action plan unless growth exceeds 4.3 percent.

### *Population health and quality-of-care targets*

The Model agreement outlines three primary population-level health outcome goals: (1) increase access to primary care, (2) reduce deaths from suicide and drug overdose, and (3) reduce prevalence of morbidity of chronic disease. Key stakeholders explained that reducing deaths from suicide and drug overdose and addressing chronic disease are in line with Vermont's State Health Improvement Plan.<sup>40</sup> State officials identified increasing access to primary care as a goal during Model negotiations. One key informant explained: *"We thought strongly that primary care had to be the entry point to the system."* State officials also viewed the focus on primary care as attractive to potential Model participants, particularly for independent providers. Section 3.4 provides more detail on provider approaches to changing care delivery to achieve these targets.

Each payer sets a payer-specific financial target (i.e., ACO Benchmark) that accounts for expenditures on ACO-aligned beneficiaries for the payer. The Model agreement allows CMS to adjust the Medicare Performance Year Benchmark downward if the ACO does not achieve a high-enough quality score for Medicare beneficiaries.<sup>41</sup> The quality measures for Medicaid, commercial, and self-insured plans are aligned with Medicare. Each of the payers provides incentives to the ACO based on their participating providers' performance on quality measures for aligned beneficiaries. The ACO, OneCare, may choose to distribute these quality measure performance funds to the participating providers in the ACO's network.<sup>7</sup> **Appendix Exhibit G.2** details Vermont's population health targets and process milestones (e.g., increasing the number of Vermont residents receiving MAT for substance use disorders to 150 per 10,000 Vermont residents ages 18-64 who achieve between the 70 and 80<sup>th</sup> percentiles of the national Medicare

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<sup>5</sup> In PY3 (2020), the performance metric would only be based on the entire state's Medicare population if Vermont achieves at least 65 percent in the Medicare ACO Scale Target.

performance for percent of Vermont ACO-aligned beneficiaries receiving a screening for clinical depression).<sup>12</sup>

*Scale targets: Beneficiary attribution*

Vermont is responsible for meeting scale targets for Model participation—or attributing a minimum percentage of Medicare beneficiaries and insured Vermonters to the VTAPM across each PY. The state and federal governments set scale targets for the VTAPM’s participating payers to attribute 70 percent of Vermont’s insured residents and 90 percent of Medicare beneficiaries to participating ACO providers by 2022 (see **Exhibit 2.4**).<sup>12</sup> There were no individual scale targets set for Medicaid, commercial, or self-insured beneficiaries. Scale targets for the end of PY1 (2018) included 36 percent of all insured Vermont residents across payers and 60 percent of Medicare beneficiaries; in PY2 (2019), scale targets were 50 percent of insured Vermont residents and 75 percent of Medicare beneficiaries, respectively. This minimum percentage marginally increases over the term of the Model agreement (2018-2022), adopting a phased-in approach to full implementation. We discuss the ACO and state’s progress in meeting scale targets through PY2 (2019) in **Chapter 4** (see **Exhibits 4.9 and 4.10**).

**Model Scale Targets**

Attribute 70 percent of Vermont’s insured residents and 90 percent of Medicare beneficiaries to participating practitioners by 2022

**Exhibit 2.4. VTAPM Scale Targets PY1-PY5**

	By the end of PY1 (2018)	By the end of PY2 (2019)	By the end of PY3 (2020)	By the end of PY4 (2021)	By the end of PY5 (2022)
All Insured Vermonters Across Payers	36%	50%	58%	62%	70%
Vermont Medicare Beneficiaries	60%	75%	79%	83%	90%

The VTAPM employs a *prospective attribution*<sup>t</sup> methodology to attribute Vermonters to each of its ACO initiatives.<sup>42</sup> Vermonters are attributed to the Model if they receive a meaningful level of primary care services from the Model’s attribution-eligible, participating practitioners during a two-year period prior to each PY.<sup>7,38</sup> Participating practitioners are attribution-eligible if they have one or more qualifying primary or specialty care designations. Participating specialists who provide primary care services are also attribution-eligible, such as cardiologists or endocrinologists participating in the Medicare ACO initiative. Each ACO payer initiative can

<sup>t</sup> Although voluntary attribution (i.e., allowing beneficiaries to opt into the Model by identifying a Model participant as their primary care provider online or by mail) was a feature carried over from the Next Generation ACO Model, attribution occurred solely through prospective means and voluntary alignment was not used.

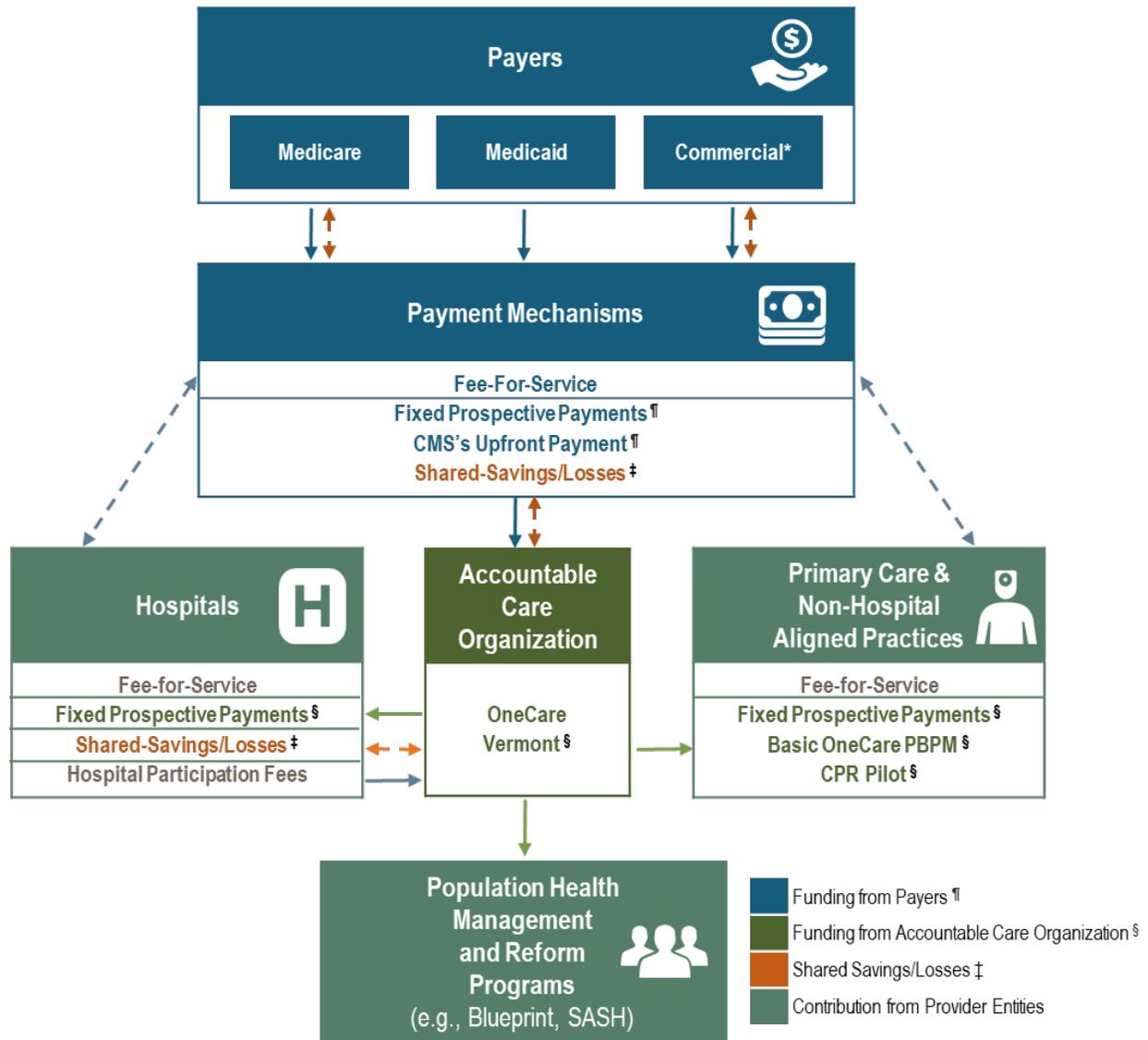
choose a different set of attribution-eligible primary or specialty care designations; the majority in PY1 (2018) and PY2 (2019) were primary care and internal medicine practitioners.<sup>43 7,38</sup>The Model's ACO initiatives also contract with "preferred" practitioners to extend the reach of the provider network. However, their patient panel would not be attributed to the Model.

To improve attribution methodology and overcome challenges to achieve the scale targets, in PY2 (2019) DVHA and OneCare piloted an expanded attribution methodology for Medicaid recipients in the St. Johnsbury HSA. The pilot based attribution on the beneficiary's geographic residence in an HSA instead of relying on claims (detailed in **Chapter 4**).<sup>38</sup>

## Financial Structure

The VTAPM features population-based payments that shift financial risk for attributed populations to hospitals and practitioners through participation in a risk-bearing ACO (OneCare in PY1 and PY2).<sup>10</sup> In addition to these payment mechanisms, CMS provided \$9.5 million in an upfront payment to the AHS to support care coordination activities, make connections to community-based resources, and support practice transformation for Medicare FFS beneficiaries. **Exhibit 2.5** illustrates the funding flows from payers through OneCare to the participating providers, including hospitals, primary care practitioners, and non-hospital-aligned practitioners.

Exhibit 2.5. VTAPM Funding Flows



NOTE: \*Commercial includes self-insured, CPR = Comprehensive Payment Reform, PBPM = per beneficiary per month, SASH = Support and Services at Home.

### *Payment mechanisms*

The prospective population-based payments from each payer flow through OneCare, which distributes the **prospective payments** to participating hospital providers based on their attributed patients. Medicare and Medicaid provide OneCare with fixed PBPM prospective payments.<sup>u</sup> For providers that accept the all-inclusive population-based payment (AIPBP), Medicare pays for each attributed beneficiary, which is reconciled to FFS payments at the end of the year. Medicaid's fixed prospective payment is not reconciled.<sup>7,8</sup> BCBSVT pays practitioners (through their health-care organization) a fixed PBPM prospective payment for each attributed beneficiary.<sup>44</sup> Payers continue to pay claims for practitioners and institutional providers that serve non-attributed beneficiaries as previously negotiated, including FQHCs, independent primary care providers and specialists, home health and hospice providers, designated mental health agencies, and SNFs.

OneCare requires hospitals to pay dues (or ACO participation fees).<sup>30,45</sup> OneCare uses these fees to support population health programs for primary care and community-based providers (detailed in **Exhibit 3.1**). Medicare has continued to provide, as advanced shared savings, an amount approximately equal to its investments in Blueprint and SASH under MAPCP (plus inflation); this is a cash flow mechanism intended to support continued investment in ACO population health programs and infrastructure investments, however, it is not explicitly or implicitly allocated to them. This same amount is also added to the TCOC benchmark in the Vermont Medicare ACO Initiative to ensure that it is not reducing shared savings from other programs. The original intention was to maintain the payments at the 2017 Medicare levels with an annual inflation rate of 3.5 percent, but this is not required by the Agreement and has fluctuated in subsequent years.<sup>20,46,47</sup> GMCB requires OneCare to continue Medicare SASH and the Blueprint payments for all Vermonters.

### *Risk-sharing arrangements*

OneCare established agreements that include risk corridors, shared-savings/loss rates, and shared-savings/loss limits for each payer (see **Exhibit 2.6**). While OneCare is ultimately responsible and takes on both upside and downside risk (i.e., sharing in both potential savings and losses), each participating hospital agrees to take on some portion of OneCare's risk for the TCOC of beneficiaries attributed to its HSA. In the first two years of the Model, OneCare used a "*Robin Hood principle*" when distributing risk to hospitals, using net patient service revenue as one marker, so larger hospitals took on more of the financial burden than smaller hospitals. In PY1, OneCare did not share any risk with employers who administered self-insured plans (only

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<sup>u</sup> DVHA continues to pay Medicaid FFS claims for non-hospital providers in OneCare's network, for all providers who are not part of OneCare's network, and for all services not included in the fixed prospective payment. See the [Department of Vermont Health Access Vermont Medicaid Next Generation ACO Program 2019 Performance report](#).

UVM Medical Center in PY1).<sup>48</sup> However, starting in PY2 (2019), self-insured plans transitioned to a two-sided risk model.<sup>49</sup>

**Exhibit 2.6. 2019 Risk Arrangements, by Payer**

	Medicare	Medicaid	Commercial	Self-Insured
Shared-Savings Rate	100%	100%	50%	30%
Shared-Loss Rate	100%	100%	50%	30%
Shared-Loss Limit (stop loss as a percentage of TCOC)	5%	4%	6%	6%
Shared-Savings Limit (stop gain as a percentage of TCOC)	5%	6%	6%	6%

**2.4 Comparison with Other Medicare ACO Initiatives**

The VTAPM is distinct from other Medicare ACO initiatives in that funding from all participating payers flows through a single ACO. Other Medicare ACOs are often a single payer (e.g., Medicare only) and funding often flows through multiple ACOs to participating providers and practitioners. **Exhibit 2.7** compares the VTAPM Medicare ACO initiative to other Medicare ACO initiatives. It is important to note that in PY1 (2018), the Medicare portion of the VTAPM was a modified version of the Medicare NGACO Model.<sup>12</sup> The VTAPM used the NGACO design features to get started quickly in 2017.

The VTAPM diverges from the NGACO methodology in calculating the benchmark; the VTAPM agreement gives the GMCB authority to set the Vermont Medicare ACO benchmark, or the agreement’s spending target. The benchmark score also incorporates the ACO’s performance on quality measures instead of impacting its shared-savings rates.<sup>4,8</sup>

Both the NGACO Model and the VTAPM Medicare ACO initiative feature prospective beneficiary attribution. Both were designed with the option for beneficiaries to voluntarily attribute themselves to a participating practitioner within an ACO; however, VTAPM has not implemented voluntary alignment. VTAPM’s Medicaid ACO initiative piloted expanded attribution in PY2<sup>v</sup> (2019) and moved to expanded attribution in PY3 (2020).<sup>38</sup>

VTAPM payment mechanisms and benefit enhancements for Medicare beneficiaries also are similar to the NGACO Model. Both models allow waivers for SNF care, telehealth, and post-discharge home visits for Medicare beneficiaries and feature an AIPBP for attributed Medicare beneficiaries.<sup>50</sup> While an AIPBP is an NGACO Model feature, only one of 50 NGACOs elected the AIPBP as an alternative payment mechanism in 2018.<sup>50</sup> Thus, the VTAPM’s widespread use

<sup>v</sup> This approach was originally referred to as geographic attribution.

of the AIPBP for Medicare is distinct. Participants in the VTAPM and NGACO Models serving a high volume of Medicare beneficiaries also had the option to receive credit for participation in an Advanced Alternative Payment Model (APM), a track of the CMS Quality Payment Program.<sup>w</sup>

The VTAPM moves to prospective beneficiary attribution and higher shared-savings/loss rates than prior initiatives. The VTAPM Medicare ACO initiative and the NGACO Model differ from the Medicare SSP ACO Tracks 1 and 1+ across a number of key features. Unlike the prospective attribution used in the VTAPM, Medicare SSP Track 1 and Track 1+ use concurrent beneficiary attribution and lack Medicare benefit enhancements and payment mechanisms available to the VTAPM. Medicare shared-savings/loss rates of 100 percent for the VTAPM fall at the higher limit of the NGACO Model and are much higher than Medicare SSP Track 1+ (up to 50 percent). However, the Medicare shared-savings/loss limits for the VTAPM (5 percent of TCOC) fall at the lower end of the range of the NGACO Model (5-15 percent). While the shared-savings/loss rates are relatively high for the VTAPM, the risk limits are at the lower end of the range for other Medicare ACO models.

**Exhibit 2.7. VTAPM Medicare ACO Initiative Compared to Other Medicare ACO Initiatives—PY2 (2019)**

2019 Design Features	VTAPM: Medicare ACO initiative	Medicare NGACO	Medicare SSP, Track 1	Medicare SSP, Track 1+
<b>Beneficiary Attribution and Characteristics</b>				
Attribution Type	Prospective	Prospective	Concurrent	Concurrent
Option for Voluntary Alignment		●	●	●
Beneficiary Eligibility Criteria	Medicare	Medicare	Medicare	Medicare
Average Number of Attributed Beneficiaries per ACO (Medicare initiative only for VT)	53,973	33,404	20,445	22,496
Advanced APM	●	●		●
<b>Risk Arrangements</b>				
One-Sided Risk (“Upside Risk”)			●	
Two-Sided Risk (“Downside Risk”)	●	●		●

<sup>w</sup> Model participants also have the option to participate in other Medicare incentive programs if they meet eligibility requirements. These providers are automatically eligible to receive 5 percent bonuses through their Quality Payment Program participation and are exempt from Merit-based Incentive Payment System (MIPS) reporting requirements. Medicare providers that do not participate in an Advanced Alternative Payment Model must follow MIPS reporting requirements but will earn performance-based payment adjustments.<sup>w</sup>

2019 Design Features	VTAPM: Medicare ACO initiative	Medicare NGACO	Medicare SSP, Track 1	Medicare SSP, Track 1+
Shared-Savings Rate	80% or 100%*	80% or 100%**	50%	50%
Shared-Loss Rate	80% or 100%*	80% or 100%**		30%
Shared-Loss Limit (“Stop Loss” as a percentage of TCOC)	5%	5 – 15%		4% of benchmark or 8% of ACO Medicare revenue***
Shared-Savings Limit (“Stop Gain” as a percentage of TCOC)	5%	5–15%	10%	10%
Minimum Savings/Loss Requirements (“Risk Corridor”)			2–3.9% savings****	0.5–2% fixed corridor or 2-3.9% variable corridor****
<b>Quality Measurement</b>				
Quality Score Affects Shared-Savings Rate			●	●
Quality Score Affects Spending Benchmark	●	●		
<b>Medicare Benefit Enhancements</b>				
Skilled Nursing Facility 3-Day Rule Waiver	●	●		●
Telehealth Waiver	●	●		
Post-Discharge Home Visit Waiver	●	●		
<b>Payment Mechanisms</b>				
AIPBP	●	●		
Advanced APM Bonus Payments	●	●		●

Sources: 2019 Shared Savings Program (SSP) ACOs PUF. <https://data.cms.gov/Special-Programs-Initiatives-Medicare-Shared-Savin/2019-Shared-Savings-Program-SSP-Accountable-Care-O/v3c3-qgff>.

Vermont All-Payer ACO Model Annual ACO Scale Targets and Alignment Report Performance Year 2 (2019).

[https://gmcbboard.vermont.gov/sites/gmcb/files/documents/payment-reform/PY2%20Annual%20ACO%20Scale%20Targets%20and%20Alignment%20Report\\_FINAL2.pdf](https://gmcbboard.vermont.gov/sites/gmcb/files/documents/payment-reform/PY2%20Annual%20ACO%20Scale%20Targets%20and%20Alignment%20Report_FINAL2.pdf).

Next Generation ACO Model Financial and Quality Targets: Performance Year 4 (2019) Results.

<https://innovation.cms.gov/media/document/nextgenaco-py4finalresults>.

Next Generation ACO Model Calculation of the Performance Year Benchmark: Performance Years 2019 and 2020.

<https://innovation.cms.gov/files/x/nextgenaco-benchmarkmethodology-py4.pdf>.

MSSP Shared Savings and Losses Assignment Methodology.

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/Shared-Savings-Losses-Assignment-Spec-V7.pdf>.

<sup>1</sup> Exhibit adapted from Kaiser Family Foundation’s “Medicare Delivery System Reform: The Evidence Link.”<sup>32</sup>

\* At the time of this report, there is only one participating ACO, which has chosen 100% shared savings and losses rates.

\*\*These shared-savings/loss rates are based on risk option.

\*\*\*Shared-loss limit based on ACO size.

\*\*\*\* These minimum savings/loss requirements are based on ACO size.

## Chapter 3: Model Participation—Hospitals, Practitioners, and Beneficiaries

### Key Takeaways

#### Payer Participation



- While the VTAPM is designed to include Vermont’s major public and commercial insurers, BCBSVT was the only commercial payer in the Model in PY1 (2018) and PY2 (2019).
- While the University of Vermont Medical Center (UVMCC) self-insured plan participated beginning in PY1, the two largest self-insured plans (Vermont teachers’ union and the State Employees’ Health Care Plan) did not participate in PY1 or PY2.

#### Hospital Participation



- In PY2 (2019), only 8 of the 15<sup>x</sup> eligible hospitals participated in all participating payer ACO initiatives (Medicare, Medicaid, and commercial).
- Critical Access Hospitals (CAHs) were reluctant to participate in the Medicare ACO initiative due primarily to concerns about taking on additional risk in the face of thin operating margins and the lack of guidance regarding how the Medicare’s AIPBP mechanism aligned with CAH cost-based reimbursement and payment benefit.

#### Practice- and Practitioner-Level Participation



- Because hospitals are the risk-bearing entities, practitioners can only participate with a hospital partner.
- The Medicare ACO participation rate is higher among large practices (those with more than 50 participating practitioners) than among smaller practices.
- Practitioner participation in the Model increased between PY1 and PY2
- There was only a small increase in the number of practitioners who participated in all participating payer initiatives, mirroring that of the hospitals.

#### Scale Target Performance



- The Model failed to achieve the all-payer and Medicare-specific beneficiary attribution scale targets in PY1 (2018) and PY2 (2019).
- The Medicare ACO initiative has limited presence in the state’s more rural areas.
- Given the Model’s limited scale, most providers continue to have a majority of their revenue in FFS, which is an additional barrier to widespread delivery system transformation.
- The greatest opportunities for reaching scale are: (1) adjust mechanisms for Model attribution; (2) increasing participation of self-insured employers; and (3) increasing the participation of CAHs in the Medicare ACO initiative.

<sup>x</sup> One of the 15 hospitals—Dartmouth Hospital and Clinic—is located in Lebanon, NH, but its service area includes counties in Vermont.

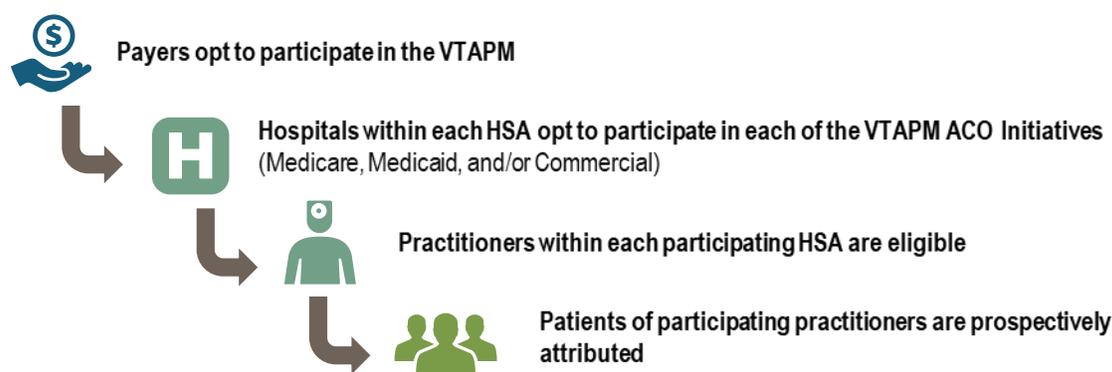
As discussed in Chapter 2, Vermont is responsible for meeting scale targets for Model participation, namely, to attribute a minimum percentage of the Medicare, Medicaid, and commercial populations to the VTAPM in each Model PY. For payers and providers, participation in the Model is voluntary. While the VTAPM aims to achieve a uniform payment and incentive structure across payers, providers who choose to participate are not required to do so with all participating payers. Hospitals are the primary risk-bearing entities in the Model. As a result, unless the “home” hospital in each of Vermont’s 15 HSAs<sup>y</sup> opts to participate in the VTAPM, other health-care providers and practitioners in the HSA will not be eligible to participate. (See **Exhibit 3.1** for a schematic depicting the mechanism for participation.) The payers and providers can opt to change their participation decisions during each performance period.

In this chapter, we present findings on the extent of payer and provider participation (hospitals, practices, and practitioners both individually and as part of networks) in the VTAPM during the first two PYs. Additionally, we consider the Model’s progress toward achieving the all-payer and Medicare scale targets, and the barriers and facilitators associated with Model participation. Sources for the analyses presented in this chapter include Medicare claims; Model participation lists; the CMS National Plan and Provider Enumeration System (NPPES); the Medicare Provider Enrollment, Chain, and Ownership System (PECOS); American Hospital Association Annual Survey Database; stakeholder interviews; and Model documents, including GMCB and OneCare reports.

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**Exhibit 3.1. Model Participation Mechanisms**

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<sup>y</sup> OneCare’s definition of HSA refers to one or more counties that are relatively self-contained with respect to the provision of routine hospital care as defined by the Dartmouth Atlas methodology. The Blueprint uses a different HSA definition and includes only 13 HSAs.

### 3.1 Payer Participation

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**While the VTAPM is designed to include Vermont’s major public and commercial insurers, BCBSVT was the only commercial payer in the Model in PY1 (2018) and PY2 (2019).** The two major public insurers—Medicare and Medicaid—have participated with BCBSVT through its qualified health plans (QHPs) and self-insured employer plans that decided to participate (see **Appendix Exhibit H.1**). While some national commercial payers have a growing market share in Vermont in the large group market, they have not chosen to participate. One stakeholder suggested this may be due to the limited size of national payers’ enrollment in the state and the Model’s reporting requirements. A GMCB report cited the lack of state regulatory oversight over self-insured employer plans and increasing market share of Medicare Advantage (MA) plans as barriers to meeting scale targets.<sup>7</sup> OneCare is working with payers to facilitate self-insured employers joining through third-party plan administrators, but stakeholders noted resistance among some of the self-insured employers (e.g., Vermont-National Education Association [NEA] and the State Employees’ Health Care Plan) to join the Model.<sup>z</sup>

### 3.2 Hospital Participation

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**Most hospitals serving Vermonters participated in one or more of the three payer ACO initiatives (13 of 15 in PY2); however, small, independent hospitals in rural areas of the state (5 of 7 in PY2; see Exhibit 3.2) opted not to participate in the Medicare ACO initiative because of the greater downside risk and concern about the impact of AIPBP on CAH reimbursement and benefits.**<sup>aa</sup> The OneCare provider network is divided into 15 HSAs, each with its own home hospital. The hospitals include Vermont’s 14 hospitals and the DHMC in New Hampshire.<sup>bb</sup> The number of hospitals participating in any VTAPM ACO payer initiative increased during the first two PYs (from 4 in PY0 to 10 in PY1 and 13 in PY2). The number of hospitals participating in all VTAPM ACO payer initiatives also increased during this period (from 0 in PY0 to 6 in PY1 and 8 in PY2). Five of the seven hospitals that did not participate in the VTAPM’s Medicare ACO initiative were CAHs.

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<sup>z</sup> The State Employees’ Health Care Plan joined the Model in PY4 (2021).

<sup>aa</sup> CMS adopted MSSP’s Extreme and Uncontrollable Circumstances policy for the Vermont Medicare ACO Initiative, reducing 2020 downside risk by reducing shared losses by the proportion of months during the COVID-19 pandemic ([June 24, 2020, memo from CMS to Michael K. Smith, Secretary, Agency of Human Services and Kevin Mullin, Chair, Green Mountain Care Board](#)). GMCB requested that this reduction in downside risk continue through the duration of the PHE in 2020 (see [December 23, 2020, memo from Kevin Mullin, GMCB to CMS](#)).

<sup>bb</sup> OneCare’s definition of HSA refers to one or more counties that are relatively self-contained with respect to the provision of routine hospital care as defined by the Dartmouth Atlas methodology. The Blueprint uses a different HSA definition and includes only 13 HSAs.

**Exhibit 3.2. Hospital Participation by Payer, Performance Period, and Organizational Characteristics**

Health Service Area	Home Hospital	Type of Hospital	Number of Beds*	Hospital Affiliation	2017	2018	2019
Burlington	UVM Medical Center	PPS	415	UVM Health Network	Medicaid	All Risk Programs	All Risk Programs
Berlin	Central Vermont Medical Center	PPS	76	UVM Health Network	Medicaid	All Risk Programs	All Risk Programs
Middlebury	Porter Medical Center	CAH	25	UVM Health Network	Medicaid	All Risk Programs	All Risk Programs
St. Albans	Northwestern Medical Center	PPS	53	Independent	Medicaid	All Risk Programs	All Risk Programs
Brattleboro	Brattleboro Memorial Hospital	PPS	47	Independent		All Risk Programs	All Risk Programs
Springfield	Springfield Hospital	CAH	25	Independent		All Risk Programs	All Risk Programs
Lebanon	Dartmouth Hospital and Clinic	PPS	374	Dartmouth-Hitchcock Health		Medicaid & BCBSVT	Medicaid & BCBSVT
Bennington	Southwestern Vermont Medical Center	PPS	78	Independent		Medicaid	All Risk Programs
Windsor	Mt. Ascutney Hospital	CAH	25	Dartmouth-Hitchcock Health		Medicaid	All Risk Programs
Newport	North Country Hospital	CAH	25	Independent		Medicaid	Medicaid
Rutland	Rutland Regional Medical Center	PPS	124	Independent			Medicaid
St. Johnsbury	Northeastern Regional Hospital	CAH	25	Independent			Medicaid
Randolph	Gifford Medical Center	CAH	29	Independent			Medicaid
Morrisville	Copley Hospital	CAH	25	Independent			
Townshend	Grace Cottage	CAH	19	Independent			

SOURCE: 2019 OneCare Hospital Participation list; NORC Analysis of Hospital Cost Report Public Use File.

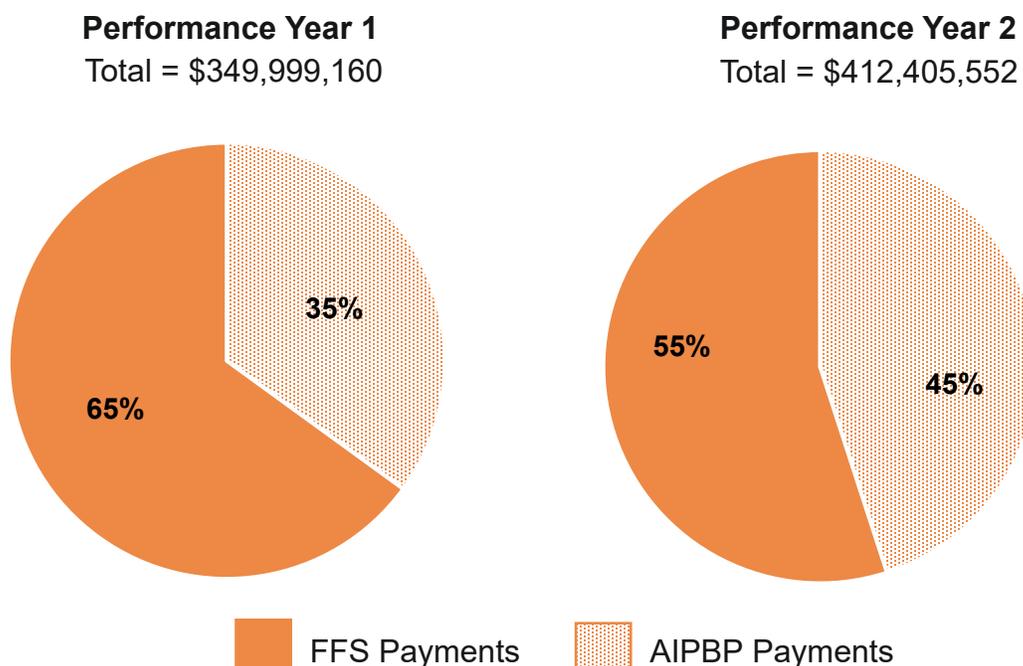
NOTE: PPS – Prospective Payment System Hospital; CAH – Critical Access Hospital.\* The number of beds available for use by patients at the end of the cost reporting period. A bed means an adult bed, pediatric bed, birthing room, or newborn ICU bed (excluding newborn bassinets) maintained in a patient care area for lodging patients in acute, long-term, or domiciliary areas of the hospital. Beds in labor rooms, birthing rooms, post-anesthesia or post-operative recovery rooms, outpatient areas, emergency rooms, ancillary departments, nurses’ and other staff residences, and other such areas that are regularly maintained and utilized for only a portion of patient stays (primarily for special procedures or not for inpatient lodging) are not termed a bed for these purposes.

**A significant and increasing fraction of the participating hospitals’ overall Medicare FFS revenue was withheld by Medicare and paid to OneCare as periodic, lump-sum population-based payments.** This AIPBP may give OneCare greater flexibility in establishing payment relationships with providers and upfront resources to invest in delivery system transformation. As discussed in Chapters 2 and 4 (Sections 2.3 and 4.2), all hospitals participating in the Medicare ACO initiative opted for the AIPBP.<sup>cc</sup> Between PY1 and PY2, the share of Medicare revenue for hospital-based services paid through the AIPBP increased from 35 percent to 45

<sup>cc</sup> <https://innovation.cms.gov/files/slides/nextgenaco-2017popbasedpaymentslides.pdf>.

percent, reflecting the increase in participation in the Medicare ACO initiative and an associated increase in attributed Medicare beneficiaries (see Exhibit 3.3). However, the greater share of total payments continued through FFS, as hospitals participating in the Model still served a number of non-attributed beneficiaries.

**Exhibit 3.3.** Share of Medicare FFS Payments for Hospital-Based Services Covered by AIPBP, PY1 and PY2



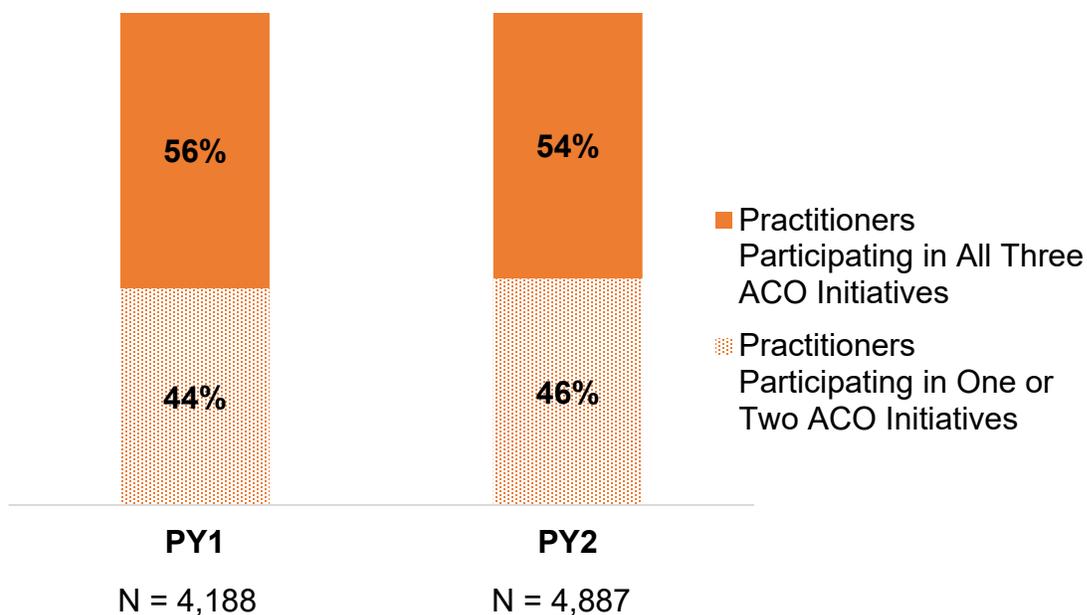
SOURCE: NORC analysis of Medicare claims data.

NOTE: This exhibit includes the sum total of all Medicare payments – FFS and AIPBP – to participating hospitals for FFS-covered services rendered to attributed and non-attributed Medicare beneficiaries during the PY (i.e., denominator).

### 3.3 Participation by Practitioner- and Practice-Level Networks

**Hospital participation decisions within each HSA had a direct impact on the participation of practices and practitioners in the VTAPM and across the three ACO payer initiatives.** Practitioner eligibility depends on whether the hospital within their HSA is participating in each payer initiative. The number of practitioners participating in the VTAPM increased between the first two PYs; however, the share of the providers who were eligible for and opted to participate in all three VTAPM ACO payer initiatives decreased slightly (see **Exhibit 3.4**).

**Exhibit 3.4. Practitioner Participation in the VTAPM, PY1 and PY2**



SOURCE: NORC analysis of Medicare claims data.

NOTE: Counts below the labels represent the total eligible population for each category (i.e., denominator).

**Most practitioners who participated in the VTAPM in PY1 continued to do so in PY2.**

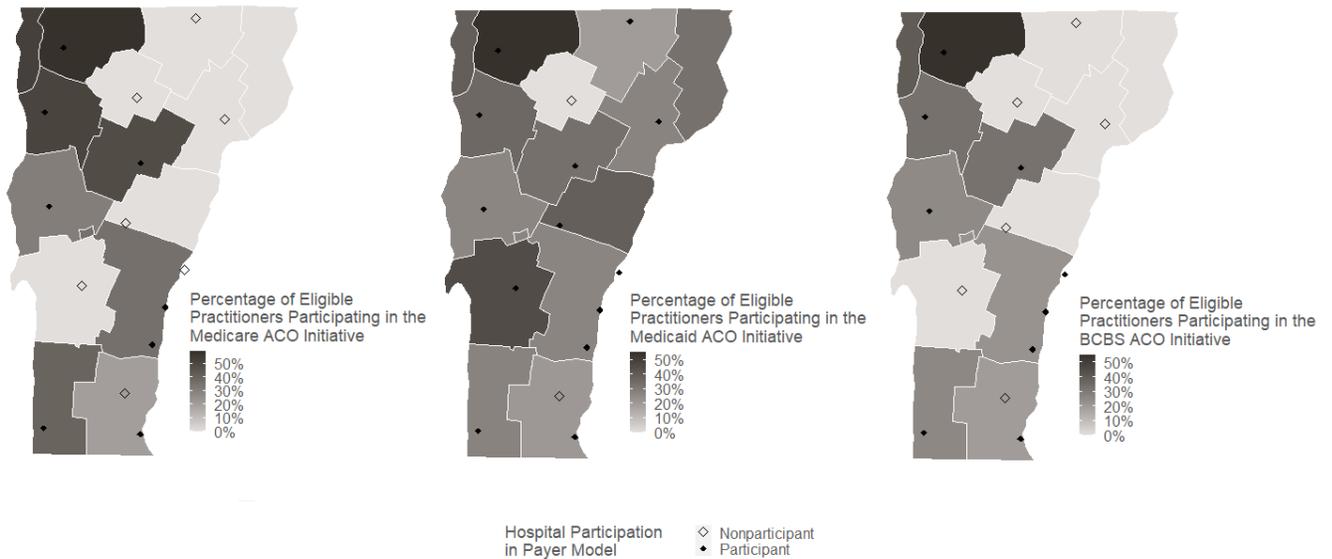
Between PY1 and PY2, about 17 percent (n = 729) of practitioners participating in any of VTAPM’s ACO payer initiatives in PY1 exited the Model and about 29 percent (n = 1,426) of the PY2 practitioners were new entrants (see **Appendix Exhibit H.2**). Of those who participated in all three of VTAPM’s ACO payer initiatives in PY1, 84 percent (n = 3,459) maintained the same level of participation in PY2 (see **Appendix Exhibit H.3**).

**Urban counties served by the UVM and Dartmouth-Hitchcock health systems had higher practitioner participation rates in PY2.**<sup>dd</sup>

Although there was broader participation in the VTAPM’s Medicaid and commercial ACO initiatives, participation rates in rural counties was similar to those for the Medicare ACO initiative (see **Appendix Exhibit H.4**). Participation in the Medicare ACO initiative was also more concentrated in specific counties than participation in the VTAPM’s Medicaid and commercial ACO initiatives. As Exhibit 3.5 illustrates, participation rates in rural counties was similar across all payer types.

<sup>dd</sup> See **Appendix Exhibit H.5** for a reference map of Vermont population by county for reference relative to maps shown in Exhibit 4.5. Low-population areas in the northeast corner of the state align with areas that see lower percentage of eligible practitioners participating in the Medicare ACO and BCBS ACO initiatives.

**Exhibit 3.5. Practitioner Participation, by VTAPM ACO Payer Initiative and County (PY2)**

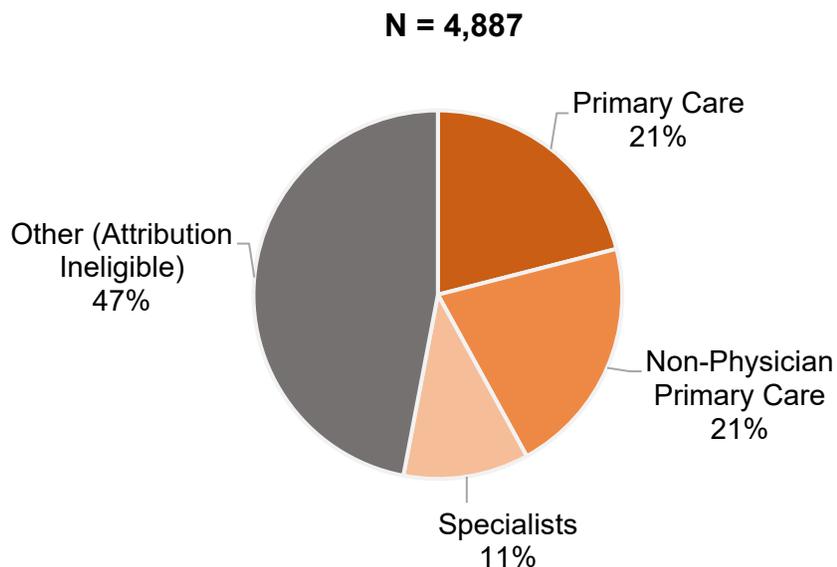


SOURCE: NORC analysis of Medicare claims data.

NOTE: We used the VTAPM Provider Files to identify the VTAPM ACO participants. We identified the eligible, non-participants based on their specialty designation; non-participants needed to have one or more of the specialty designations held by the participants.

**The high proportion of practitioners in the VTAPM ACO provider network with attribution-ineligible specialties limited the ability of the Model to achieve the scale targets (see Exhibit 3.6).** About 47 percent (n = 2,291) of the practitioners in the ACO provider network did not have an attribution-eligible specialty (see Appendix Exhibit H.6). Therefore, the patient population of these practitioners had no opportunity to be attributed to the Model. Most of the attribution-eligible practitioners in the ACO provider network had primary care specialties. Over half of the practitioners with primary care specialties were non-physicians (i.e., nurse practitioners and physician assistants).

**Exhibit 3.6. Practitioner Participation, by Specialty, PY2**



SOURCE: NORC analysis of Medicare claims data.

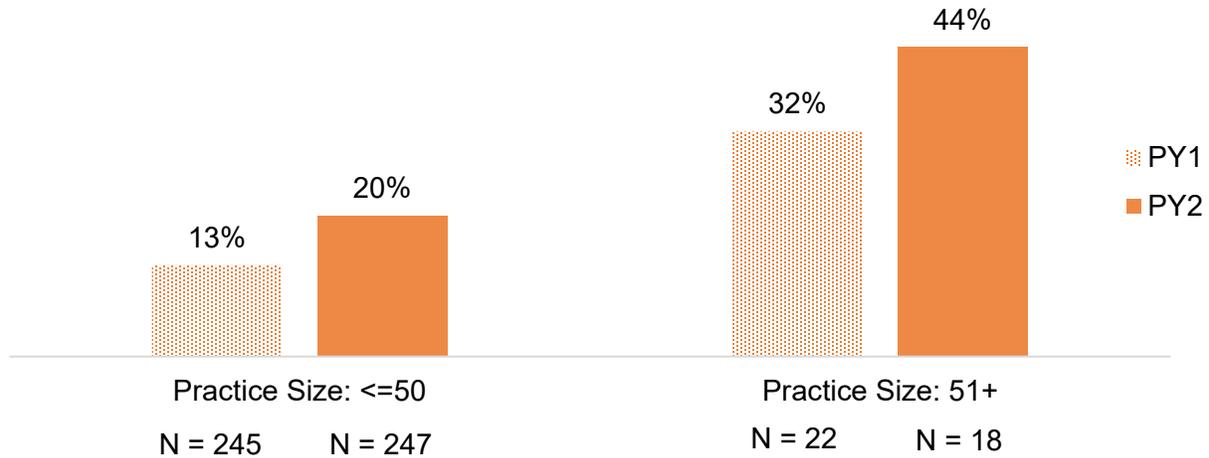
NOTE: Other (Attribution Ineligible) represents the practitioners who are not attribution-eligible providers. These numbers represent participating and preferred NPIs. Alignment eligible specialists are primary care specialists (general practice, family medicine, internal medicine, pediatric medicine, geriatric medicine, nurse practitioners, clinical nurse specialists, physician assistants); cardiology; osteopathic manipulative medicine; neurology; obstetrics/gynecology; sports medicine; physical medicine and rehabilitation; psychiatry; geriatric psychiatry; pulmonology; nephrology; endocrinology; multi-specialty clinic or group practice; addiction medicine; hematology; hematology/oncology; preventive medicine; medical oncology; gynecological/oncology; and neuropsychiatry.

**Medicare ACO participation rates are higher among large practices than among smaller practices.** As of PY2, about 44 percent of the eligible Vermont-based practices<sup>ee</sup> with over 50 affiliated practitioners participated in the VTAPM, compared with 20 percent of the Vermont-based practices with fewer than 50 affiliated practitioners (see **Exhibit 3.7**).<sup>ff</sup> Between PY1 and PY2, there was an increase in the number of practices, FQHCs, and rural health clinics in the ACO provider network, with much of the increase occurring in the Medicare and commercial ACO initiative provider networks. See **Appendix Exhibit H.7** for more information.

<sup>ee</sup> If one or more practitioners affiliated with the practice have an attribution-eligible specialty, the practice is deemed eligible.

<sup>ff</sup> We used the Tax ID number to identify group practices. We used the CMS Certification Number to identify FQHCs, rural health clinics, and eligible CAHs. To calculate practice size, we counted all providers associated with a billing tax identification number (TIN) to define a practice. We counted all providers associated with the CMS Certification Number (CCN) to calculate the number of practitioners associated with FQHCs, rural health clinics, and eligible CAHs.

**Exhibit 3.7. Share of Eligible Practices Participating in Medicare ACO Initiative, by Practice Size, PY1 and PY2**

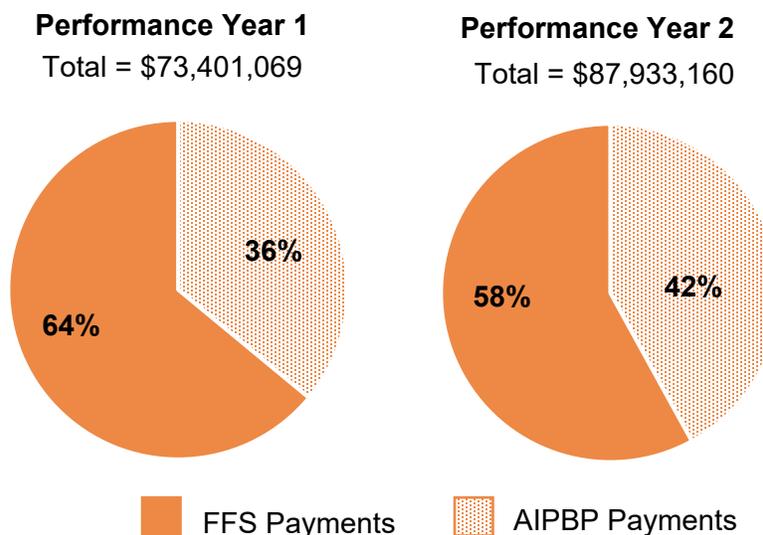


SOURCE: NORC analysis of Medicare claims data.

NOTE: Counts below the labels in graphic represent the total number of eligible practices in each category (denominator). Eligible practices include participating, non-participating, and preferred providers.

**Participating hospitals are the primary risk-bearing entities; however, the AIPBP covered a significant share of the Medicare FFS revenue associated with professional services rendered by practitioners in the ACO provider network.** Between PY1 and PY2, the share of Medicare FFS revenue associated with professional services covered by the AIPBP increased from 36 percent to 42 percent (see Exhibit 3.8). The overall size of the periodic, lump-sum payments for professional services may give OneCare flexibility to establish payment relationships with the providers and upfront resources to invest in delivery system transformation.

**Exhibit 3.8. Share of Medicare FFS Payments for Professional Services Covered by AIPBP**



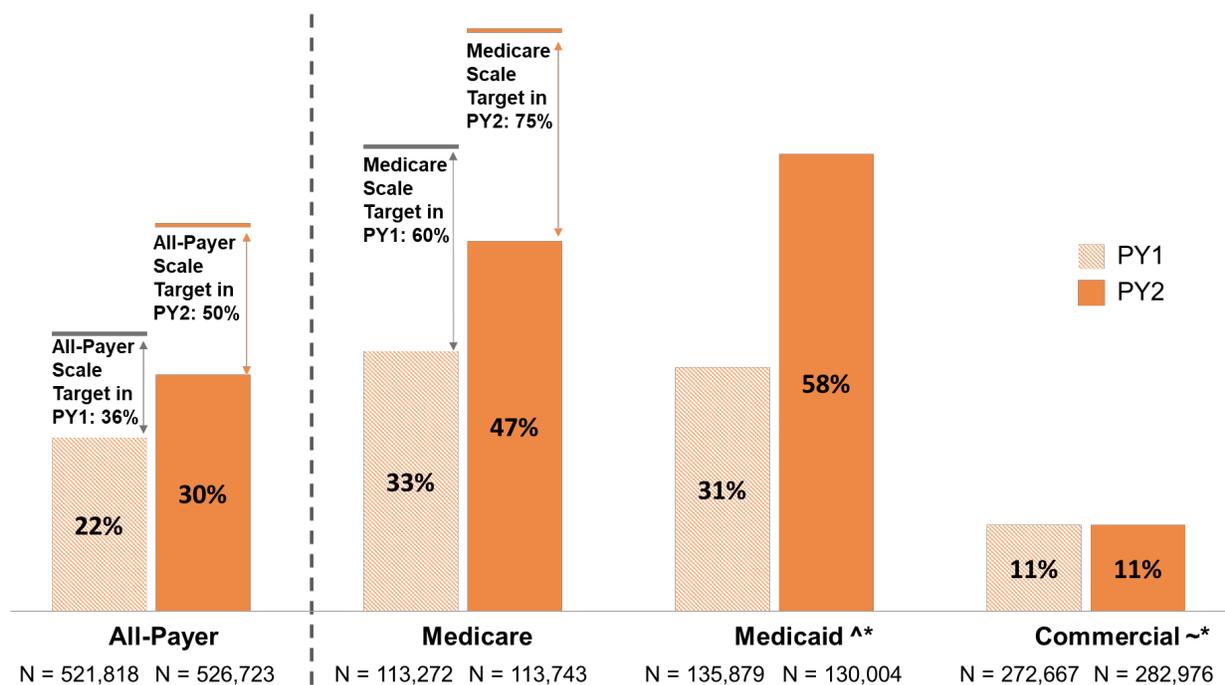
SOURCE: NORC analysis of Medicare claims data.

NOTE: This exhibit includes the sum total of all Medicare payments – FFS and AIPBP – to participating and preferred practitioners who opted for AIPBP for FFS-covered services rendered to attributed and non-attributed Medicare beneficiaries during the PY (i.e., denominator).

**3.4 Assessing Scale Target Performance by Payer and Performance Period**

**For both PY1 and PY2, the VTAPM did not meet the all-payer and Medicare-specific scale targets.** As described in Chapter 2, Vermont is required to meet specific all-payer and Medicare scale targets in each PY. In PY2, the GMCB’s analysis of the Model’s progress found that 30 percent (n = 160,048) of the eligible insured Vermont population was attributed to the VTAPM, falling short of the all-payer scale target by 20 percentage points (see **Exhibit 3.9**). For the VTAPM’s Medicare ACO initiative in PY2, the VTAPM achieved a scale target of 47 percent (n = 53,973), falling short of the scale target goal of 75 percent.

**Exhibit 3.9. Scale Target Performance—GMCB Analysis**



SOURCE: GMCB Vermont All-Payer ACO Model Annual ACO Scale Targets and Alignment PY1 and PY2 Reports.

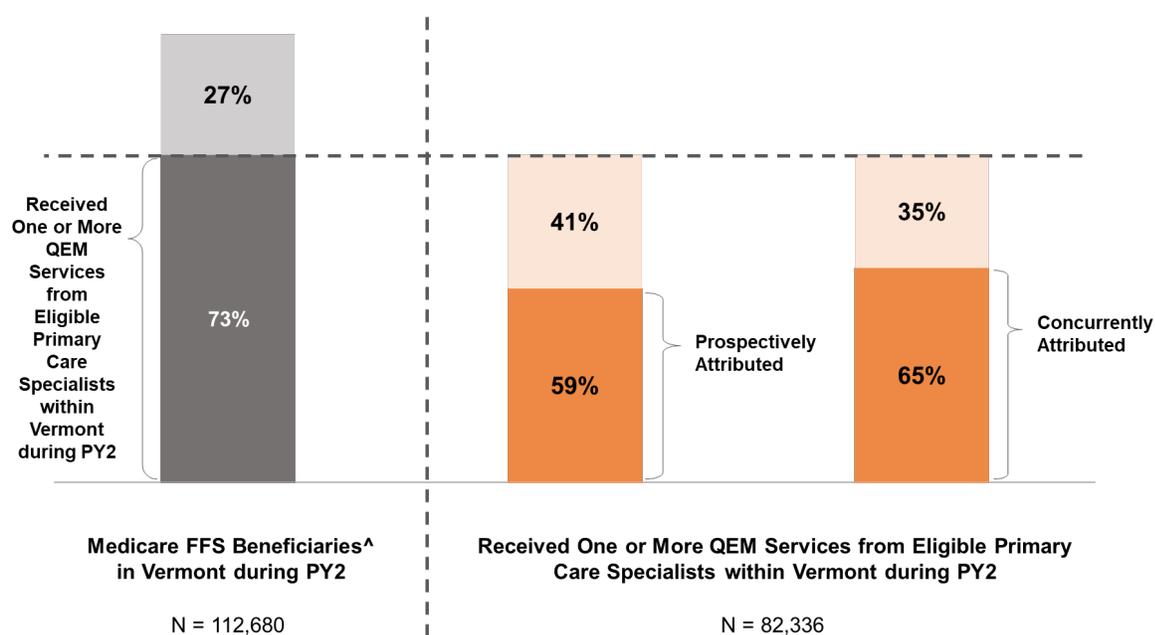
NOTE: ^ Exclusion of Medicaid recipients with evidence of third-party coverage, limited Medicaid benefits package, or who are dually eligible; ~ Commercially insured members include self-insured employers, fully insured, and Medicare Advantage plans. Members of insurance plans that do not have a Certificate of Authority from Vermont’s Department of Financial Regulation are excluded; \* Expected Attribution Rate not available. Counts below the labels in graphic represent the total population for each category (denominator).

Medicare beneficiaries are attributed prospectively to the VTAPM, based on the beneficiary’s past care utilization patterns.<sup>88</sup> Any change to care-seeking patterns during the PYs could affect the Model’s actual reach. Specifically, over 25 percent of the eligible Medicare beneficiary population did not receive any qualified evaluation and management (E&M) services within the state during PY2 (see **Exhibit 3.10**).

<sup>88</sup> The prospective attribution process assigns patients to practitioners through patient claims data. Patients are attributed to the VTAPM if they receive a meaningful level of primary care services, as measured by the allowed charges associated with qualified evaluation and management (QEM) visits rendered by practitioners with eligible specialties, during the three years leading up to the performance period. Alignment-eligible specialists are primary care specialists (general practice, family medicine, internal medicine, pediatric medicine, geriatric medicine, nurse practitioners, clinical nurse specialists, physician assistants); cardiology; osteopathic manipulative medicine; neurology; obstetrics/gynecology; sports medicine; physical medicine and rehabilitation; psychiatry; geriatric psychiatry; pulmonology; nephrology; endocrinology; multi-specialty clinic or group practice; addiction medicine; hematology; hematology/oncology; preventative medicine; medical oncology; gynecological/oncology; and neuropsychiatry.

To consider the potential impact of this gap on measurement of the scale target, we assessed performance after excluding such beneficiaries, creating an alternative assessment of the Medicare scale target. With the alternative assessment, the Model performed better than the GMCB’s assessment in PY2 but still did not achieve the 75 percent scale target. The Medicare scale target performance in PY2 would be marginally higher at 65 percent (n = 53,915) if attribution were based on Medicare beneficiaries’ care-seeking patterns during the PY, in contrast with using a prospective attribution methodology. Further, under the alternative assessment, the Medicare scale target performance increased in PY2 over PY1 (see **Appendix Exhibit H.8**).

**Exhibit 3.10. Alternative Assessment of Medicare Scale Target Performance (PY2)**



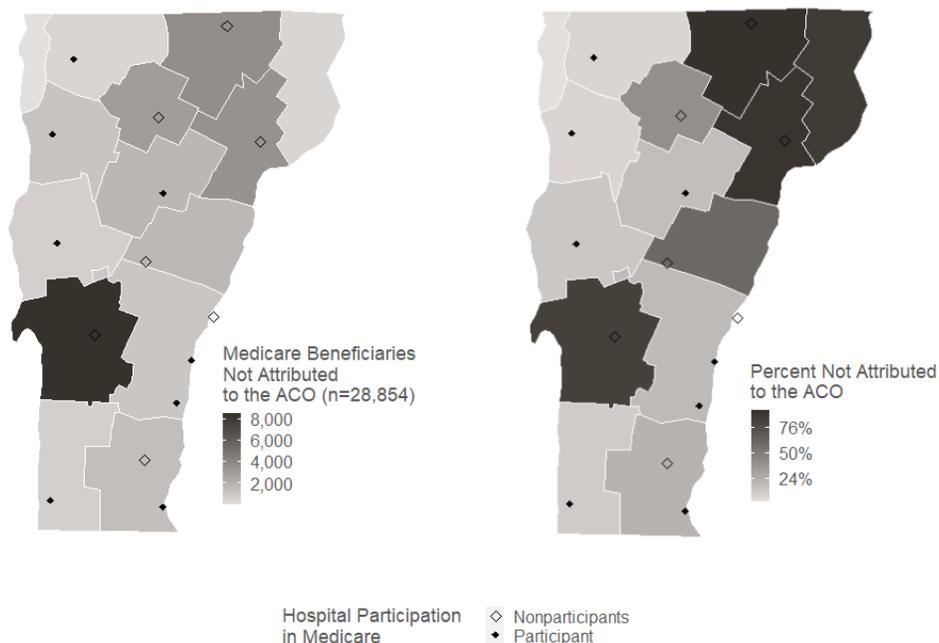
SOURCE: NORC analysis of Medicare claims data.

NOTE: <sup>^</sup> FFS Part A & B coverage, no Medicare Advantage coverage during the year, and Medicare was not a secondary payer at any point during the year. Counts below the labels in the graphic represent the total eligible population for each category (denominator). This alternative approach to assessing Medicare Scale Target performance serves to inform the assessment and is not representative of the Model’s Scale Target Performance definition.

As noted earlier, participation in the Medicare ACO initiative among hospitals and practitioners is lowest in the more rural counties. **Exhibit 3.11** illustrates the counties with the greatest number of non-attributed Medicare beneficiaries. While the counties in the northeastern area of the state are among those with the highest percentage of eligible, non-attributed beneficiaries, the county in which Rutland Regional Medical Center is located, which participated in the Medicaid ACO initiative only in PY1 and PY2, has the greatest number of non-attributed Medicare beneficiaries (see **Appendix Exhibit H.9**).<sup>hh</sup>

<sup>hh</sup> Rutland Regional Medical Center joined the Medicare ACO initiative in PY4 (2021).

**Exhibit 3.11. Medicare Beneficiaries Attributed to the VTAPM by County (PY2)**



SOURCE: NORC analysis of Medicare claims data.

**3.5 Barriers and Opportunities to Increasing Participation and Achieving Scale Targets**

Given the requirement to achieve scale targets and the importance of widespread participation to meeting the VTAPM’s goals, the state, OneCare, and participating payers have identified opportunities to increase Model participation for payers, hospitals, and practitioners.<sup>ii</sup>

**Increasing predictability of Medicare ACO initiative, particularly for rural hospitals**

In April 2019, the GMCB and Vermont AHS surveyed Vermont hospitals and FQHCs to assess how the state can increase provider participation in the VTAPM.<sup>51</sup> Survey respondents noted that to increase participation and achieve the scale target goals, hospitals and FQHCs need to feel that the Model’s payment structure is “transparent, predictable, and sustainable.” Further, respondents agreed that payments from the ACO and participating payers must offset provider burden for the additional administrative and reporting requirements involved with Model participation.<sup>35</sup>

<sup>ii</sup> For additional discussion on progress and challenges meeting scale targets, see the [GMCB Vermont All-Payer ACO Model Annual ACO Scale Targets and Alignment Report Performance Year 2 \(2019\)](#).

As noted above, the VTAPM has been most successful in increasing participation in the Medicaid ACO initiative, due in part to OneCare’s strong partnership with the state Medicaid agency. Medicaid leaders interviewed credited this continued growth to a *“focus on executing on the operational side and making sure that [they] are adhering to the contract, are being good partners with the ACO, and are trying to be responsive to any feedback that might be coming from the provider community as they’re participating in this and learning from it.”*

### **Expansion of attribution methodology**

Several stakeholders reported that the Medicare scale targets established at the outset of the Model are unachievable even if all eligible practitioners participated, because a significant portion of beneficiaries do not seek the plurality of their care in Vermont and instead receive care out of state. Our assessment of scale target performance confirmed this limitation. When Medicare beneficiaries who do not seek care in Vermont are excluded from the assessment, the Model’s Medicare scale target performance improved but still fell short of the intended goal.

Alternative approaches to attribution may have an impact on scale target performance. For example, the Medicaid team is considering expanded attribution to capture pockets of beneficiaries without a primary care relationship, either those who are new to Medicaid or who were missed due to the timing of the look-back period (six months prior to the start of a PY). Medicaid piloted expanded attribution in St. Johnsbury in 2019 and began expanded attribution in 2020. The initial pilot surfaced a number of challenges, including limited data on newly attributed Medicaid beneficiaries and difficulty including newly attributed beneficiaries in OneCare’s tools for care coordination. Several stakeholders voiced interest in adopting Medicaid’s expanded attribution for all participating payers. One stakeholder hypothesized that expanded attribution would increase the acuity of their patient population as the newly attributed population does not regularly seek care.

### **Increasing participation of self-insured employers**

GMCB and OneCare view increasing commercial payer participation as the biggest opportunity for reaching the Model’s all-payer scale targets; without additional buy-in from self-insured employers in Vermont, the VTAPM will not reach scalability targets. State leaders described the challenges when health plans (e.g., BCBSVT) serve only as administrative services organizations to process claims for self-insured plans. While some self-insured plans defer to the health plans to design their benefits package, others take an active role in design. In an effort to increase participation in the VTAPM, one health plan made participation a standard feature of its self-insured plans. Many self-insured plans accepted this standard feature; however, others, including two of the state’s largest group plans, the State Employees’ Health Care Plan and the Union of Vermont-NEA, declined this standard feature. The State Employees’ Health Care Plan will join OneCare beginning in PY4 (2021).

## Incentivizing independent providers

In an effort to engage independent providers, OneCare continues to expand the Comprehensive Payment Reform (CPR) Pilot, from three practices in PY1 (2018) to nine practices in PY2 (2019). Independent practices in HSAs participating in Medicare, Medicaid, and commercial ACO initiatives with a minimum patient panel of 500 were eligible to participate in this pilot, which provided a blended capitation payment for attributed beneficiaries; participating practices opt out of receiving FFS payment.<sup>jj</sup> The monthly enhanced PBPM payment for attributed patients integrates a payer-blended capitated amount and standard OneCare PBPM payments for population health management and care coordination. Staff interviewed at one of the participating practices shared that these payments allowed the practice to hire care coordinators and behavioral health staff, which would not have been possible otherwise. However, staff also noted that because only a portion of the practice's total revenue is capitated, they have been unable to make significant changes to workflow and the practice's overall approach to care.

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<sup>jj</sup> In later model years, program payment model has continued to evolve.

## Chapter 4: Implementation of the VTAPM

### Key Takeaways

#### State Oversight



- GMCB has effectively used its oversight of hospital budgets to encourage hospital investments in population health, encouraging transparency through probing questions during the budget review process.
- GMCB's ACO budget review process has also been key to fostering investments in population health, balancing requirements with flexibility in how the ACO invests in specific population health initiatives over time.

#### Implementation of the Payment Model



- The Medicaid ACO initiative's prospective, population-based payment was perceived as innovative, and was widely supported across the state.
- Neither state-level stakeholders nor providers understood at the outset that, in contrast to the Medicaid model, the Medicare AIPBP was reconciled with FFS claims at the end of the year and does not use full capitation. This has been administratively challenging for hospitals, and a barrier to increasing population health investments.

#### Population Health Initiatives



- The VTAPM enabled continued funding and administrative support for the Blueprint initiatives (e.g., PCMH, CHT, SASH) that serve the entire community, not only ACO-attributed beneficiaries.
- PY1 and PY2 payments were intended to build capacity for care coordination; however, provider and community organizations were reluctant to hire staff without certainty around the future of the Model.
- The Model is beginning to strengthen relationships between hospitals, community organizations, designated mental health agencies, primary care practices, and other providers.

#### Engaging Providers



- Engaging providers has been challenging due to both a lack of trust in the ACO and the complexity of the Model.
- At the same time, there has been increasing recognition among providers of the value of community-based care.

#### Data Analytics



- HSA-level stakeholders, including hospitals, suggested that the biggest added value of the ACO is its ability to provide actionable data. However, while some hospitals have used OneCare's data to inform investments and initiatives, others suggested the claims data is not timely enough to be actionable.
- OneCare does not provide any data or support directly to community providers within the HSA (e.g., FQHCs, independent providers), and there is variation in how engaged hospitals are with community providers.

In this chapter, we present findings on implementation of the VTAPM to date. Across all of the areas discussed, implementation continues to evolve over time. We first provide an overview of how the GMCB uses its regulatory authority, the alignment of GMCB processes to support Model implementation, and developments in GMCB's analytic capacity. We then describe implementation of the payment structure and methods. Next, we explore OneCare's efforts encourage collaboration to address population health goals, including OneCare initiatives, hospital investments, and community collaboratives. We then provide an overview of progress and challenges in engaging providers. Finally, we examine the benefits and challenges behind OneCare's data sharing. Sources for the analyses presented in this chapter include stakeholder interviews, supplemented by a review of documents, including GMCB presentations, reports, white papers, and OneCare and hospital budget submissions and budget orders.

#### 4.1 Implementation: GMCB Regulatory Authority

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The GMCB is in an ideal position to encourage investments in population health given its oversight of hospital and ACO budgets. GMCB leaders encourage hospital investment in population health through terms and conditions in annual budget orders. Stakeholders commented that the GMCB has tended to use probing questions to encourage change, including asking hospitals to report on all-payer model measures, in lieu of wielding its regulatory powers. According to one GMCB leader, these pressure points have been sufficient to increase interest in shifting away from FFS toward a population health approach (see section below on Hospital Investments in Population Health for specific examples):

*“We were envisioning that the Model would really change provider behavior. With hospitals, what we were hoping for and what we are beginning to see is that they would shift from a revenue generation model to an expense containment and population health approach.... the hospitals are voluntarily giving up revenue to fund other community providers essentially.”*

Interviews with GMCB leaders suggested the ACO budget review process is also key to fostering investments in population health. In reviewing OneCare's budget, the GMCB can examine planned population health investments and program specifics. For example, while the GMCB required the ACO to invest a certain amount in the Blueprint programs through budget orders in PY1 (2018) and PY2 (2019) whereby the Medicare funds flow through the ACO as advanced shared savings, the Board also earmarked a percentage of the ACO's overall revenues for population health programs while granting flexibility in how the ACO invests in specific population health initiatives over time.

Aligning regulatory processes has been a challenge for the GMCB.<sup>6</sup> Currently, insurance premium rate review occurs in August, hospital budget review in September, and ACO budget review in December. Ideally, ACO budgets, participation fees, attributed lives, and payment

rates would be set prior to hospital budgets, enabling hospitals to craft budgets that reflect accurate plans for ACO participation.<sup>52</sup> Similarly, the ACO's budget order requires that the ACO's commercial rate aligns with rates the Board approved as part of Vermont's health insurance premium rate review process.<sup>33</sup> The GMCB is working to streamline regulatory processes,

“With the All-Payer Model, we've really taken a step back to try and look at each regulatory process, how it may be important to see how it connects to total cost of care. If it doesn't have a quality component, [we] start to think about, is that something we could infuse into this regulatory process? Do we have the statutory authority or not?”

—GMCB leadership

revamp how it provides budget guidance and collects data, and align activities internally through cross-team collaboration. For example, beginning in 2020, the GMCB launched a series of white papers discussing the current state of regulatory alignment,<sup>53</sup> options for changing the regulatory timeline,<sup>6</sup> and options for policy alignment.<sup>54</sup>

**The VTAPM also led to investments in the GMCB's analytics department.** The GMCB leadership shared that the VTAPM gave the Board increased analytic capacity to support required model reporting and regulatory work. While limited, this increased analytic capacity has allowed GMCB to provide and analyze data for hospital and ACO budget reviews. The GMCB also took over calculation of the financial benchmark from CMS for PY3 (2020), as intended in the Model agreement; the GMCB leaders believed they could more efficiently calculate the benchmark, incorporate more feedback, and conduct the process with higher levels of transparency for stakeholders.<sup>12</sup>

## 4.2 Implementation of the Payment Model

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**Neither state-level stakeholders nor hospitals understood at the outset of the Model that Medicare would recoup AIPBPs against FFS claims.** When negotiating with CMS, state leaders expected that the Medicare payment model would be full capitation, which is how the state designed the Medicaid model. Hospital administrators similarly did not expect that the Medicare model would be different from the Medicaid model in which began in 2017. They voiced frustration that the continued need to submit and track FFS claims under the Medicare model has limited their ability to achieve the administrative efficiencies they had anticipated in their financial models. Moreover, due to the reconciliation, hospitals are reluctant to use the AIPBP for population health initiatives because they expect CMS will recoup a portion of the funds in the settlement phase.

In PY1, the calculation of the benchmark resulted in an overpayment of AIPBP; as a result, some providers had to return portions of these payments to CMS well after receiving them. In PY2, the calculation was revised and came close to actuals. Additionally, in both PY1 and PY2 there were errors in the list of participating providers that had elected AIPBP, resulting in providers receiving FFS payments in addition to the AIPBP, which again resulted in CMS recouping payments from providers. While CMS and the implementation contractor rectified the

errors in the participating provider list that resulted in the claims processing issue and reported that the AIPBP overpayment was less than 2 percent, the error had a large impact on hospitals. OneCare leadership reported that these actions created *“huge distractions and eroded confidence in the program overall,”* and several hospitals considered pulling out of the Medicare ACO initiative.

The Medicare payment mechanism presented unique challenges for rural CAHs<sup>kk</sup>, which comprise the majority of hospitals in the state.<sup>55</sup> In the absence of formal guidance from CMS, CAHs participating in the Medicare ACO initiative struggled to clarify how to report ACO-related expenses and payment as part of their cost report through PY2 (e.g. whether to carve out ACO beneficiaries). In addition, the lack of alignment between the CAH cost reporting timeline and the required hospital ACO participation payments and reconciliation made it challenging for CAHs to hold reserves for both AIPBP and performance-based reconciliation. For CAHs not affiliated with an academic medical center, the risk corridor required was the primary barrier to participation in the Medicare ACO initiative as it encompasses most, if not all, of their operating margin (described further in **Section 4.2**). In addition, for CAHs, the current cost-based reimbursement structure is likely a more financially advantageous and secure payment model than are capitated payments.

OneCare and state leadership described Medicaid as an innovator in the VTAPM, given that Medicaid uses an unreconciled, prospective, population-based payment. Many communities and state stakeholders praised Medicaid’s ability to effectively implement a *“fully capitated program without breaking the system.”* A state leader explained the Medicaid ACO initiative as follows:

*“[It] really looks a lot more like our vision for the prospective payment, meaning that Medicaid...sets a total price.... When [Department of Vermont Health Access] or Medicaid pays that, that is it. It’s not reconciled against actual for the purposes of the settlement. It doesn’t get settled. They’ve paid that.... That allows providers to get the predictable chunk of money upfront from Medicaid to more flexibly spend.”*

“[The Medicare model] is not as simple as the Medicaid model. It’s not elegant. It’s not as flexible for providers, and...the incentives to really move away from fee-for-service are stronger if you actually move away from fee-for-service....That is something that we would like to see happen with Medicare. I think they [providers] are also interested, but the speed of that change I’m anticipating would be slower than we’d like it to be. But when we were negotiating, first there was no Next Gen program. So, we wanted our own Medicare cap model. Then there was the Next Gen program, and as it was described, it would have capitation as its fourth model. ... Then when they actually rolled it out, it became AIPBP instead of capitation. We were like, ‘Okay. Well, we can work with that,’ but we actually weren’t fully appreciating how different that is than capitation.”

—State official

<sup>kk</sup> CAHs have 25 or fewer acute care inpatient beds; are located more than 35 miles from another hospital (or more than a 15-mile drive from another hospital in an area with mountainous terrain or only secondary roads); and provide 24/7 emergency care services. CAHs are paid for most inpatient and outpatient services at 101 percent of reasonable costs and are not included in Medicare’s hospital internal personnel and pay system (IPPS) or outpatient prospective payment system (OPPS).

Rollout of the VTAPM within Medicaid was perceived as relatively smooth, with provider buy-in across the state's HSAs, according to state leadership. Medicaid sets the rates for each calendar year to provide predictability for OneCare and participating providers. OneCare leadership noted that they were able to work through changes iteratively with Medicaid to improve Model features and viewed Medicaid as a collaborative partner in the negotiation and refinement process.

**In addition to the misalignment of the Medicare and Medicaid payment models, state-level stakeholders and hospital leaders underscored the challenge of operating in both FFS and VBP models simultaneously.** With limited scale provider organizations described operating with their “*feet in two canoes*,” enacting care delivery reforms to reduce utilization for VBP models, while continuing to rely on traditional FFS reimbursement as a large portion of their operating revenue. Providers voiced a reluctance to provide different models of care based on patients' payers, and administrators described the challenge of managing and projecting their revenue with the two payment models.

**Providers and state-level stakeholders expressed concern that the state had not contributed sufficient matching funds to draw on the DSR funds.**<sup>ll</sup> DVHA has provided DSR investment funding to support OneCare population health management and care coordination initiatives, as well as programs to improve access to mental health services.<sup>mmm</sup> Hospital leaders suggested, however, that the relatively limited state investments have diminished overall capacity for population health initiatives. Some stakeholders interviewed explained that with limited revenue and tight budgets, state legislators viewed DSR investments as a large upfront investment with uncertain potential benefits that may take years to materialize.

### 4.3 Implementation: Population Health Initiatives

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OneCare, hospitals, and the state are investing resources in population health initiatives to impact population health and quality-of-care targets, and ultimately TCOC. These investments include continuation of programs implemented under previous initiatives, as well as the introduction of a number of new initiatives. Below we describe and discuss implementation experience to date for OneCare's population health initiatives, as well as state and hospital investments. Lastly, we discuss the impact of the VTAPM on community collaboratives.

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<sup>ll</sup> See the August 2019 letter from Kevin Mullin, GMCB Chair, to Governor Scott and Secretary of the Agency of Human Services Martha Maksym expressing concern about the lack of financial support for the Model.

<sup>mmm</sup> The June 2021 [Report of the Vermont State Auditor: All-Payer Model Implementation Costs](#) provides additional detail on DVHA support for OneCare.

## Addressing Population Health: OneCare’s Population Health Initiatives

Approximately four percent of OneCare’s budget (approximately \$23 million in PY1 and approximately \$33 million in PY2) has been devoted to population health initiatives. These initiatives focus primarily on care coordination, care management, health and wellness programs, and pilot programs for innovations in care delivery and payment reform; see **Exhibit 4.1** for a complete list of OneCare’s initiatives (**Appendix Exhibit G.1** provides additional detail).<sup>46,47</sup> OneCare funds these initiatives through the upfront CMS funding and hospital participation feeds, or dues.<sup>2,9</sup> As noted in Section 2.1, Blueprint programs and SASH, previously supported by Medicare funds under the MAPCP demonstration, are continuing under the VTAPM, with Medicare funds now flowing through OneCare as advanced shared savings.<sup>mm</sup>

**Exhibit 4.1. 2018 and 2019 Population Health Initiatives**

Program	Description	New under the VTAPM
Blueprint Patient-Centered Medical Homes (PCMHs)*	Support PCMHs for both risk and non-risk communities.	
Community Health Teams (CHTs)*	Blueprint community health teams for both risk and non-risk communities.	
Comprehensive Payment Reform (CPR) Pilot	Blended capitation model for independent primary care practices and FQHCs with a minimum of 500 attributed beneficiaries.	✓
Innovation Fund	Grant funds that support innovative evidenced-based (or informed) programs that align with OneCare’s priorities and could be readily spread and sustained by the ACO and participating communities. Projects span various health topics including mental health, vulnerable populations, technology in rural settings, and specific chronic conditions.	
OneCare Basic Care Coordination Payments	Intended to support engaging in quality measurement, participating in quality improvement activities, and other activities related to population health.	✓
OneCare Complex Care Coordination Program	Intended to provide proactive and preventive care to high- and very high-risk beneficiaries (16%) in an effort to reduce spending.	✓
Primary Prevention and Adverse Childhood Events Pilot	Pilot program in collaboration with the Developmental Understanding and Legal Collaboration for Everyone Program and the Vermont Department of Health to support the social determinants of health (SDOH) needs of infants from birth to six months.	✓
Regional Clinical Representatives (RCR)	The Blueprint employed local clinical leaders who support community-level population health initiatives. In addition, OneCare provided part time stipends to one RCR in each HSA,	
RiseVT	Community-based primary prevention program emphasizing healthy lifestyles. Initially funded through the SIM grant in 2013, in 2018 the program has spread to 20 communities throughout the state.	
Specialist Payment Pilot	Pilot programs to support coordinated efforts between primary and specialty care to address patients’ needs. Programs include a care coordination system for management of advanced chronic kidney disease, a program to embed clinical pharmacists in primary care practices, and the improvement of UVMHN’s eConsult function.	✓

<sup>mm</sup> Medicaid continued to fund Blueprint programs directly.

Program	Description	New under the VTAPM
Supports and Services at Home (SASH)*	Connects local health and long-term care systems for Medicare beneficiaries to support aging at home through partnerships with housing organizations, home health agencies, Area Agencies on Aging, and designated mental health agencies. Funds both participating and non-participating communities.	
Value-Based Incentive Fund (VBIF)	A fund to incentivize meeting/exceeding quality performance program metrics.	

\*Previously received Medicare funding under the MAPCP demonstration.

Sources: FY18 ACO Budget Order.

<https://gmcboard.vermont.gov/sites/gmcb/files/FY18%20ACO%20Budget%20Order%20OneCare%20Vermont.pdf>

OneCare Vermont ACO 2018 Fiscal Year Budget.

<https://gmcboard.vermont.gov/sites/gmcb/files/files/resources/reports/GMCB%20ACO%20Budget%20Submission%20%20Final.pdf>

FY19 Accountable Care Organization Budget Order.

[https://gmcboard.vermont.gov/sites/gmcb/files/FINAL%20%202019%20ACO%20Budget%20Order%202\\_5\\_2019.pdf](https://gmcboard.vermont.gov/sites/gmcb/files/FINAL%20%202019%20ACO%20Budget%20Order%202_5_2019.pdf)

OneCare Vermont ACO 2019 Fiscal Year Budget Resubmission.

<https://gmcboard.vermont.gov/sites/gmcb/files/documents/GMCB%20ACO%20Budget%20Submission%202019%20Final%20%28Supplemental%20Attachment%29.pdf>

**The VTAPM enabled continued funding and administrative support for the Blueprint initiatives (e.g., PCMH, CHT, SASH) that serve the entire community, not only ACO-attributed beneficiaries.** While the Blueprint’s funding now comes from multiple sources, its program funding structure was relatively unchanged with the shift to the VTAPM. OneCare funds the Blueprint through Medicare shared savings. Medicaid continues to fund the Blueprint directly, and program operations have not been greatly affected.

**In designing the ACO’s approach to care management, OneCare’s board chose to leverage the Blueprint network, including CHTs and PCMHs, rather than hiring additional care coordinators and/or care managers.** Blueprint for Health PCMH and CHT infrastructure, including QI facilitators and other local program staff, have been instrumental in the development, implementation, and dissemination of the OneCare model. In addition, OneCare provides stipends to one local clinical leader in each HSA to provide local content expertise and to support each HSA’s local community collaborative. A member of OneCare’s leadership team noted:

*“The Blueprint laid the foundation for the way that primary care practices operate and deliver care. The Blueprint put into place processes and procedures to close gaps in care and getting people in for management, and established community health teams that provide funding and the foundation for collaboration within.”*

**Delineation of roles between the Blueprint and OneCare, and between existing and new programs, has been a challenge, requiring extensive discussion and negotiation.** Early in the Model, there were “turf disputes” between OneCare and the Blueprint, centering on concerns that OneCare was building redundant care coordination capacity. While the intention was to reduce duplication, the overlap between the two organizations and divergence in approach (i.e., OneCare’s centralized approach compared with Blueprint’s community-driven approach) led to mistrust at the community level. To overcome these barriers and to align expectations moving

forward, the two organizations are meeting more frequently, resulting in a significant amount of administrative coordination to include historically siloed agencies and align stakeholders. Now, a primary goal between the two organizations is to identify who is best qualified and positioned to provide particular services and how to efficiently use personnel and resources across organizations.

**Exhibit 4.2. OneCare Care Management Programs, by Risk Level**

	Category	Focus	Key Activities	Changes due to VTAPM
Pop. Health Programs	Primary Prevention, Health, and Wellness (Low Risk)	Preventive care and community-based wellness	<ul style="list-style-type: none"> <li>■ RiseVT</li> <li>■ Preventive care</li> </ul>	New for the VTAPM
	Stable Chronic Illness (Medium Risk)	Self-management of chronic disease	<ul style="list-style-type: none"> <li>■ PCMH panel</li> <li>■ Comprehensive health assessment</li> <li>■ Self-management education and training</li> </ul>	Continuation of the Blueprint’s PCMH and community health teams
Complex Care Management	Onset Chronic Illness and Rising Risk (High Risk)	Chronic condition management and co-occurring social needs	<ul style="list-style-type: none"> <li>■ Care plan</li> <li>■ Care coordination (quarterly)</li> <li>■ Transitions of care</li> <li>■ Social determinants of health management</li> </ul>	New for the VTAPM; leverages existing Blueprint community health teams and implements Care Navigator, a software tool to coordinate care
	Complex/High Cost, Acute Catastrophic (Very High Risk)	Address complex medical and social challenges	<ul style="list-style-type: none"> <li>■ Designated lead care</li> <li>■ Coordinator (monthly outreach)</li> <li>■ Palliative and hospice care assessments</li> </ul>	

**With the shift to the VTAPM, OneCare leadership formalized population risk segmentation and a care management structure.** The model builds on Vermont Medicaid pilots, which employed risk stratification, and traditional insurance’s focuses on high-risk populations. OneCare developed a model to provide a holistic approach, including elements for low and rising risk that are not central to traditional risk stratification approaches (see **Exhibit 4.2**).

OneCare adopted Johns Hopkins’s ACG® system,<sup>56</sup> which uses past medical and pharmacy claims and demographic information for risk stratification. This tool enables OneCare to identify beneficiaries in the top 16 percent as high- or very high-risk and engage them in a complex care management program. In 2020, OneCare adjusted this tool to separate the pediatric and adult populations for risk stratification to ensure that complex pediatric patients received necessary support. While OneCare is using the validated ACG® system, the ACO continues to explore additional ways to capture SDOH at the individual and HSA level in risk stratification.

In PY1 and PY2, OneCare leadership intended that during the first two years, the care coordination payments to primary care practices and community providers (e.g., designated

agencies, home health agencies) under a complex care coordination program would help to build capacity to provide care management. OneCare developed contractual agreements with each HSA that set milestones for managing high-risk (10 percent) and very high-risk (6 percent) patients (e.g., development of a care plan, quarterly calls). This agreement included an upfront payment for initiating care with very high-risk patients, and a PBPM payment for high- and very high-risk patients with milestones. The additional \$15 PBPM payment provided a revenue stream for HSAs to support care coordination, including creating and sharing care plans, participating in care conferences, supporting transitions of care, and trainings. OneCare tied payments to quality metrics and operational milestones, such as having a lead care coordinator and sharing care plans. Beneficiaries select the lead care coordinator, who may be from primary care practices, home health agencies, designated mental health agencies, or other community organizations.<sup>oo</sup> The increased funding has allowed expansion of some services already provided through the Blueprint, such as the community health teams. However, some community providers and organizations were reluctant to use the funding to hire new staff because they were concerned about the sustainability of the position should the Model be terminated or ACO change the payment structure.

**To standardize care coordination across HSAs and facilitate communication and collaboration across sectors, OneCare designed, implemented, and trained staff to use Care Navigator, a care management software for both health and social service providers.** The OneCare leadership team envisioned that Care Navigator would house standardized care plans with goals of care; serve as a common platform for communication across care settings; provide alerts when patients were seen in the ED, admitted to the hospital, and discharged from the hospital; and serve as a patient portal to enable non-clinical providers to communicate with beneficiaries. OneCare’s leadership team engaged stakeholders in selecting the software and developing a care plan template and believed that *“everyone had bought in.”* OneCare collaborated with the Blueprint to provide statewide training on Care Navigator.

“There was a strong emphasis on training. They organized trainings for care coordination, they started the Care Navigator system, they organized the north team and the south team so that we regularly talked to other HSAs, shared cross-fertilization of what people were doing, and started to build a sense of accountability for care coordination by feeding us back our numbers.”

—HSA Blueprint program manager

**Despite efforts by OneCare to engage stakeholders, including additional financial incentives, evidence suggests that care coordinators, CHTs, and community organization staff used Care Navigator inconsistently or not at all.** In PY2 (2019), OneCare began to use Care Navigator engagement as one of the organizational milestones to determine disbursement of complex care coordination payments. OneCare leadership noted that they expected this incentive

<sup>oo</sup> For more detail on OneCare’s care coordination program, see the [OneCare Vermont ACO Case Study](#) developed by the CMS Learning Systems for Accountable Care Organizations and [OneCare’s presentation to the House Committee on Health Care](#) (April 2019).

to lead to increased Care Navigator use. Several providers, however, expressed concern with retrospective, rather than upfront, payments for completing care plans in Care Navigator, as they believed the funding is necessary to support staff time to complete the plans. Due in part to the change in payment, the number of beneficiaries documents as care managed<sup>PP</sup> in Care Navigator has grown from 239 managed beneficiaries in 2018 to 3,901 as of October 2019.<sup>57</sup> Care managers expressed concern that these payments feel similar to FFS.<sup>99</sup>

Providers also noted significant administrative/documentation burden because the software is not interoperable with their electronic health records (EHRs), requiring double documentation. Moreover, the benefits of shared communication, alerts for patient admissions, and a patient portal are not effective incentives for providers who use UVM's Epic EHR, which already integrates these features. Meanwhile, independent providers described challenges of working with UVM Medical Center, noting delayed care from specialists, gaps in care navigation, and a lack of notes sharing. Other challenges cited by community organization staff included Care Navigator's use being limited to beneficiaries attributed to the VTAPM and OneCare providers and a lack of overall users, which undermines the software's goal to facilitate communication across sectors statewide.

### **Challenge to Implementing Population Health Initiatives: Workforce Shortages**

Workforce shortages in Vermont contributed to unique challenges within each HSA. Most stakeholders reported some level of workforce shortage, though the type and barriers differed. The main shortages were for RNs, behavioral health providers, and primary care providers. Hospital leaders lamented the difficulty of implementing the Model while addressing immediate and anticipated (retirement) workforce challenges. Some independent hospitals reported challenges in competing with UVM and DHH for staff, related to salaries, benefits, and location. Others reported challenges competing with other organizations within their community for staff.

## **Addressing Population Health: State Investments**

As noted previously, Vermont has continued to build on its history of health reform, with new and ongoing state investments amplifying OneCare's population health investments and supporting the VTAPM's goals. Through these collaborative efforts to improve population health, the GMCB, AHS (including DVHA), and OneCare work together to establish an accountability framework for ACO population health investments designed to support the Model's Statewide Health Outcomes and Quality of Care Targets.<sup>12</sup> While the GMCB and DVHA support the accountability framework for OneCare investments through the budget review process and Vermont Medicaid's ACO contract management, additional efforts by state agencies broaden the reach of OneCare population health initiatives by implementing population

<sup>PP</sup> OneCare defined care managed as having a Lead Care Coordinator, identified by the patient, and a Shared Care Plan document in Care Navigator or other OneCare approved care coordination software. Source: [OneCare Policy Number 02-02 OneCare Advanced Community Care Coordination Payments](#).

<sup>99</sup> In July 2020, OneCare tied Care Navigator payments to documented use of the system rather than payments to build provider capacity to use the system.

health programs statewide. For example, the Prevention Change Packages developed by VDH support practitioners' efforts to adopt preventive strategies by offering guidance and tips for best practices. The Blueprint also continues to support its care coordination and population health initiatives beyond the scope of the Model (i.e., to non-ACO attributed beneficiaries), while collaborating with OneCare to pilot new programs. The Blueprint and VDH are currently working with OneCare to pilot projects that would support the continued integration of the Blueprint's Quality Improvement Facilitator and Self-Management programs with the ACO. OneCare's investments also support ongoing initiatives in the state. With their focus on high- and very high-risk care management, OneCare has created the opportunity for DVHA to expand the reach of its Vermont Chronic Care Initiative (i.e., supporting non-ACO attributed Medicaid beneficiaries).<sup>58</sup> While OneCare's investments are designed to promote the health of ACO-attributed lives, various state programs, in conjunction with these OneCare investments, support the state's continued efforts to improve population health.

### Addressing Population Health: Hospital Investments

To support VTAPM population health goals and quality measures, hospitals are beginning to invest in local population health initiatives. In their 2019 budgets, five hospitals reported investing in their mental health workforce in an effort to support the VTAPM population health goal to reduce deaths from suicide and drug overdose.<sup>59</sup> In addition, hospitals are investing in care coordination and prevention, hiring dedicated care coordinators and RiseVT program managers, and improving HIT capabilities to support case management and address additional population health goals of the VTAPM.

### UVM Medical Center Population Health Investments

In 2019, UVM Medical Center made several investments to support care coordination, including \$3.8 million for an RN care management model within the network's primary care practices and \$880,000 for care coordinators targeting high-risk patients. In 2020, UVM Medical Center's RN care management team and outpatient social work team were integrated to further facilitate care coordination and create "patient-centric care plans."

Other UVM population health initiatives include:

- The Population Health Steering Alliance supports provider efforts to transform care delivery and track and meet metrics in a risk-based payment model.
- UVM Medical Center also implemented Epic EHR to support providers' care coordination efforts and improve case management. This tool allows providers to assess patient risk, coordinate care management plans, and track provider performance on quality dashboards.
- Through UVM Home Health & Hospice (UVMHHH) longitudinal care program, nurses and community health workers continue to follow patients at high risk for hospitalization once or twice a month after Medicare eligibility for home health services ends. This longitudinal care may include telemonitoring. UVMHHH covers the most populous counties in the state. The VTAPM ACO initiative provided funding to expand this program to six additional home health agencies throughout the state.

Source: UVM Health Network Fiscal Year 2019 Budget Narrative.

Additional hospital investments and initiatives have focused on improving beneficiary access to the most appropriate care in an effort to reduce spending and unnecessary utilization. In 2019, Porter Hospital, a UVM Health Network affiliate, increased investments in its urgent care center, ExpressCare, which establishes primary care relationships for those who do not have a medical home, with a goal of reducing ED utilization.<sup>52</sup> Both Porter Hospital and Northeastern Vermont Regional Hospital expanded palliative care programs to help ensure patients with serious illnesses have treatment plans and primary care support to reduce ED utilization.<sup>52,60</sup> One hospital also collaborated with their local hospice to increase the use of advanced directives and understanding of Medicare’s hospice benefit. One interviewee noted that, within their community, Medicaid beneficiaries were struggling to access dental services and were instead seeking care in the ED. The local hospital collaborated with a nonprofit organization to create a dental care center for Medicaid beneficiaries, resulting in no ED visits related to dental pain in the second quarter of PY2019.

### Addressing Population Health: Community Collaboratives

Other entities addressing population health goals include the Accountable Communities for Health and community collaboratives (hereafter referred to as ‘community collaboratives’).<sup>61</sup> Initially funded through the SIM grant, these HSA-level groups, additionally sponsored by AHS and the Blueprint in 2016, are intended to foster and coordinate population health initiatives across health and social service providers, community-based organizations, and community members.<sup>10</sup> The community collaborative infrastructure enables dialogue at the community level, bringing local perspectives together with data to identify population needs as well as gaps in care. Each HSA has its own approach, set of initiatives, level of maturity, and tailored programs to address specific needs that may align with the ACO goals, such as suicide prevention or behavioral health, or are unique to the community, such as cervical cancer screenings or food insecurity.

#### Hospital Investments to Address SDOH

Northeastern Vermont Regional Hospital, which participates only in the Medicaid ACO initiative, annually invests 1 percent of received Medicaid capitated payments into the St. Johnsbury HSA community collaborative, NEK Prosper! Specifically, the hospital contributes to the Healthy Cents fund for upstream investments in health, such as housing and food security. In 2020, NEK Prosper! invested in an initiative to create a community hub to bolster financial security by increasing average household income, employee retention, and employment rates in the community.

Source: <https://nekprosper.org/healthy-cents-fund/>.

**The VTAPM has brought hospitals to the table in communities where they had not previously been involved.** In some instances, hospitals serve as the convener for community collaboratives. In other communities, the hospital historically has not been the driving force for reform, and local health departments or community organizations served as the convener. In these circumstances, the addition of OneCare’s presence combined with more hospital involvement have added new voices to community dialogue. For other HSAs, the hospital has become the backbone of the community collaborative, convening community organizations

and investing in infrastructure (e.g., staff, data analytics). One local health department leader noted: *“I feel like [the Model has] been an avenue to bring us to the table in a more collaborative way. I feel like the hospital has reached out in a more collaborative way to a variety of partners.”*

**While some individuals representing HSAs believed that community collaboratives brought their communities together, others stated that much work remained to accomplish community health goals.** The collaboratives’ work to date has focused mostly on SDOH. Some collaboratives have discussed matching initiatives to target high- and very high-risk people, but the data they have reviewed have not yet informed such an initiative.

#### 4.4 Implementation: Engaging Providers

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**In the first two PYs of the Model, OneCare struggled to engage CAHs, FQHCs, and independent providers.** Prior to the VTAPM, OneCare served as the ACO for UVM Health

[Physicians] are excited to get paid a different way, but I think they don't have total trust in the ACO... They're worried about any kind of added burden to their practices, such as more documentation...Some of their practices, I think really get it, and have seen the positive.... I think some of the other practices are concerned... they don't think that the \$3.25 they're getting, per member, per month is enough. They don't exactly understand why they're getting it... they just saw it as revenue coming into the practice, and didn't really tie it back to... a population health based payment... an accountable care organization means that we're all going to be accountable for providing higher quality, high value care. I think many of them thought they were already doing that.

--Hospital leader

Network and the DHMC; (FQHCs participated in CHAC), and independent providers were in the Health First ACO (see **Section 2.1** for more detail). Providers and other stakeholders also expressed concerns about the close relationship between OneCare and UVM Health Network.<sup>11</sup> An independent provider questioned if OneCare, given its reliance on UVM Health Network, which they perceive to be the most costly provider organization in the state, is appropriately positioned to *“solve the state’s health-care problem,”* which the person likened to *“asking tobacco companies to reduce the incidence of smoking.”* Stakeholders also shared their concerns that OneCare was not positioned to support CAHs and independent practices in the Model’s financial structure. Stakeholders described CAHs’ challenges with cost reporting relative to the

ACO, and an FQHC administrator shared the belief that financial incentives do not drive rural providers: *“You don’t practice rural medicine because you want to get rich.”*

**Given that hospitals are the risk-bearing entities, OneCare works primarily with each HSA’s hospital leadership; this has contributed to a perception among some non-risk-bearing, non-hospital providers that they have been sidelined.** While some leaders from CHAC and Health First—Vermont’s two ACOs that ceased operations—serve on OneCare’s

<sup>11</sup> The president of UVM Medical Center and CEO of UVM Health Network served as chairs of the OneCare board, and nearly two-thirds of the ACO’s attributed beneficiaries are affiliated with UVM Health Network.

advisory committee (a group independent of OneCare's board), many FQHCs and independent providers do not believe OneCare sufficiently supports them. Community-based providers described OneCare's efforts to centralize control. These stakeholders questioned if a centralized approach could adequately meet the needs of different HSAs and types of provider organizations. One physician described a now distanced relationship with the ACO: *"We don't really feel part of the design or the implementation. There's top-down stuff that's happening around us not with us."*

**There are limited financial incentives for non-hospital providers to transform care delivery.** For the most part, hospitals are not yet sharing OneCare Value-Based Incentive Fund (VBIF) payments (quality payments) directly with participating physicians. Furthermore, specialty providers do not have meaningful avenues to participate and thus do not have the financial support to implement care delivery changes.

**Stakeholders reported that the Model has helped the health-care system recognize the value of community-based, patient-centered care.** While many HSAs have worked at the community level for some time, the reforms happening within the state under the VTAPM have encouraged more providers to take part. Community stakeholders are excited by the increased interest and support they are receiving from hospitals. Across health-care providers, there has been broader acknowledgement of the importance of patient-centered care.

#### 4.5 Implementation: Data Analytics

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**OneCare offers a centralized source of data for hospital participants that hospitals are using to engage providers through their community.** Initially, hospitals received static reports from OneCare's claims. They used these data, in addition to internal dashboards that use EHR data to track quality measures and utilization to identify areas for quality improvement and to engage a broad group of stakeholders. In 2020, OneCare began offering an online platform to review data at the organization (as defined by a tax identification number) and provider level in addition to static monthly reports. The platform analyzes and benchmarks utilization by care setting and condition.

While OneCare provides data to participants, some found the data not actionable due to the delays in finalizing Medicare claims. Furthermore, leaders from two community-based hospitals were emphatic about the importance of having data, but using the data required organizational expertise and staff resources (e.g., data analysts, clinical informaticists) to integrate claims, EHR, and/or quality data into an actionable format. Some smaller hospitals and many FQHCs do not have the internal capacity to do so.

**OneCare does not provide any data or support directly to community providers within the HSA (e.g., FQHCs, independent providers), and there is variation in how engaged hospitals**

**are with community providers.** OneCare expects hospitals to provide relevant data to affiliated provider groups in their HSAs. OneCare works with the executive teams at each participating hospital to access, review, and address issues identified through the data. Some hospitals have worked closely with affiliated providers, either directly or through their community collaborative. One hospital leader described using both data from OneCare and data provided by their partners involved in the community collaborative to identify areas for quality improvement. Stakeholders also suggested that Model participants need more support to review and analyze the data due to limited internal analytics resources, particularly among independent hospitals.

### **Using Data to Impact Hospice Utilization**

Leadership from a hospital participating in the Medicare ACO initiative explained how they were surprised to learn about the low use of the Medicare hospice benefit in their HSA through data provided by OneCare. Given the robust voluntary hospice programming in the community, they attributed the low utilization to lack of knowledge of the benefit among both medical offices and the general population. The hospital collaborated with the local hospice to encourage advanced directives and to increase awareness of the Medicare hospice benefit. The hospital CEO shared that they observed a significant change in our performance, from being one of the lowest utilizers of the benefit to one of the highest.

## Chapter 5: Impact of the VTAPM in the First Two Performance Years

### Key Takeaways

#### Impact on Cumulative Medicare Spending



- The VTAPM Medicare ACO initiative achieved statistically significant gross spending reductions in total Medicare Parts A & B spending over PY1 and PY2, totaling \$607.05 per beneficiary per year (PBPY) (-5.5 percent), largely due to gross spending reductions in PY2.
- After taking into account the shared savings and pass-through payouts from Medicare, the VTAPM Medicare ACO initiative achieved a cumulative net spending reduction of \$522.29 PBPY (-4.7 percent) that did not reach statistical significance. This net reduction is driven by a significant spending reduction in PY2.
- Statewide, VTAPM achieved statistically significant reductions in cumulative gross (\$782.58 PBPY; -6.8 percent) and net (\$748.74 PBPY; -6.5 percent) reductions in total Medicare Parts A & B spending, largely due to spending reduction in PY2.
- Observed reductions in Medicare spending—for both the Medicare ACO and statewide Medicare populations—reflect rising spending in the comparison groups and relatively flat spending in the VTAPM groups during that began prior to the end of the baseline period and continued through the first two PYs.

#### Impact on Medicare Utilization and Quality of Care



- Acute care stays and days significantly decreased in PY2 for the VTAPM's Medicare ACO and statewide Medicare populations. Additionally, statewide, there were significantly fewer beneficiaries with unplanned 30-day readmissions. Declines in acute care utilization and readmissions contributed to the overall reduction in gross Medicare spending.
- Specialty E&M visits significantly declined in PY2 for VTAPM's Medicare ACO and statewide Medicare populations. This decrease may indicate that beneficiaries' conditions were being managed by primary care providers or through care management, thereby decreasing the need for specialists.

This chapter presents the methods we used to estimate impacts, followed by the findings regarding VTAPM's impacts on spending, utilization, and quality-of-care outcomes for Medicare beneficiaries in PY1 and PY2. The Model is designed to reduce spending and utilization for its attributed Medicare ACO and statewide Medicare populations by shifting to value-based payments and aligning incentives and care processes across payers, which could lead to more efficient delivery of health care overall.

## 5.1 Impact Analysis Methods

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In this report, we assess the performance of the VTAPM over PY1 (2018) and PY2 (2019) for total spending, utilization, and quality-of-care for Medicare beneficiaries. The VTAPM has multiple layers of accountability and incentives; for this reason, we estimate the Model's impact at two levels:

- **ACO-level:** Is the VTAPM Medicare ACO initiative achieving spending, utilization, and quality of care, goals *for its attributed Medicare beneficiaries?*
- **State-level:** Is Vermont achieving spending, utilization and quality-of-care goals *for the Medicare population statewide?*

To answer these questions, we use a DID design that compares the change in performance of the treatment and comparison groups from baseline to performance years. Additional information regarding the quantitative methods is available in **Appendix D**.

### Defining the Treatment Groups

- **ACO-Level.** The VTAPM uses a *prospective attribution* methodology to identify its Medicare beneficiary population in a given PY, based on a beneficiary's care-seeking patterns in the prior two years.<sup>7</sup> To define the treatment group, our evaluation uses *concurrent attribution*—a method that attributes beneficiaries to VTAPM's practitioners based on their care-seeking patterns during the PY. Using concurrent attribution methodology, we assess VTAPM's impact on beneficiaries receiving a meaningful level of care from its Medicare ACO practitioners. Beneficiaries who received the plurality of their primary care services in a year from VTAPM's Medicare ACO practitioners were determined to be concurrently attributed to the ACO-level treatment group.<sup>ss</sup>
- **State-Level.** The treatment group consists of all eligible Vermont Medicare FFS beneficiaries who received the majority of their primary care services within the state during the baseline (2014-2016) and first two PYs (2018-2019).

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<sup>ss</sup> Over 87 percent of the prospectively attributed beneficiaries were included in the treatment group, and about 18 percent of concurrently attributed beneficiaries sought the majority of their care from Model participants, despite not being prospectively attributed; see **Appendix Exhibits D.5.1** and **D.5.2** for more information.

**Exhibit 5.1** presents the definition of the treatment group and the motivating hypotheses for the ACO- and state-level analyses.

**Exhibit 5.1. Definitions of Treatment Groups and Supporting Rationales**

Level	Treatment Group Definition	Rationale
<b>ACO</b>	Medicare FFS beneficiaries residing in Vermont and receiving the plurality of their primary care services from Model practitioners <sup>tt</sup> during the Baseline Years (BYs) (2014-2016) and PYs (2018-2019)	The Model’s ACO initiatives will impact all Medicare beneficiaries—attributed and non-attributed—who receive a meaningful level of primary care services from the Model practitioners during each BY (2014-2016) and PY (2018-2019).
<b>State</b>	Medicare FFS beneficiaries residing in Vermont and receiving the majority of their primary care services within the state during the BYs (2014-2016) and PYs (2018-2019) <sup>uu</sup>	The Model’s population health initiatives and delivery system reform will impact all Vermonters, including those not attributed to Model practitioners.

**Defining the Comparison Group**

**Exhibit 5.2** presents the definition of the comparison groups and justification for the ACO- and state-level analyses.

<sup>tt</sup> The list of Model participants changes each PY as practitioners opt to enter or exit the Model. The VTAPM Medicare ACO participant list for PY2 (2019) is different from PY1 (2018). As a result, the sample of beneficiaries attributed to the PY1 (2018) participants during each BY (2014-2016) and PY (2018) is different from the sample of beneficiaries attributed to the PY2 (2019) participants during each BY (2014-2016) and PY (2019). Therefore, the study sample for the ACO-level treatment is different for each performance year’s impact analysis.

<sup>uu</sup> We used the proportion of allowed charges for QEM visits to measure volume of care. Practitioners serving treatment group or comparison beneficiaries should have a specialty code that matches the list of specialties used to determine a practitioner’s eligibility for participation in the VTAPM. The QEM visit should occur within the state or should be rendered by a VTAPM participant.

**Exhibit 5.2. Definitions of Comparison Groups and Supporting Rationales**

Level	Comparison Group Definition	Rationale
ACO	A representative, weighted sample <sup>vv</sup> of Medicare FFS beneficiaries who resided in states with a similar health-reform history as Vermont, where those beneficiaries receive the plurality of their primary care services from (i.e., are concurrently attributed to) practitioners <sup>ww</sup> participating in Medicare SSP Track 1 <sup>xx</sup> ACOs during the baseline and PYs	Because OneCare was a Medicare SSP Track 1 ACO during the baseline period, we hypothesize that the ACO would have remained in the Medicare SSP absent the VTAPM.
State	A representative, weighted sample of Medicare FFS beneficiaries residing in states with a similar health-reform history as Vermont, where those beneficiaries receive the majority of their primary care services within the same comparison state during the baseline and performance years	Because the Model is expected to have statewide reach, beneficiaries in other states were used for the comparison group.

We used a four-stage approach to construct the treatment and comparison groups for the ACO- and state-level analyses, summarized below. For more details on our approach, including comparison group sampling, claims-based attribution methodology, and balancing methods, see **Appendix D**.

- **Stage 1.** We identified 26 comparison states<sup>yy</sup> with similar histories of health-care reform<sup>zz</sup> as Vermont’s.
- **Stage 2.** Using stratified random sampling, we selected a representative sample of eligible Medicare FFS beneficiaries residing in the 26 comparison states to create a comparison group that was both representative and computationally manageable.

<sup>vv</sup> To minimize computational burden in comparison group construction and estimation, we used a stratified random sample of Medicare beneficiaries residing in the 26 comparison states instead of including all beneficiaries in those states.

<sup>ww</sup> Similar to the treatment group, the list of MSSP participants changes each performance year as practitioners opt to enter or exit the MSSP. The MSSP Track 1 participant list for PY2 (2019) is different from PY1 (2018). As a result, the sample of beneficiaries attributed to the PY1 (2018) MSSP Track 1 participants during each BY (2014-2016) and PY (2018) is different from the sample of beneficiaries attributed to the PY2 (2019) MSSP Track 1 and Pathways to Success Basic A and B participants during each BY (2014-2016) and PY (2019). Therefore, the study sample for the ACO-level comparison group is different for each PY’s impact analysis.

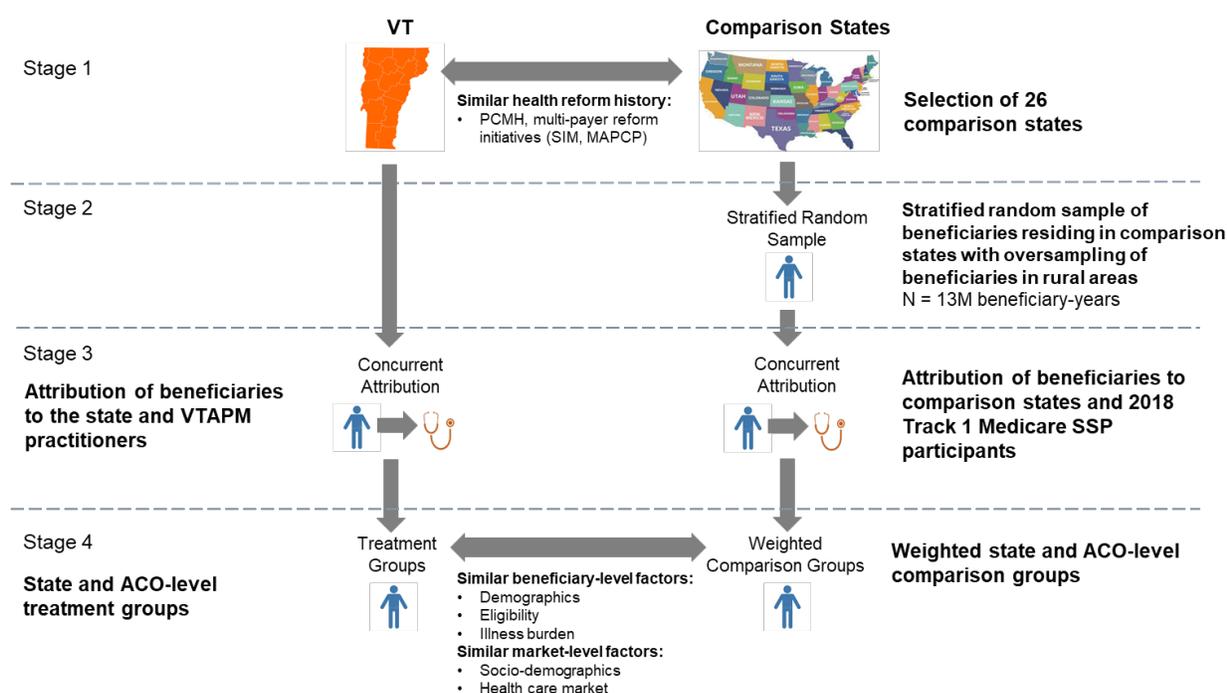
<sup>xx</sup> In 2019, CMS made structural changes to the MSSP introducing the *Pathways to Success* tracks. Some MSSP participants opted to switch to the newly introduced upside-risk *Basic A* and *Basic B* tracks. Therefore, the comparison group for the impact analysis in PY2 (2019) includes the upside-risk MSSP Track 1 participants as well as the providers who opted to transition into the *Pathways to Success Basic A* and *Basic B* tracks.

<sup>yy</sup> Because the Model’s reach is statewide, an in-state comparison group was not feasible.

<sup>zz</sup> The PCMH Model and the Multi-Payer ACO model served as the key building blocks for the VTAPM. Therefore, the comparison group includes states that implemented such initiatives in the baseline period. Refer to **Appendix Exhibit D.2.1** for the list of comparison states.

- **Stage 3.** We applied the definitions and eligibility criteria described in **Exhibits 5.1 and 5.2** to identify the treatment and comparison group populations, respectively.
- **Stage 4.** We weighted comparison beneficiaries using entropy balancing (EB) methods to ensure that the comparison group beneficiaries, on average, resided in regions similar to Vermont and were similar to those Vermonters on observed characteristics. The EB approach balanced the means and distributions of observed characteristics across treatment and comparison groups. Characteristics were balanced at the person level (sociodemographic and health) and at the area level (sociodemographic and health-care market).
- **Exhibit 5.3** illustrates the four-stage approach used to construct treatment and comparison groups.

**Exhibit 5.3. Treatment and Comparison Group Design**



NOTE: PCMH is Patient-Centered Medical Home; SIM is State Innovation Model Initiative; MAPCP is Multi-Payer Advanced Primary Care Practice Demonstration.

The unique context in Vermont posed several methodological challenges with respect to constructing a comparison group to assess the Model’s impact on Medicare spending and utilization. Few areas outside Vermont have similar sociodemographic and health insurance market characteristics and such an extensive history of health-care reform (see **Appendix Exhibit E.1.2**). As a result, unaccounted-for differences in area-level characteristics between the treatment and comparison groups, and differing trends for the treatment and comparison groups in the baseline period, may affect the accuracy and precision of some of the findings presented in this report, including the magnitude of the stated impacts.

To address these methodological challenges, we employed several mitigation strategies, including constructing alternative comparison groups, employing a flexible DID framework that allowed groups to have differing baseline trends for outcomes, and prioritizing area-level characteristics that were most likely to influence outcomes in the weighting stage. Below we note the key methodological limitations that may affect the impact findings presented in this report. For a more detailed account of the methodological challenges posed by Vermont’s unique context and the strategies used to mitigate these challenges, see **Appendix E**.

- **Lack of covariate balance on area-level characteristics.** As noted above, Vermont had significantly greater upside-risk Medicare SSP ACO penetration rate and lower MA penetration rate than comparison states during the baseline period (see **Appendix Exhibits E.4.3 and E.4.7**). The MA penetration rate in Vermont was significantly lower than comparison states (9 percent versus 26 percent) and the ACO penetration rate was significantly higher than comparison states (48 percent versus 22 percent). Given that magnitude of difference, we were unable to achieve balance on these characteristics using the EB weights. Because providers in Vermont were more likely to have experience with upside-risk Medicare ACO contracts, certain differences in outcomes between treatment and comparison groups could be attributed to varied experiences with these contracts, in addition to impacts attributed to the VTAPM. For the ACO-level analysis, providers’ differing levels of experience with these contracts are mitigated to some extent, because the comparison group was limited to Medicare beneficiaries attributed to Track 1 Medicare SSP ACO providers.
- **Influence of outlier weights.** Achieving balance on most market- and beneficiary-level covariates meant that a small proportion of beneficiaries with large EB weights comprised a large proportion of the weighted comparison group. A small proportion of beneficiaries in comparison states were similar to Vermonters on observed beneficiary-level characteristics, and resided in areas with market-level characteristics similar to Vermont. For example, in the ACO-level analysis, 1 percent of beneficiaries of SSP providers in comparison states accounted for 37 percent of the weighted comparison group (see **Appendix Exhibit E.4.2**). Few regions outside Vermont have identical market-level demand and supply characteristics.<sup>aaa</sup>
- **Magnitude of the stated impacts was sensitive to how we defined the baseline period.** Because PY0 (2017) is considered a “ramp-up” period during which the Model design was being finalized, we defined the baseline period from 2014-2016. In our flexible DID framework we adjusted for incremental differences between Vermont and the comparison group’s annual Medicare spending trends in the baseline period. Because our estimate of the baseline period includes only three time points (2014-2016), there may be uncertainty

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<sup>aaa</sup> We observed the same issue of high outlier weights in each iteration of our comparison group, further reinforcing the fact that Vermont’s market- and beneficiary-level characteristics are unique among states, and that it is likely that no comparison group would be able to entirely mitigate those differences.

associated with our estimate of the group-specific baseline trends. To assess the robustness of the impact estimates to our assumptions about the group-specific, baseline trends, we included PY0 (2017) as the fourth baseline year. Inclusion of PY0 (2017) in the baseline period *lowered* Vermont's incremental annual Medicare spending trend in the baseline period relative to the comparison group's, while its exclusion *increased* Vermont's incremental annual Medicare spending trend in the baseline period over the comparison group. In our main analyses, Vermont's incremental annual spending trend in the baseline period was influenced by a spike in the state's Medicare spending in CY2015. Including PY0 (2017) in the baseline period in sensitivity checks mitigated the CY2015 spending spike's influence on the stated impacts (see **Appendix Exhibits D.10.1** and **D.10.2**). However, given that PY0 (2017) saw the ramp-up of the Medicare ACO initiative in the state, we excluded it from the baseline period for our main findings. Overall across the different baseline approaches, results for PY2 consistently showed reductions in Medicare spending, although the magnitude of the reduction varied. In the sections below, we present findings from this sensitivity assessment alongside the main findings to convey the uncertainty associated with the magnitudes of the stated impacts.

- **Potential of delayed impacts of other Vermont health-reform efforts.** As described in detail in Chapter 2, the VTAPM builds on a history of health-reform efforts in Vermont spanning the last two decades. Many of the initiatives overlapped, spanned multiple payers, and had goals similar to those of the VTAPM around improving the health of Vermonters through delivery system reform and financial incentives. Because of this, findings may also reflect delayed impacts from other health-reform initiatives in Vermont. To partially mitigate this potential source of bias, we selected comparison states with similar histories of health reform, specifically PCMH and multi-payer reform initiatives.

For more details on the study population and selection of comparison groups, see **Appendices D.3-D.5**. In both ACO-level and state-level analyses, descriptive characteristics of treatment group beneficiaries and weighted comparison group beneficiaries across BYs and PYs were largely similar. See **Appendix Exhibits I.1-I.4** for detailed breakdowns of the beneficiary populations by year and group for the ACO- and state-level analyses in PY1 and PY2.

## Statistical Analysis and Inference

We used a DID design to evaluate the impact of the VTAPM on beneficiaries attributed to OneCare participating practitioners (ACO-level analysis) and on beneficiaries residing in Vermont and receiving a meaningful level of care within Vermont or from VTAPM-participating practitioners (state-level analysis). We estimated the impact of the VTAPM in a PY by comparing change in outcomes for treatment group beneficiaries before and after the launch of the Model to the change in outcomes for the comparison group. To estimate the VTAPM's treatment effects, we employed a flexible DID specification that allowed trends in outcomes

during the baseline period to differ between the treatment and comparison groups.<sup>bbb</sup> For more information about the DID design and specification, see **Appendix D.7**.

In the sections that follow, we present the impact of the VTAPM in PY1 (2018) and PY2 (2019) separately, as well as a cumulative estimate across the two years, relative to a three-year baseline period (2014-2016).<sup>ccc</sup> We do not present an impact for PY0 (2017), considered a ramp-up year for VTAPM implementation. We first present the ACO-level impacts (for OneCare), followed by impact estimates at the state level:

- The ACO-level analysis includes a treatment group of 93,645 Medicare beneficiaries attributed to Model practitioners over the first two PYs (40,274 beneficiaries attributed to PY1 Model practitioners; 53,371 beneficiaries attributed to PY2 Model practitioners),<sup>ddd</sup> and a weighted comparison group of Medicare beneficiaries<sup>eee</sup> attributed to practitioners participating in a Medicare SSP ACO in the selected comparison states.
- The state-level analysis includes a treatment group of 162,935 Medicare beneficiaries residing in Vermont and receiving the majority of their primary care services within the state in the first two PYs (81,379 beneficiaries in PY1; 81,556 beneficiaries in PY2)<sup>fff</sup> and a weighted comparison group of beneficiaries<sup>ggg</sup> residing in the 26 comparison states.

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<sup>bbb</sup> The DID design usually requires trends in outcomes to be parallel between the treatment and comparison groups across the baseline period. Our flexible DID specification allowed trends in outcome between the treatment and comparison group to either increase or decrease linearly over time. The DID estimate represents the impact of the Model on the outcome measure after accounting for baseline secular trends.

<sup>ccc</sup> Sensitivity analyses indicate that the inclusion of 2017 in the baseline period has a significant effect on the impact estimation because of a dramatic increase in spending in 2015. Refer to **Appendix D.10** for more details and for findings of these sensitivity analyses.

<sup>ddd</sup> The ACO-level treatment groups for PY1 and PY2 are not two distinct populations. Almost all Medicare beneficiaries attributed to the Medicare ACO initiative in PY1 were also attributed to the Model in PY2.

<sup>eee</sup> The unweighted comparison group for the ACO-level analysis for each BY and PY includes approximately 350,000 to 400,000 Medicare beneficiaries attributed to 2018 upside-risk MSSP participants and 500,000 to 650,000 Medicare beneficiaries attributed to 2019 upside-risk MSSP participants. See **Appendix Section D.2** for additional details.

<sup>fff</sup> The state-level treatment groups for PY1 and PY2 are not two distinct populations. Almost all Medicare beneficiaries attributed to VTAPM in PY1 were also attributed to the Model in PY2.

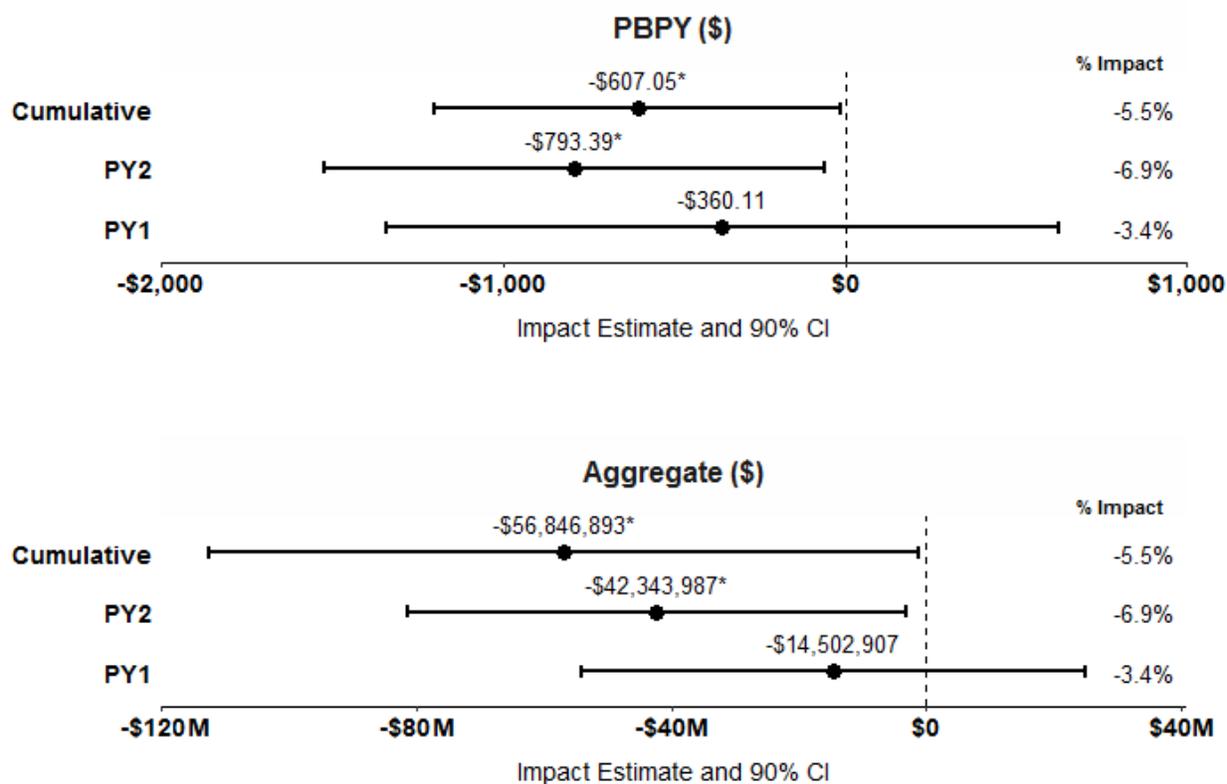
<sup>ggg</sup> The unweighted comparison group for the state-level analysis for each BY and PY includes approximately 2.5 million Medicare beneficiaries. See **Appendix Section D.2** for additional details.

## 5.2 ACO-Level: Impact on Gross and Net Medicare Spending

**Gross impact.** In its first two performance years, the VTAPM Medicare ACO initiative was associated with a statistically significant reduction in gross Medicare Parts A & B spending of \$607.05 (-5.5 percent) PBPY or a \$56.85 million overall, before considering CMS’s shared savings and other pass-through payouts (see **Exhibit 5.4.1**). The Model was also associated with a reduction in gross spending in both PY1 (2018) and PY2 (2019), relative to baseline spending for Model practitioners.

- In PY2 (2019), the Model was associated with a statistically significant reduction in gross Medicare spending of \$793.39 PBPY (-6.9 percent) or a \$42.34 million reduction overall.
- In PY1 (2018), the Model was associated with a statistically insignificant reduction in gross Medicare spending of \$360.11 PBPY (-3.4 percent) or a \$14.5 million reduction overall.

**Exhibit 5.4.1. ACO-Level: Impact on Gross Medicare Spending**

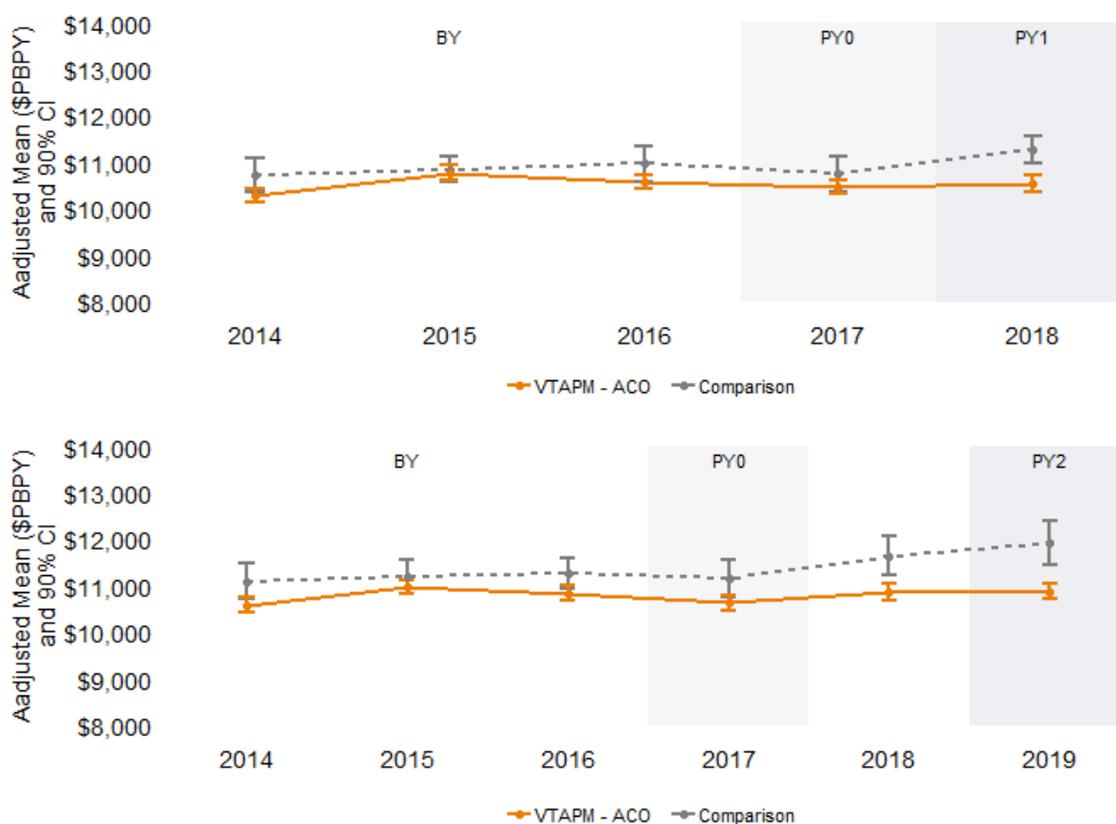


SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impact in 2019 USD (\$) per beneficiary per year (PBPY) or in aggregate for all beneficiaries in the performance year(s). Estimated aggregate gross impact is the difference-in-differences (DID) estimate multiplied by the number of aligned beneficiaries in performance year(s). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Trends in gross Medicare spending.** Exhibit 5.4.2 presents the trends in gross Medicare spending associated with the PY1 (upper panel) and PY2 (lower panel) VTAPM Medicare ACO participants (treatment group) and the comparison group of upside-risk MSSP participants for each PY.<sup>hhh</sup> Because our DID design takes into account comparison group trends, the spending reduction presented above for PY2 (see Exhibit 5.4.1) in large part reflects rising spending in the comparison groups and relatively flat spending in the VTAPM groups, especially for PY2 (2019).

**Exhibit 5.4.2. ACO-Level: Trends in Gross Medicare Spending in PY1 and PY2**



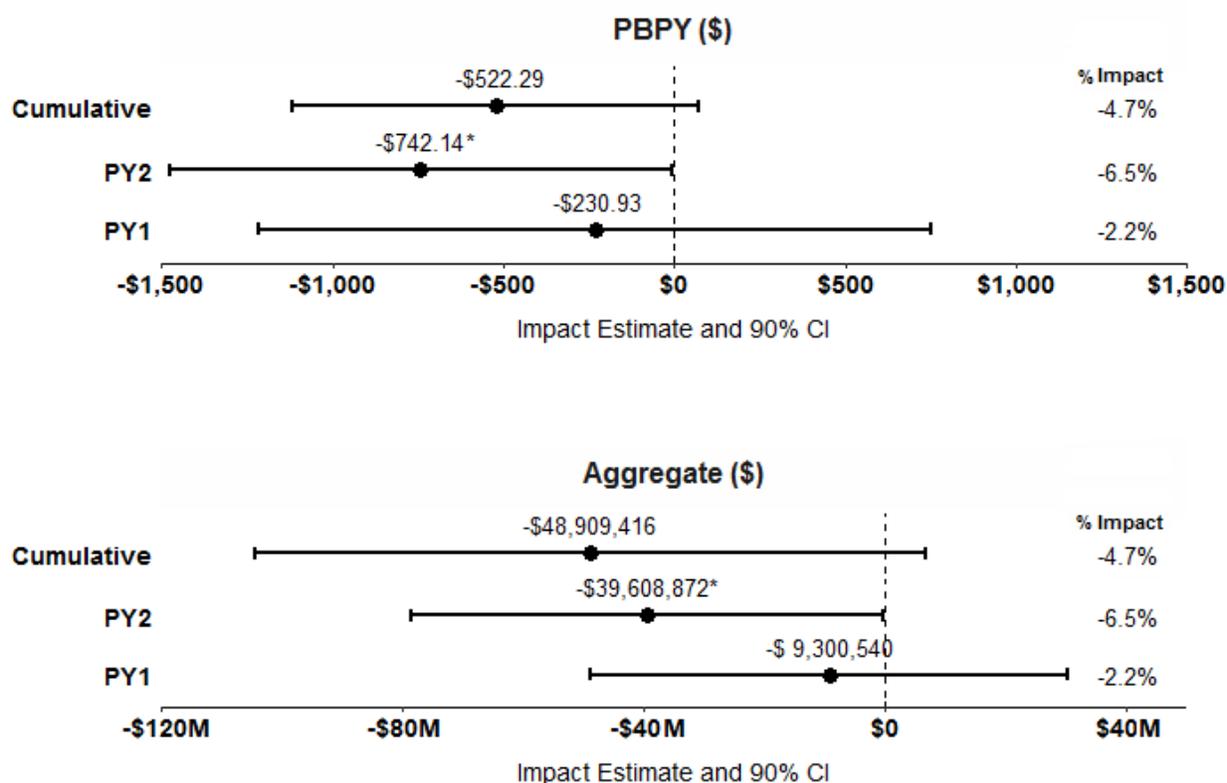
SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Upper panel presents regression-adjusted baseline trends for the PY1 gross Medicare spending impact estimate, which reflects the relative difference in gross Medicare spending between the baseline period (2014-2016) and PY1 (2018) for the Medicare beneficiaries attributed to the PY1 Model and comparison group practitioners; the lower panel presents regression-adjusted baseline trends for the PY2 gross Medicare spending impact estimate, which reflects the relative difference in gross Medicare spending between the baseline period (2014-2016) and PY2 (2019) for the Medicare beneficiaries attributed to the PY2 Model and comparison group practitioners; the right panel presents the regression-adjusted trends for the PY2 gross Medicare spending impact estimate. Impacts in PY2 (right panel) reflect the relative difference in gross Medicare spending between the baseline period (2014-2016) and PY2 (2019) for the Medicare beneficiaries attributed to the PY2 Model and comparison group practitioners.

<sup>hhh</sup> Baseline trends are calculated for Medicare beneficiaries attributed to the Model in each PY, based on the list of participating practitioners in that PY. The list of participating practitioners changes each year (as providers enter and leave the Model); for this reason, the baseline trends for PY1 providers (left panel) will differ from those for PY2 providers (right panel).

**Net impact.** After accounting for Medicare shared savings and other pass-through payments,<sup>iii</sup> the cumulative net impact of the VTAPM across PY1 and PY2 was a reduction in Medicare spending of \$522.29 PBPY (-4.7 percent) or \$48.91 million overall that did not reach statistical significance (see **Exhibit 5.4.3**). Net shared savings payments to the VTAPM Medicare ACO initiative over PY1 and PY2, taking into account shared savings payments to VTAPM providers in the baseline and comparison providers in the baseline and performance periods, totaled approximately \$7.94 million. Total gross spending decreased during that period by \$56.85 million relative to the comparison group, resulting in a relative net decrease in Medicare spending of \$48.91 million.

**Exhibit 5.4.3. ACO-Level: Impact on Net Medicare Spending**



SOURCE: Analysis of Medicare claims data by NORC.

<sup>iii</sup> The net impact assessment includes the MAPCP Start-up Adjustment (the pass-through payments to the ACO that may have benefited both attributed and non-attributed Medicare beneficiaries) in the baseline and performance periods, the VTAPM shared savings payments in the performance period, and shared savings incentives to comparison group providers from Pioneer, MSSP, and NGACO Models in the baseline and performance periods. Note that the PY1 shared-savings payment is considered accounted for in the ACO's PY2 benchmark as a health care expenditure. The net impact assessment does not account for the Medicare start-up funds (\$9.5 million) provided to Vermont by CMS in 2017 (PY0) as part of a cooperative agreement between the two entities. For more details on net impact estimation, see Appendix D.9.

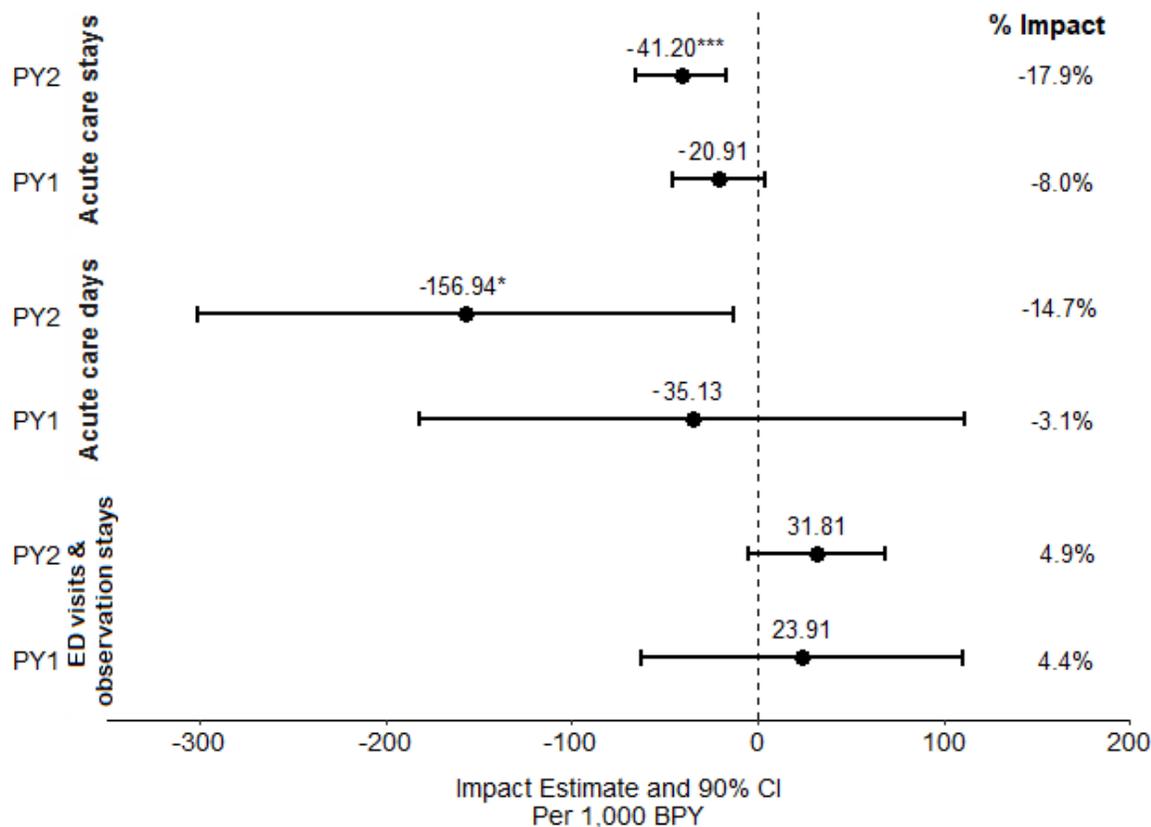
NOTE: Impact in 2019 USD (\$) per beneficiary per year (PBPY) or in aggregate for all beneficiaries in the performance year(s). Estimated aggregate gross impact is the difference-in-differences (DID) estimate multiplied by the number of aligned beneficiaries in performance year(s). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

### 5.3 ACO-Level: Impact on Medicare Utilization and Quality of Care

Over the first two PYs, the VTAPM Medicare ACO initiative had varied impacts on measures of Medicare utilization and quality of care for its attributed beneficiaries.

**Hospital-Based Utilization.** In PY2, the Model saw a significant decrease in acute care stays (-17.9 percent) and acute care days (-14.7 percent) (see **Exhibit 5.5.1**). In PY2, both the Model and the comparison group were associated with declines in acute care days and stays for its Medicare beneficiaries, but the decline was much greater for the Model (**Appendix Exhibits I.13 and I.15**). Because hospital spending represents a third of total gross Medicare spending on average,<sup>62</sup> the decreases in acute care use likely contribute to the significant gross spending reduction in PY2 and cumulatively. We observed no significant reductions in hospital-based utilization in PY1 at the ACO level and small non-significant increases in ED visits and observation stays in both PYs.

**Exhibit 5.5.1. ACO-Level: Impact on Hospital-Based Utilization**

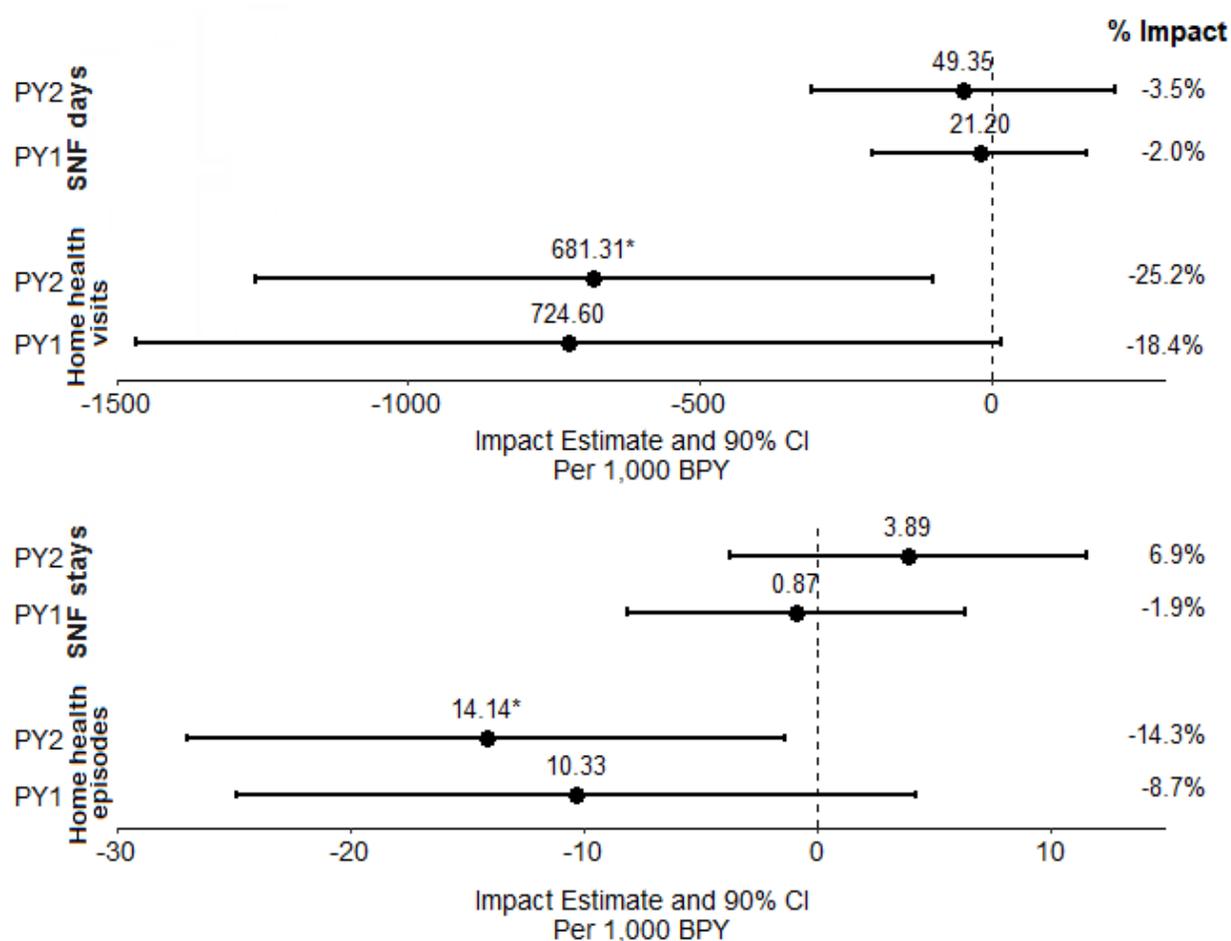


SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Post-Acute Utilization.**<sup>iii</sup> In PY2, OneCare saw a statistically significant decrease in home health visits (-25.2 percent) and home health episodes (-14.3 percent) (see **Exhibit 5.5.2**). In both PY2 and PY1, the Model was associated with greater declines in home health use, relative to the comparison group, which showed smaller declines or no change in home health use (**Appendix Exhibits I.13 and I.15**). These decreases in home health care are likely associated with the observed decrease in acute care stays, as fewer beneficiaries were eligible and in need of post-acute home health services. There was no significant change observed for the number of SNF stays or SNF days.

**Exhibit 5.5.2. ACO-Level: Impact on Post-Acute Utilization**

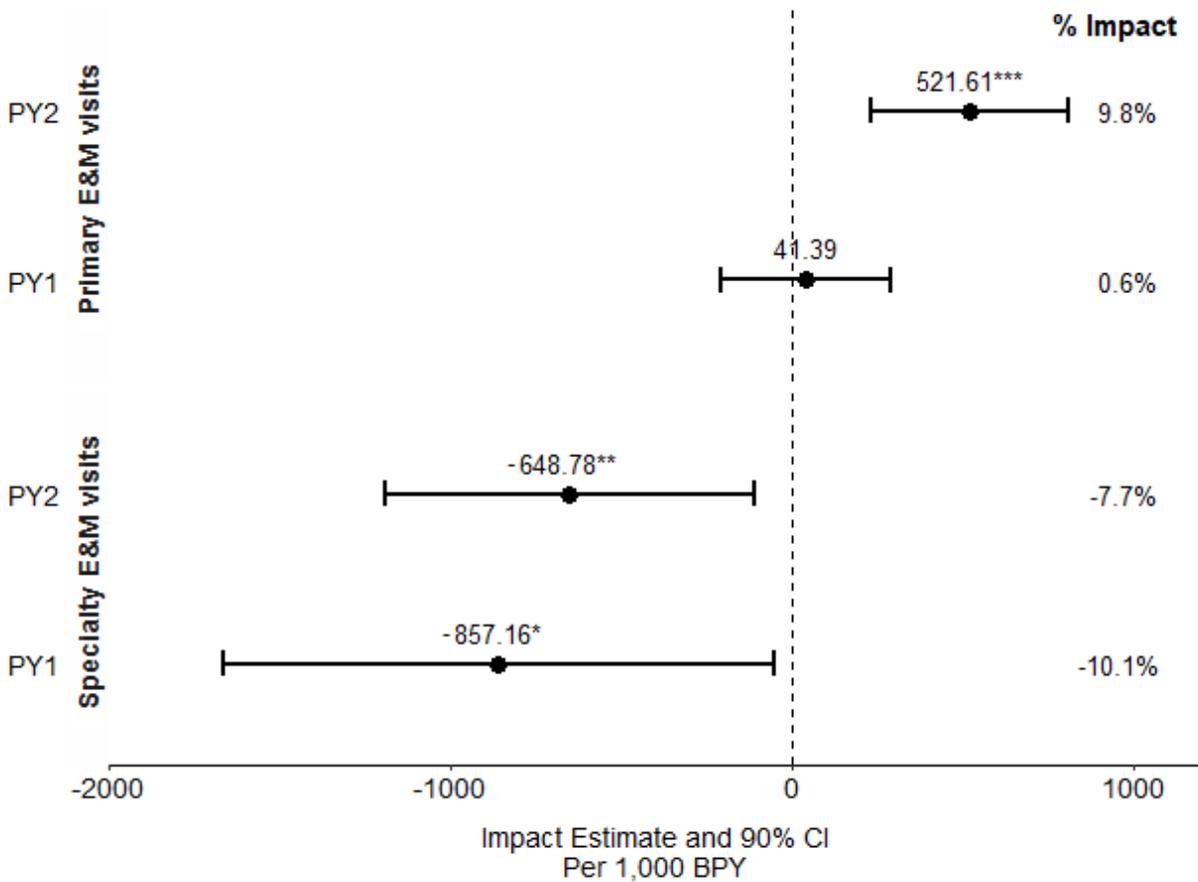


SOURCE: Analysis of Medicare claims data by NORC.  
 NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

<sup>iii</sup> Because of the small sample sizes – only a small fraction of the Medicare beneficiaries in the treatment and comparison groups received post-acute care services – there is considerable uncertainty associated with the impact estimates for the post-acute care utilization outcomes. We urge caution in interpreting the impacts of the Model on post-acute care utilization.

**Ambulatory Care Utilization.** In both PY1 and PY2, we observed a statistically significant decrease in specialty E&M visits (-10.1 percent and -7.7 percent, respectively) for the VTAPM’s Medicare ACO population (see **Exhibit 5.5.3**). For both years, the Model was associated with a larger decline in specialty E&M visits between the baseline and performance periods, relative to the comparison group, which showed increases (**Appendix Exhibits I.13 and I.15**). Additionally, in PY2, we observed a significant increase in primary care E&M visits (9.8 percent). This decrease may reflect VTAPM’s focus on care coordination, along with a shortage of specialists in Vermont.<sup>63</sup>

**Exhibit 5.5.3. ACO-Level: Impact on Ambulatory Care Utilization**

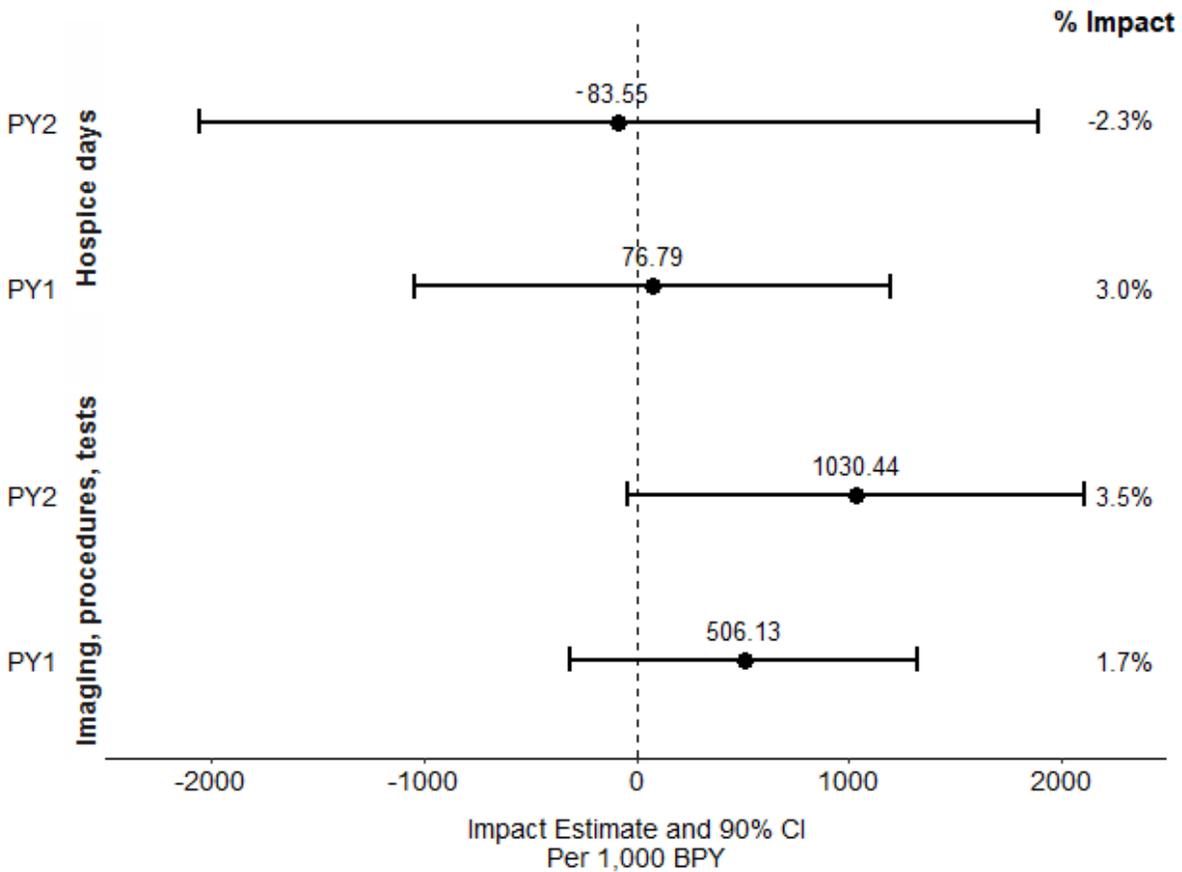


SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Other Utilization.** No significant impact was observed on hospice days in either PY1 or PY2 (see **Exhibit 5.5.4**).<sup>kkk</sup> While there are increases in imaging, tests, and procedures in both PY1 and PY2, neither reaches statistical significance.

**Exhibit 5.5.4. ACO-Level: Impact on Other Utilization (Hospice Days and Imaging/Procedures/Tests)**



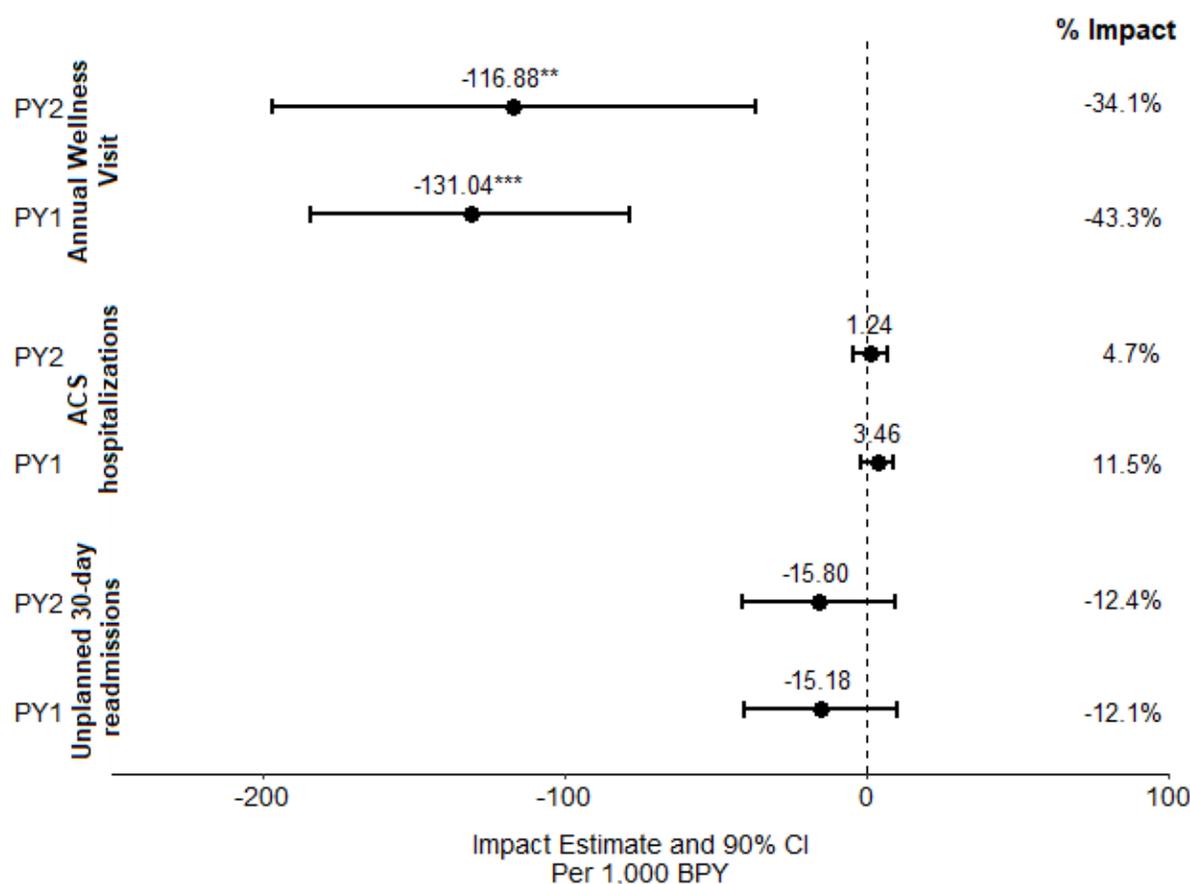
SOURCE: Analysis of Medicare claims data by NORC.  
 NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Access to and Quality of Care.** In both PY1 and PY2, the Model was associated with significant declines in beneficiaries receiving annual wellness visits (AWVs; -43.3 percent and -34.1 percent, respectively) (see **Exhibit 5.5.5**). The comparison group comprises beneficiaries attributed to 2018 and 2019 Medicare SSP ACO practitioners. Consistent with Medicare SSP

<sup>kkk</sup> Because of the small sample sizes – only a small fraction of the Medicare beneficiaries in the treatment and comparison groups received hospice care services – there is considerable uncertainty associated with the impact estimates for the ‘hospice days’ outcome measure. We urge caution in interpreting the impacts of the Model on hospice care utilization.

incentives increasing the use of AWWs, we observed increases in beneficiaries with AWW between the baseline and performance periods in the comparison group and the small declines in beneficiaries with AWW for OneCare (**Appendix Exhibits I.13 and I.15**). There were no statistically significant declines or improvements in quality of care, measured as beneficiaries with potentially avoidable ambulatory care-sensitive (ACS) hospitalizations or those with unplanned readmissions.

**Exhibit 5.5.5. ACO-Level: Impact on Access to and Quality of Care**



SOURCE: Analysis of Medicare claims data by NORC.  
 NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

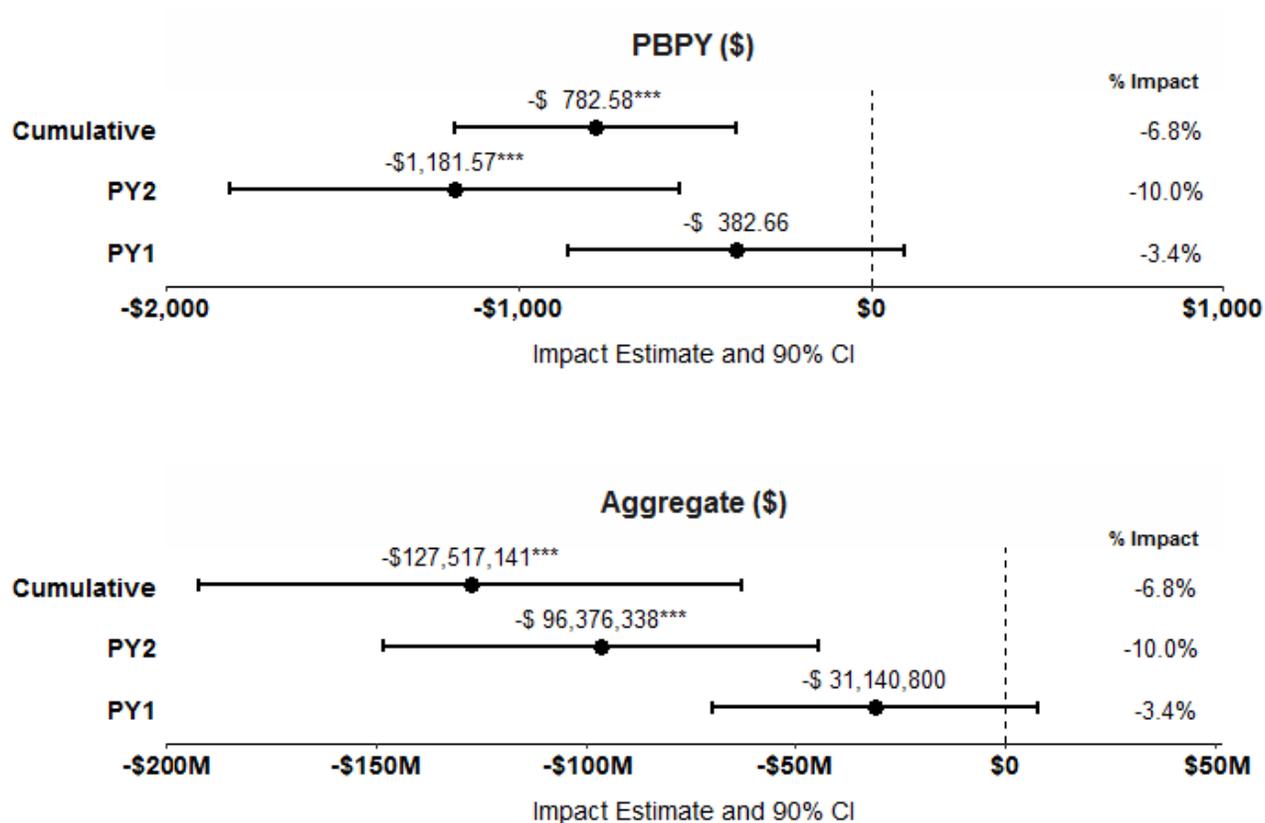
**5.4 State-Level: Impact on Gross and Net Medicare Spending**

**Gross impact.** In the first two years, the VTAPM was associated with a statistically significant reduction in gross Medicare Parts A & B spending of \$782.58 (-6.8 percent) PBPY or a \$127.52 million gross reduction in Medicare spending overall, before considering CMS’s payouts (see **Exhibit 5.6.1**).

- In PY2 (2019), the Model was associated with a statistically significant reduction in gross Medicare spending of \$1,181.57 PBPY (-10.0 percent), or a \$96.38 million reduction overall.
- In PY1 (2018), the Model in Vermont was associated with a statistically insignificant reduction in gross Medicare spending of \$382.66 PBPY (-3.4 percent), or a \$31.14 million reduction overall.

Findings of gross Medicare spending reductions may reflect the ongoing influence of other programs, in addition to the VTAPM. As discussed in Chapter 4, implementation of the Model allowed for Blueprint PCMH and SASH funding to continue, which provided care coordination and management for beneficiaries across the state, not only for beneficiaries attributed to VTAPM. Numerous initiatives implemented across the state—by the state, hospitals, and other community providers and organizations—provided benefits to the population as a whole.

**Exhibit 5.6.1. State-Level: Impact on Gross Medicare Spending**



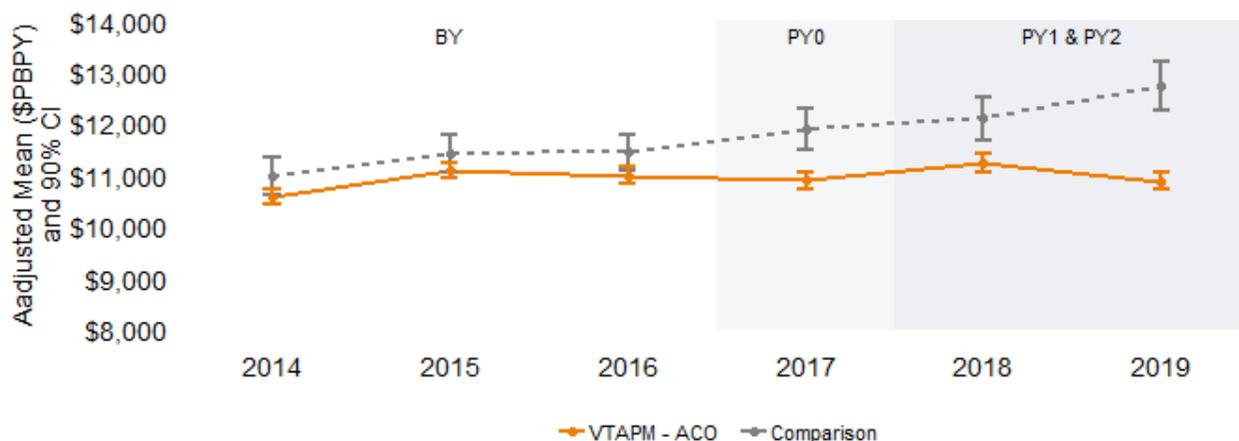
SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impact in 2019 USD (\$) per beneficiary per year (PBPY) or in aggregate for all beneficiaries in the performance year(s). Estimated aggregate gross impact is the difference-in-differences (DID) estimate multiplied by the number of aligned beneficiaries in performance year(s). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Trends in gross Medicare spending.** Exhibit 5.6.2 presents the trends in statewide gross Medicare spending associated with the VTAPM and the comparison group in the BY (2014-2016) and PY (2017-2019). Because our DID design takes into account comparison group trends, the spending reduction presented above (see Exhibit 5.6.1) in large part reflects rising spending in the comparison groups and relatively flat spending in the VTAPM. We observe a notable shift in the VTAPM’s trends in statewide gross spending beginning in PY0 (2017), which is considered a “ramp-up” performance year for the Model and thus is not included as a baseline year in our analyses presented above.

In order to assess the sensitivity of our findings to assumptions about the baseline trends, we conducted a sensitivity check using a model that included PY0 (2017) as a baseline year, which allowed us to estimate the Model’s impacts in a scenario of slower spending growth during the baseline period. Inclusion of PY0 (2017) in the baseline period lowered Vermont’s incremental annual Medicare spending trend in the baseline period relative to the comparison group’s, while its exclusion increased Vermont’s incremental annual Medicare spending trend in the baseline period over the comparison group (see Appendix D.10). The magnitude of the stated impacts were sensitive to the inclusion of PY0 (2017) in the baseline period; the Model was associated with a non-significant *increase* of \$159.51 PBPY in PY2, and a significant *reduction* of \$426.60 in PY1 when PY0 (2017) was treated as a BY. For more information on the sensitivity assessment, see Appendix D.10.

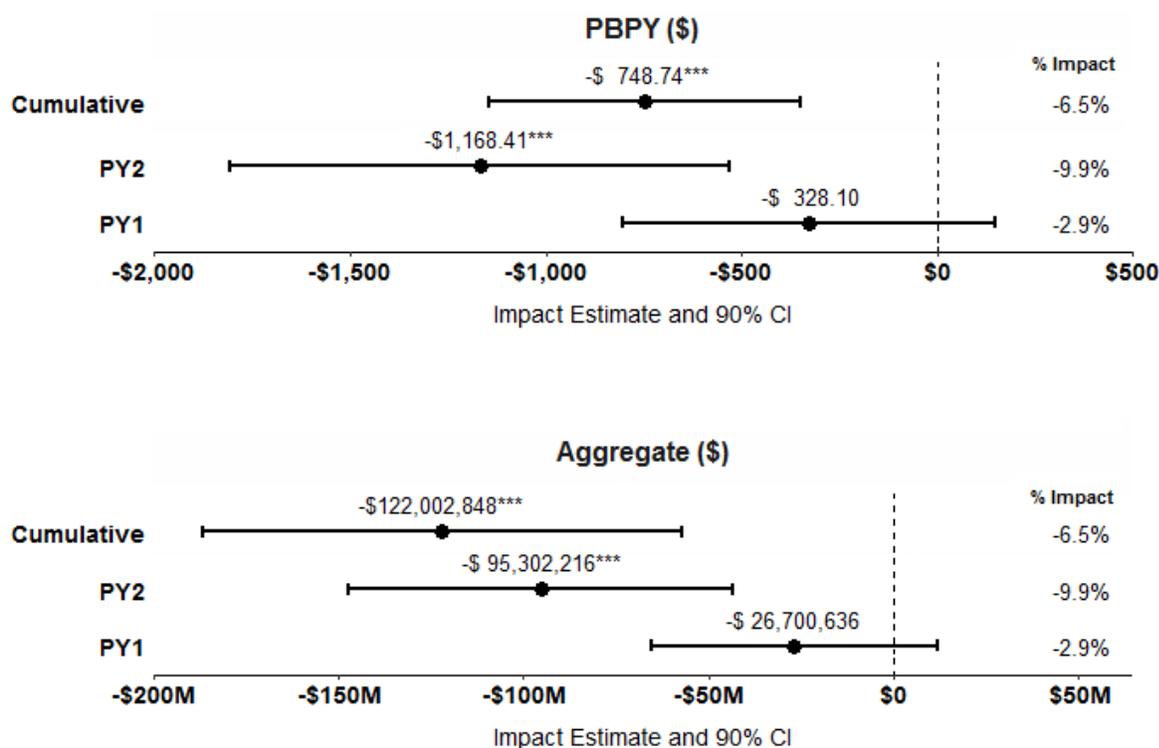
**Exhibit 5.6.2. State-Level: Trends in Gross Medicare Spending in PY1 and PY2**



SOURCE: Analysis of Medicare claims data by NORC.  
 NOTE: Shaded area represents PY1 (2018) and PY2 (2019).

**Net impact.** After accounting for the Medicare shared-savings and other pass-through payments<sup>III</sup>, the cumulative net impact of the Model statewide gross spending across PY1 and PY2 was a significant reduction in Medicare spending of \$748.74 PBPY (-7.5 percent), or \$122 million overall (see **Exhibit 5.6.3**). Net shared savings payments to the VTAPM initiative over PY1 and PY2, taking into account shared savings payments to VTAPM providers in the baseline and comparison providers in the baseline and performance periods, totaled approximately \$5.51 million, while gross spending decreased during that period by \$127.52 million, resulting in a net decrease in Medicare spending of \$122 million.

**Exhibit 5.6.3. State-Level: Impact on Net Medicare Spending**



SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impact in 2019 USD (\$) per beneficiary per year (PBPY) or in aggregate for all beneficiaries in the performance year(s). Estimated aggregate gross impact is the difference-in-differences (DID) estimate multiplied by the number of aligned beneficiaries in performance year(s). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

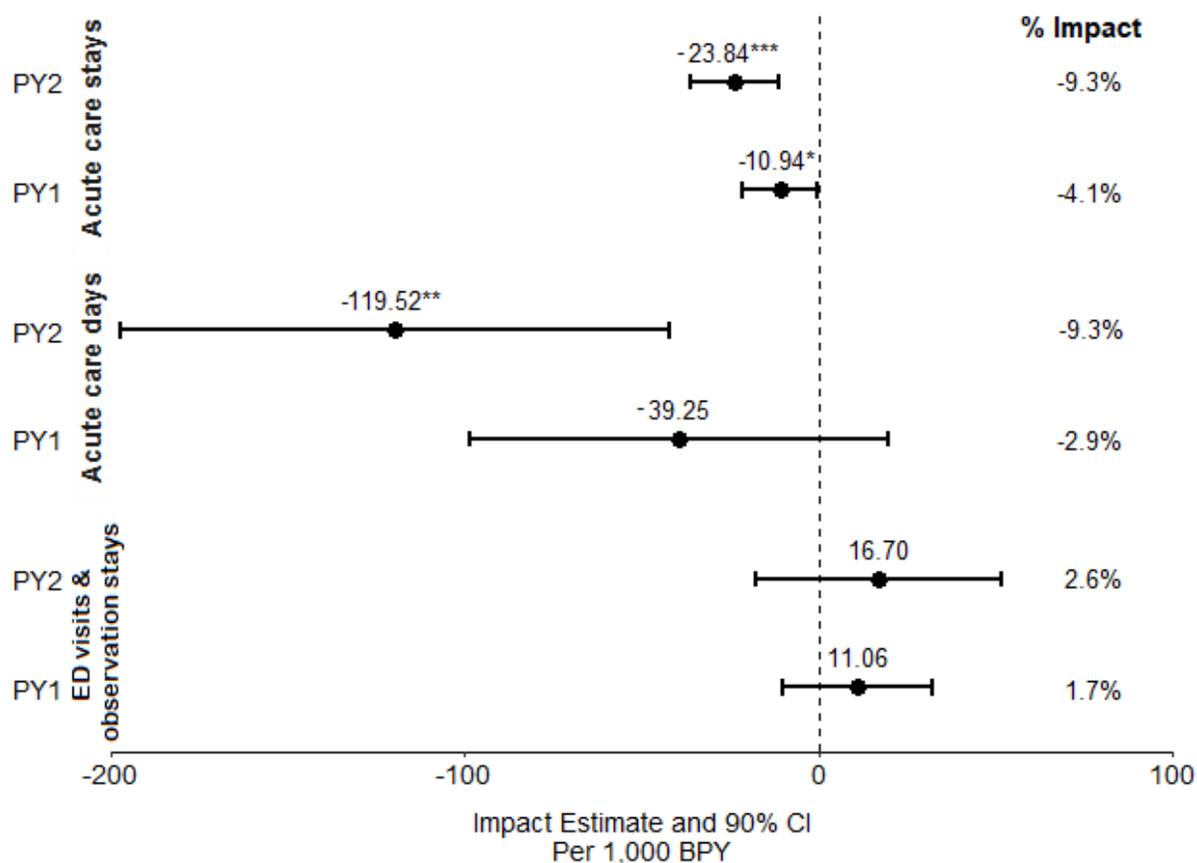
<sup>III</sup> Although the VTAPM Medicare ACO received the shared savings and pass-through payments, we present net impacts at the state level because the ACO is one of the mechanisms through which the VTAPM aims to achieve its statewide financial targets. Additionally, the payments to the ACO may have benefited non-attributed Medicare beneficiaries as well as beneficiaries attributed to the Medicare ACO initiative. The net impact assessment includes the MAPCP Start-up Adjustment (the pass-through payments to the ACO that may have benefited both attributed and non-attributed Medicare beneficiaries) in the baseline and performance periods, the VTAPM shared savings payments in the performance period, and shared savings incentives to comparison group providers from Pioneer, MSSP, and NGACO Models in the baseline and performance periods. Note that the PY1 shared-savings payment is considered accounted for in the ACO’s PY2 benchmark as a health care expenditure. The net impact assessment does not account for the Medicare start-up funds (\$9.5 million) provided to Vermont by CMS in 2017 (PY0) as part of a cooperative agreement between the two entities. For more details on net impact estimation, see Appendix D.9.

## 5.5 State-Level: Impact on Medicare Utilization and Quality of Care

Over the first two PYs, the Model in Vermont had varied impacts on measures of Medicare utilization and quality of care for attributed state beneficiaries.

**Hospital-Based Utilization.** The VTAPM was associated with significant decreases in acute care stays in both PY1 (-4.1 percent) and PY2 (-9.3 percent), as well as a significant decrease in acute care days in PY2 (-9.3 percent; see **Exhibit 5.7.1**). Similar to the ACO-level analysis noted earlier, the large overall contribution of acute care to Medicare spending means that the significant decreases in hospital-based utilization are one main contributor to spending reductions at the state level. Additionally, we observed no reductions in ED visits and observation stays in either PY1 or PY2.

**Exhibit 5.7.1. State-Level: Impact on Hospital-Based Utilization**

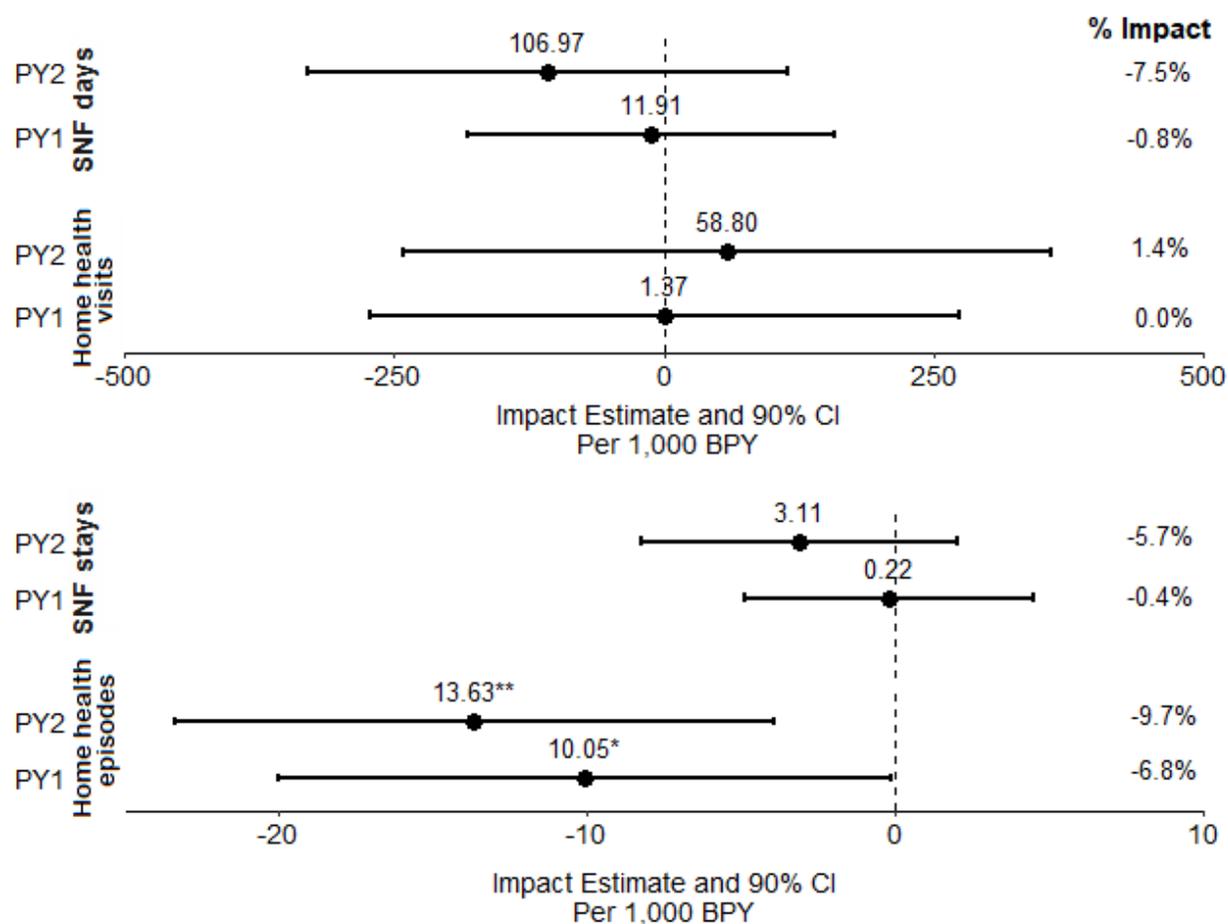


SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Post-Acute Utilization.**<sup>mmm</sup> In PY1 and PY2, Vermont Medicare beneficiaries saw a significant decrease in home health episodes (-6.8 percent and -9.7 percent, respectively; see **Exhibit 5.7.2**). Similar to what was observed in the ACO-level analysis, this is likely related to the observed decrease in acute care stays, as there were fewer opportunities for beneficiaries to receive post-acute home health services. There was no significant change seen for the number of SNF stays, SNF days, or home health visits.

**Exhibit 5.7.2. State-Level: Impact on Post-Acute Utilization**

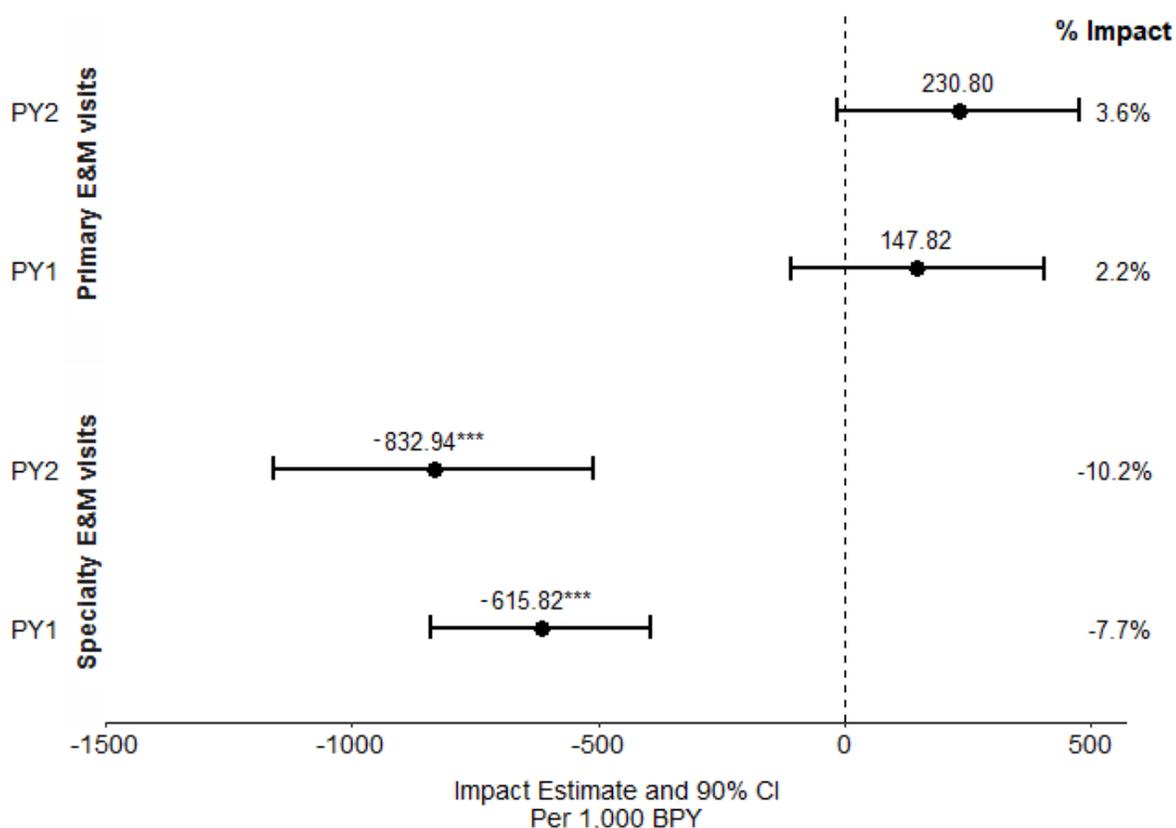


SOURCE: Analysis of Medicare claims data by NORC.  
 NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

<sup>mmm</sup> Because of the small sample sizes – only a small fraction of the Medicare beneficiaries in the treatment and comparison groups received post-acute care services – there is considerable uncertainty associated with the impact estimates for the post-acute care utilization outcomes. We urge caution in interpreting the impacts of the Model on post-acute care utilization.

**Ambulatory Care Utilization.** In both PY1 and PY2, we observed a statistically significant decrease in specialty E&M visits (-10.2 percent and -7.7 percent, respectively) for Vermont beneficiaries (see **Exhibit 5.7.3**). This may be a result of ongoing support for PCMHs in Vermont. The evaluation of the MAPCP Demonstration in Vermont similarly found a decrease in medical specialist visits among Blueprint for Health Medicare beneficiaries as compared to beneficiaries assigned to non-PCMH practices, and a decrease in the overall rate of surgical specialist visits decreased among Blueprint for Health Medicare beneficiaries compared to beneficiaries assigned to either PCMH or non-PCMH practices.<sup>22</sup>

**Exhibit 5.7.3. State-Level: Impact on Ambulatory Care Utilization**

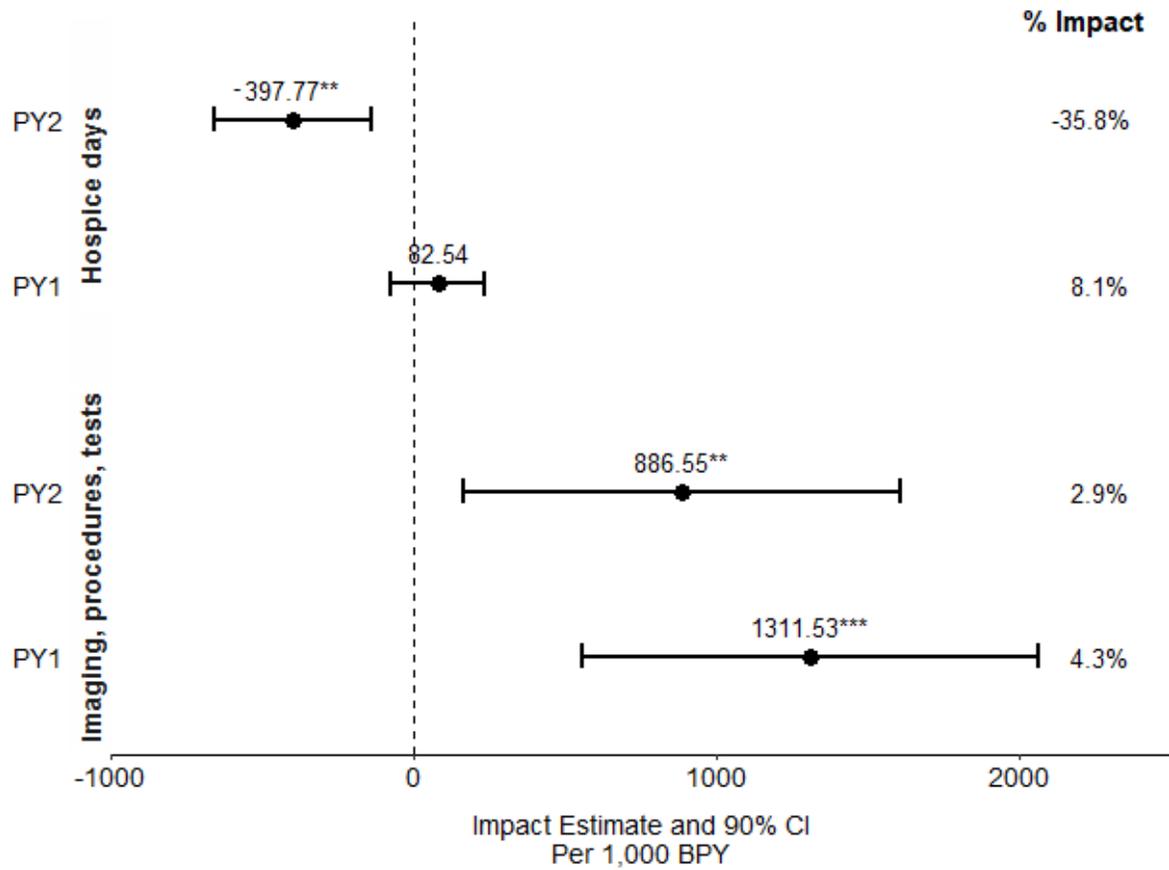


SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Other Utilization.** Vermont Medicare beneficiaries experienced significant increases in the number of imaging, procedures, and tests performed (4.3 percent in PY1 and 2.9 percent in PY2; see **Exhibit 5.7.4**). Additionally, in PY2 there was a decrease in hospice days (-11.9 percent).

**Exhibit 5.7.4. State-Level: Impact on Other Utilization (Hospice Days, Imaging/Procedures/Tests)**

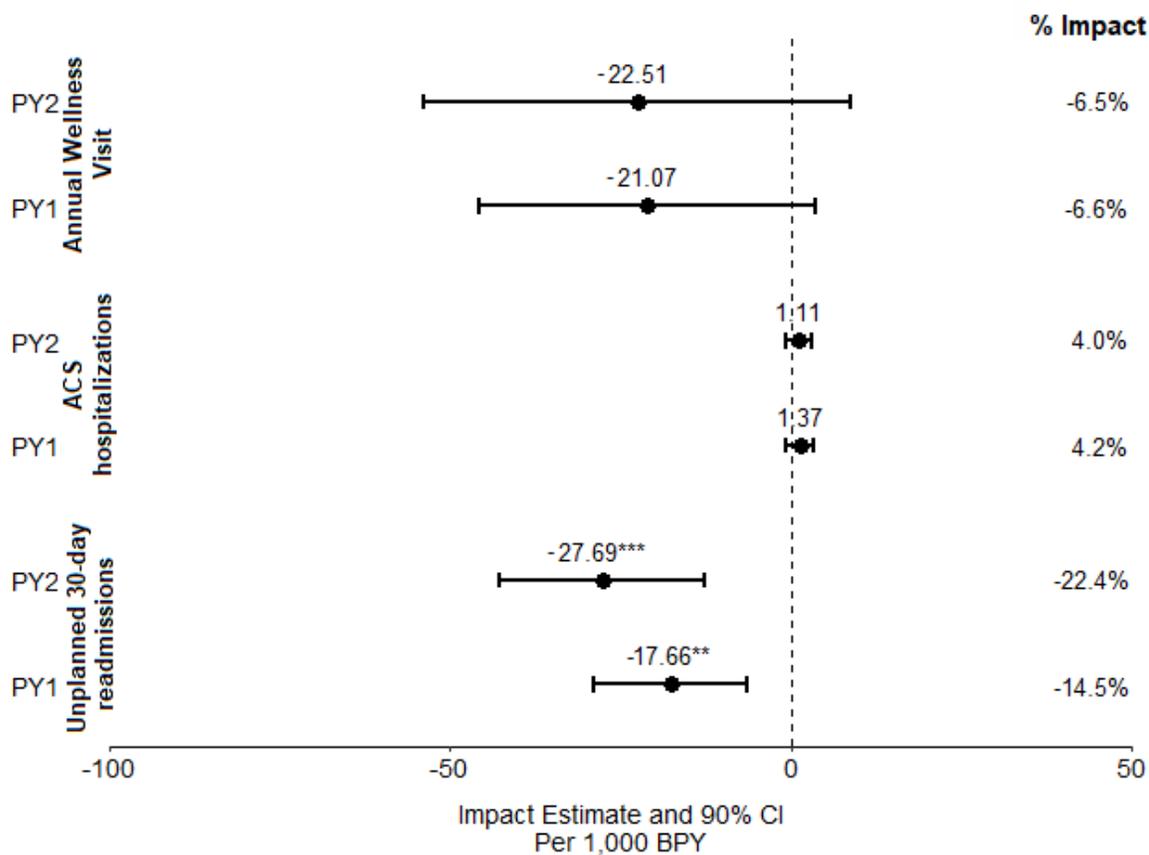


SOURCE: Analysis of Medicare claims data by NORC.

NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**Access to and Quality of Care.** The VTAPM was associated with a significant reduction in beneficiaries with unplanned readmissions (-14.5 percent in PY1 and -22.4 percent in PY2; see **Exhibit 5.7.5**) statewide, in contrast to the ACO-level findings which showed no change in unplanned readmissions. No significant changes were seen for AWWs among Vermont Medicare beneficiaries, despite significant decreases in AWWs for the ACO-attributed population. For Vermont Medicare beneficiaries, no changes were seen for ACS hospitalizations.

**Exhibit 5.7.5. State-Level: Impact on Access to and Quality of Care**



SOURCE: Analysis of Medicare claims data by NORC.  
 NOTE: Impacts are per 1,000 beneficiaries per year (BPY). Asterisks denote significance at \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

**5.6 Quality Performance Outcomes for the VTAPM**

After the completion of each contract year, CMS provides a Quality Performance Report comprising several ACO-level population health measures to each Medicare ACO. The report provides the individual ACO’s performance rate for each measure based on attributed beneficiaries, and benchmarks for comparable ACOs, including those participating in the Medicare NGACO Model and SSP. **Appendix Exhibit I.17** shows the performance rate for each population health measure over time for OneCare in PY2 and historical benchmark data, where available.

In the first two VTAPM performance years, we observed a decreasing trend in unplanned admissions for patients with multiple chronic conditions and an increase in screenings for clinical depression and follow-up plans. Rates for the quality performance measures for OneCare

Medicare beneficiaries are generally comparable to those for Medicare NGACO and SSP beneficiaries.

## 5.7 Summary and Next Steps

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Over the first two PYs of the Model, we observed significant reductions in total Medicare spending in both our ACO- and state-level analyses, largely due to reductions in spending in PY2. For both populations, these reductions reflect a rising Medicare spending trend in the comparison groups and a relatively flat Medicare spending trend in the VTAPM groups. When taking into account Medicare shared savings and other pass-through payments, we observe a statistically significant reduction in spending at the state level but not the ACO level. We also observe a relative decline in acute care utilization at the state and ACO level, especially in PY2 (2019).

It is important to note that although we took measures to minimize potential biases (e.g., drawing our comparison group from multiple states, using the flexible DID), as described earlier, unobserved differences between the treatment and comparison group, as well as time-varying effects that coincide with the Model's implementation, could also potentially bias the impact findings. Vermont's history of health and delivery system reform is unlike any other state's, and it is plausible that the impacts noted in this report, particularly at the state level, may be due to delayed effects of Vermont's delivery system reform efforts in the baseline period.

Additionally, attribution methods used to construct the treatment and comparison groups may exclude subpopulations that the Model could impact. Beneficiaries are attributed to the Model based on whether they receive a plurality of their primary care services from participating practitioners. However, other key Model providers, such as the participating hospitals, may impact the outcomes of non-attributed beneficiaries seeking acute care services at their facilities. This limitation is more likely to influence the ACO-level results than state-level results.

In future reports, we plan to present impacts for the Medicaid population attributed to the Model, to explore population health and quality-of-care outcomes more deeply, and to stratify the impact assessment by practice, practitioner, and beneficiary-level characteristics to test specific hypotheses.

## Chapter 6: Discussion

The goal of the VTAPM is to test the impact of scaling an ACO structure across all payers on transforming care delivery, reducing spending, and improving population health outcomes. The VTAPM agreement lays out financial, enrollment scale, and population health targets designed to bring health-care spending in line with Vermont’s overall economic growth and to encourage participating providers to work together in achieving population health goals.<sup>3</sup> The Model builds on the long history of reform and existing population health infrastructure in the state.

### 6.1 Early Implementation and Impact of the VTAPM

“I’ve always thought personally that the first five years of the all-payer model, it’s actually six years if you count the year zero, but that first go, if we could just break even, meaning not lose a lot of money on value-based care, and we could show that ...we kept people overall healthier, and we improved some of those measures they talked about, and Vermont primary care providers joined on, and we came out even--we didn’t make money or lose money--that would be an amazing success, and then we would be ready in the second phase to really show how to do it, and really drive the capacity of the system.”

--Hospital leader

This report assesses the performance of the VTAPM in its first two years. While the Model builds on initiatives underway, it entailed changes to roles, novel payment mechanisms, increased financial risk, and implementation of new programs. The first two years of the five-year performance period were largely a ramp-up period. OneCare, the state, and providers have been learning and adjusting course in response to challenges encountered along the way.

**In its first two PYs, the VTAPM failed to achieve its all-payer and Medicare scale target goals.** The Model’s scale targets are based on the

hypothesis that broad ACO participation across the state will enable Vermont providers to reach the tipping point that would support care transformation. Slightly over half of the VTAPM’s participating practitioners participated in all three payer initiatives (Medicare, Medicaid, and BCBSVT). While all but two hospitals in the state are participating in the VTAPM ACO initiatives, just over half participated in the Medicare ACO initiative in PY2, which has limited the overall number of participating practitioners and attributed Medicare beneficiaries. Smaller hospitals, particularly CAHs, were reluctant to participate in the Medicare ACO due to concerns about financial risk. CAHs also expressed concerns regarding how accepting AIPBP would affect cost-based reimbursement. Commercial payer participation has also been slow. Until 2019, BCBSVT participated only through its QHPs. Key self-insured employer groups in the state, which comprise a large percentage of the commercial insurance market, have been hesitant to join (though State Employees’ Health Care Plan joined in 2021).

**Despite limited progress on achieving scale, the VTAPM achieved statistically significant, cumulative Medicare spending reductions over the first two PYs at both the ACO and state**

**level.** At the ACO level, the Model was associated with a reduction of \$607.05 PBPY in gross Medicare spending. At the state level, the Model showed a gross spending reduction of \$782.58 PBPY. When Medicare shared saving and other payouts were taken into account for VTAPM and comparison providers in the baseline and performance periods, the Model was associated with a statistically significant reduction of \$748.74 PBPY for the state, but no statistically significant savings for the ACO. However, in PY2 the Medicare ACO showed a significant decrease in net Medicare spending of \$742.14 PBPY. The observed decrease in specialist office visits and increase in primary care office visits for the statewide Medicare population may have also contributed to a decline in inpatient utilization. Additionally, we observed statistically significant decreases in home health episodes across both PY1 and PY2 for both the ACO and statewide.

**These decreases in utilization and spending are likely a result of the Model’s continuation of years of primary care and population health investments in Vermont and a statewide culture of reform.** Vermont has a strong foundation of support for population health, from the establishment of the Blueprint for Health in 2003, continuing with the expansion and support of PCMHs under the MAPCP Demonstration, and the VHCIP implemented under SIM. Findings from the MAPCP and SIM VHCIP evaluations generally align with our finding that slowed growth in spending and utilization for the Model relative to the comparison group, rather than absolute decreases in those outcomes, drove savings. The reform initiatives implemented in the baseline period may have had a delayed impact on outcomes observed during the VTAPM’s performance period.

**Findings from the First Two Years of the VTAPM: Building on Previous Initiatives**

Vermont’s MAPCP Demonstration was associated with an increase in care continuity and a slowed rate of growth in total Medicare expenditures. This was attributed to decreases in expenditures for post-acute care, specialty physicians, and home health.

An evaluation of Vermont’s SIM VHCIP initiative found a decrease in total expenditures during the first two years and a slower rate of increase during the third year of implementation. Rates of ED visits that did not lead to a hospitalization declined. There was no statewide impact on the rate of ED visits or total expenditures for Medicare.

**While the VTAPM has not reached its scale targets, the continuation of population health initiatives may contribute to state-level impacts through Model spillover beyond the attributed beneficiaries.** The VTAPM has allowed for continued Medicare funding for existing Blueprint for Health programs (PCMH, CHTs, and SASH), enabling programs with demonstrated outcomes to continue. Some of the ACO and hospitals’ population health initiatives (e.g., community health teams, care coordinators) and the PCMH are payer-blind, serving ACO and non-ACO beneficiaries. In addition, numerous public and population health initiatives continuing throughout the state may also be contributing to the outcomes of this evaluation, even if not directly attributable to the Model.

**Stakeholders agree that the VTAPM provides an important, unifying forum for providers, payers, and the state to engage in meaningful discussions about health-care reform and setting goals.** The unique role of GMCB in reviewing hospital and ACO budgets may have played a role in encouraging population health investments. As one state-level stakeholder noted: *“I think that a benefit of the model in general is that it has continued to highlight the need for cost containment and the whole idea of a benchmark out there for better or worse, does allow more cohesion around a common goal.”* For example, state-level stakeholders, including GMCB, OneCare, and CMMI, noted that achieving consensus on an aligned set of 13 quality measures across most payers was an early VTAPM success. Medicaid leadership aligned quality measures with the Medicare ACO initiative and collaborated closely with OneCare on quality improvement.

**The VTAPM is also strengthening relationships between hospitals, community organizations, designated mental health agencies, primary care practices, and other providers.** Stakeholders credit the Model with increasing provider collaboration in what was a “fractured” system. One state-level stakeholder and a Blueprint program manager noted that the Model has provided a mechanism for collaboration across the continuum of care, thereby reducing competition to address population health goals. In addition, there is evidence that some hospitals, now taking on downside risk, are beginning to move towards an *“expense containment and population health approach,”* which includes collaboration with community providers. However, there is variation across HSAs. The capacity for each HSA (e.g., hospital, local Blueprint, community providers) to identify priorities and tailor investments that meet community needs is a strength of the Model but may contribute to local variation in performance.

**Lack of widespread understanding of the Model, perceived lack of transparency, and distrust have contributed to challenges engaging practitioners and the public.** While the state, the GMCB, and OneCare strive to increase transparency, some state-level stakeholders

“To me the biggest benefit is helping the health-care system recognize the value of community-based care. In the past—and just the way the American health-care system is built—all power lies within the hospitals. At some point with health-care reform, people started to realize hospital systems are very expensive...”

—Primary Care Provider

believed that describing the highly complex Model in a public forum creates further confusion and mistrust. Stakeholders interviewed suggested that because the Model is extremely complicated, most people do not see the potential benefits. There is a lack of clarity on who is in charge—as one stakeholder noted, there are *“too many cooks in the kitchen”*—and it is unclear who is responsible for communicating the Model’s goals. The Model and

OneCare have become synonymous, which has also added to communication challenges.

**Care delivery transformation will require a more comprehensive transition to value-based payment among participating providers.** The VTAPM intended to transition away from FFS by providing an avenue for health-care organizations to receive prospective monthly payments.

One of the goals of distributing predictable payments throughout the year is to influence how providers coordinate and deliver care, and eventually, lead to delivery system reform. Stakeholders suggested that comprehensive delivery system change would take five to six years. Challenges with the AIPBP mechanism and lack of scale have slowed this shift. The unpredictability and administrative burden of reconciling the Medicare AIPBP to FFS remains a barrier to hospitals investing in population health initiatives and participation in the Medicare ACO initiative. The Model has not yet reached its goals of broad participation across all participating payers due in part to CAHs’ inability to take on the risk of the Medicare ACO and limited commercial participation. As a result, providers report having their feet “*in two canoes,*” with capitated payments comprising a very small portion of their revenue and conflicting FFS incentives still driving care delivery for a sizeable share of patients.

**Beyond payment reform, the VTAPM may be missing a focus on upstream investments that address SDOH and underlying factors that affect population health.** While the VTAPM has stimulated cooperation between stakeholders to work together to address community-level health issues such as community collaboratives, there continues to be a lack of consistent upstream funding. OneCare leaders noted the need to “*broaden the accountability and the opportunity for savings across the larger audience than just the hospital systems.*” Hospitals are the risk-bearing entities in this Model; the financial incentives are not yet aligned for all hospitals to engage community practitioners and providers to the extent necessary for large-scale transformation to occur in some participating HSAs.

## 6.2 Model Implementation in PY3 and PY4

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A primary focus for state-level stakeholders for PY3 (2020) and PY4 (2021) is increasing participation and progress toward Model scale. In September 2020, CMS issued a warning notice of Vermont’s non-compliance with the ACO scale targets for PY1 and PY2.<sup>64</sup> Achieving all-payer scale requires increasing commercial participation, particularly bringing in more self-funded employers and MA plans, and increasing participation in the Medicare ACO initiative.

MVP began participating in the Model in PY3

(2020) for their QHP population. While the State Employees’ Health Care Plan joined the Model for PY4 (2021), the teachers’ union (Vermont-NEA), which has 12,000 members, has not. With respect to Medicare participation, Springfield Hospital left the Medicare ACO initiative in PY3 (2020) because the hospital filed for bankruptcy. However, Rutland Regional Medical Center began participating in the Medicare ACO initiative in PY4 (2021), adding approximately 7,500

“The biggest benefit [of the Model]... it’s allowed for sustainable funding, particularly for hospitals, that we would not have had otherwise during COVID. It really was a bit of a stabilizing factor for all hospitals and for the health-care systems overall.... So, the fact that we had sustainable, predictable monthly payments, has been good.... That would have been fairly devastating to us if we hadn’t had those PBPMs during about three or four months.”

–FQHC Administrator

beneficiaries.<sup>nnn,ooo</sup> For the Medicaid ACO initiative, this includes expanding the provider network and considering implementation of the expanded attribution approach in additional HSAs.

In November 2020, the AHS issued an APM Implementation Improvement Plan, which included a review of the challenges of achieving scale and other model goals.<sup>65</sup> The plan included 18 short-, medium-, and long-term recommendations for maximizing progress toward the model's scale, financial, and health-care quality and outcomes targets. AHS also underscored the state's commitment to continued partnership with CMS; additional health-reform efforts; the GMCB's regulatory role; and OneCare's need to further support providers in the transition from FFS to VBP, as the sole participating ACO.

State-level stakeholders and providers are continuing to advocate for aligning the Medicare payment model with the Medicaid model. Both state-level and community stakeholders recognized that Medicaid's prospective payments provided relative financial stability for participating provider organizations during the COVID-19 pandemic. Yet, providers anticipated that the Medicare ACO initiative's AIPBP would ultimately be reconciled against the lower number of FFS claims in PY3 (2020). Therefore, they did not consider these prospective payments as true stabilizers.

While care management shifted to virtual during the COVID-19 pandemic, budget shortfalls have led some hospitals to delay or suspend planned some care transformation and population health initiatives. One state-level stakeholder suggested that COVID-19 has caused hospitals to take *“more conservative approaches”* and go *“back to fee-for-service ways, even where we had seen progress in some communities really adopting or starting to adopt value-based strategies.”*

### 6.3 Next Steps

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The findings in this report provide an early picture of the implementation and impact of the VTAPM. Below we outline next steps in the evaluation and plans for future reports.

To date, the impact evaluation only includes descriptive analysis of trends in quality performance and population health outcomes for the VTAPM. Insufficient post-period data limits our ability to detect short-term statewide impact. Lags in data availability further compound this issue for several measures. In future reports, we will assess the potential to evaluate the Model's impact

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<sup>nnn</sup> See [December 10, 2020, letter from State of Vermont Office of the Governor to CMS](#) in response to warning notice of Vermont's non-compliance with ACO scale targets.

<sup>ooo</sup> CMS adopted MSSP's Extreme and Uncontrollable Circumstances policy for the Vermont Medicare ACO Initiative, reducing 2020 downside risk by reducing shared losses by the proportion of months during the COVID-19 pandemic ([June 24, 2020, memo from CMS to Michael K. Smith, Secretary, Agency of Human Services and Kevin Mullin, Chair, Green Mountain Care Board](#)). GMCB requested that this reduction in downside risk continue through the duration of the PHE in 2020 ([December 23, 2020, memo from Kevin Mullin, GMCB to CMS](#)).

on the population health outcome measures available at the state level using synthetic control methods.

The impact evaluation to date only includes analyses of VTAPM's impact on the Medicare FFS population. Because of the limited uptake of the Medicare ACO initiative, these findings provide a limited view of the impact of the Model in its first two years. Because implementation of the Medicaid ACO initiative is more widespread, incorporation of Medicaid data will provide a more complete assessment of Model impact. We plan to incorporate Medicaid data in a future evaluation report.

This report includes limited findings on the provider perspective. We plan to conduct a survey of participating and non-participating practitioners in PY4 (2021), along with interviews with additional hospital leaders and practitioners.

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