Vermont All-Payer ACO Model
Medicare Total Cost of Care Annual Report
Performance Year 5
(January – December 2022)

Submitted September 15, 2023

Green Mountain Care Board

1. Executive Summary

The Annual Medicare Total Cost of Care (TCOC) Report, as required by the Vermont All-Payer Accountable Care Organization Model ("All-Payer ACO Model" or "APM") Agreement, illustrates Vermont's progress toward its Medicare TCOC per Beneficiary Growth Target. Under the Agreement, Vermont's Medicare TCOC is measured against the projected growth of Medicare fee-for-service (FFS) expenditures nationally. These projections are released annually, with separate targets for beneficiaries eligible for Medicare due to End Stage Renal Disease (ESRD) and those eligible due to age and/or disability (non-ESRD). The Agreement's target is set to be between from -0.2 to +0.1 percentage points of the national projections. This report summarizes the Medicare TCOC through Performance Year 5 (calendar year 2022).

The results presented here for 2022 will not accurately assess "performance" as outlined in the APM Agreement. The effects of the global pandemic and associated Public Health Emergency (PHE) necessarily and drastically changed care patterns. The PHE redefined short-term health system priorities to meet immediate acute care needs and stabilize the health care system. These necessary changes are likely to have impacted preventive care and health promotion activities. The full effects of the PHE are still developing and may distort trends for many years to come.

Vermont is currently on track to meet its Medicare TCOC per Beneficiary Growth targets for both populations. As summarized in Table 1, the Vermont Medicare TCOC per beneficiary per year (PBPY) compounding annual growth was below the target for every year of the Agreement to date. The performance to date indicates the non-ESRD performance is 6.6 percentage points below the target with ESRD 8.4 points below its target. For all years, COVID expenditures are included as applicable. For 2021 and 2022, the population is All VT Medicare, other years is ACO-aligned only.

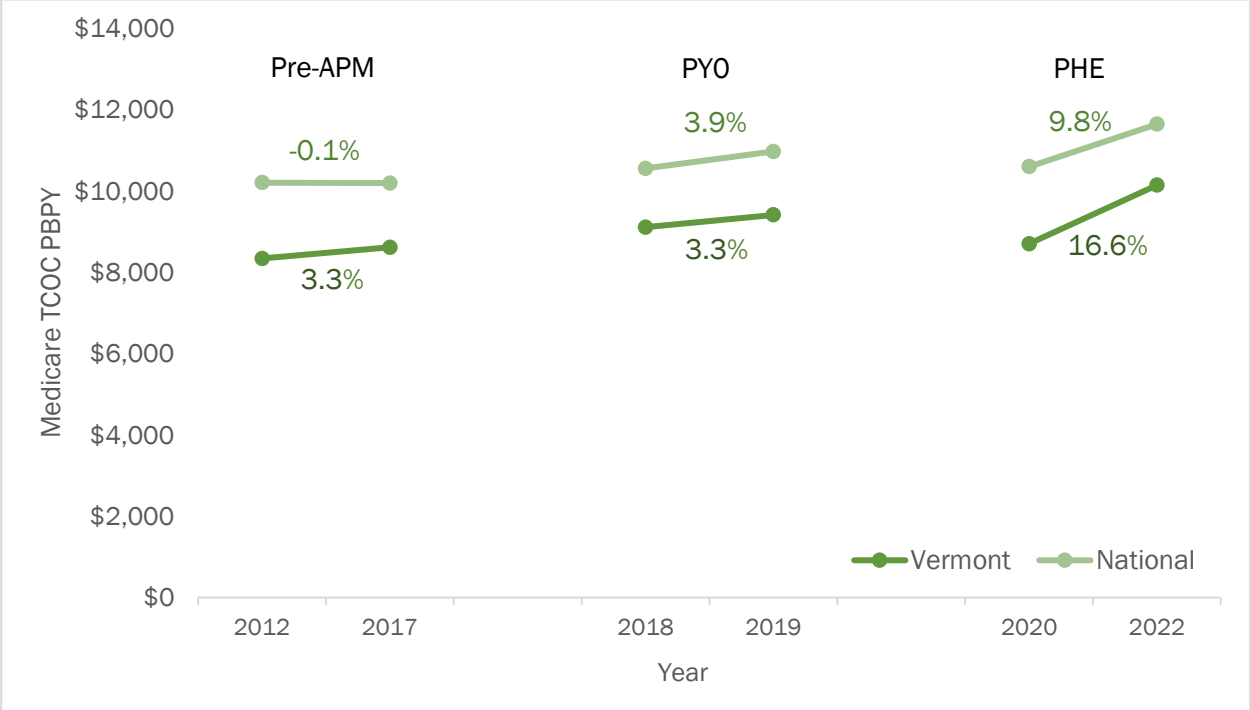
Table 1: Vermont Medicare TCOC Per Beneficiary Growth to Date by Beneficiary Type

		Performance		National Projections		
		Annual Growth	Compounding Growth Target	Annual Growth	Compounding Growth Target	Vermont Performance Above/Below Target
Non-ESRD	PY1 (2018)	-0.9%	-0.9%	3.7%	3.3%	-4.2%
	PY2 (2019)	3.0%	1.1%	4.0%	3.5%	-2.4%
	PY3 (2020)	-7.1%	-1.7%	4.2%	3.6%	-5.3%
	PY4 (2021)	10.4%	1.2%	21.6%	7.7%	-6.5%
	PY5 (2022)	3.2%	1.6%	10.6%	8.2%	-6.6%
ESRD	PY1 (2018)	-19.2%	-19.2%	3.7%	3.3%	-22.5%
	PY2 (2019)	2.0%	-9.2%	3.3%	3.1%	-12.3%
	PY3 (2020)	-4.6%	-7.7%	3.1%	2.9%	-10.7%
	PY4 (2021)	12.9%	-3.0%	11.4%	4.9%	-7.9%
	PY5 (2022)	-3.3%	-3.0%	7.8%	5.4%	-8.4%

Vermont's Medicare expenditures per beneficiary have consistently been lower than those observed nationally (Figure 1). In the five years prior to the base year of the Agreement (2012 to 2017), Vermont's average annual growth was 3.4 percentage points higher than that observed nationally. From 2018 to 2019, representing the

change between PY0 and PY1 of the Model, Vermont's growth slowed to 0.6 points below national. As previously stated, results from 2020-2022 are associated with the Public Health Emergency (PHE) from COVID-19. Within 2020 there was some reduction in expenditures, the two years following saw significant increases both in Vermont and nationally.

Figure 1: Medicare TCOC PBPY, Vermont vs United States



Data Source: CMS

Historically, Vermont's expenditures have not only been considerably lower than national expenditures, but also notably lower than the other states currently participating in All-Payer Models with CMS.[1] These results are consistent with findings from the Vermont All-Payer Model's evaluation reports.[2] As Vermont looks to extend its efforts to transform the way care is delivered, it is important to note the contributions of well-established, proven investments. These include the Blueprint for Health's advanced primary care practices, Community Health Teams, and Hub and Spoke program, as well as Vermont's Support and Services at Home (SASH) program. These initiatives are a critical foundation from which the APM builds, which have already demonstrated substantial returns on their investments.

2. Introduction

The Vermont All-Payer Accountable Care Organization Model ("All-Payer ACO Model" or "APM") Agreement was signed on October 26, 2016, by Vermont's Governor, Secretary of Human Services, Chair of the Green Mountain Care Board (GMCB), and the Centers for Medicare & Medicaid Services (CMS). The All-Payer ACO Model aims to reduce health care cost growth by moving away from fee-for-service reimbursement to risk-based arrangements

[1] Based on Total Cost of Care Per Beneficiary by State Dashboard, 2018-2020, by The Lewin Group.
[2] https://innovation.cms.gov/data-and-reports/2021/vtapm-1st-eval-full-report.
https://innovation.cms.gov/data-and-reports/2023/vtapm-2nd-eval-full-report.
https://innovation.cms.gov/data-and-reports/2023/vtapm-3rd-eval-full-report.

for Accountable Care Organizations (ACOs); these arrangements are tied to quality and health outcomes. This report provides a summary of progress to date toward achieving the Medicare Total Cost of Care (TCOC) per beneficiary growth targets, as described in Section 9 (Statewide Financial Targets) of the APM Agreement. On March 31,2023, CMMI offered an extension of the current APM Agreement for up to two years, Vermont formally accepted the offer on May 26, 2023.

The data for Medicare reported differs from that reported from Medicare in the All-Payer TCOC reports. The differences are due to different data sources, populations, and methodologies:

- The data presented in this report are sourced from CMS's Integrated Data Repository (IDR), whereas the All-Payer data originate from the Chronic Conditions Warehouse (CCW). The CCW provides quarterly extracts, which are most appropriate for integrating into the state's All-Payer Claims Database. However, the data in the IDR provides more precise financial data.

- The data available through the CCW are limited to Vermont residents. However, beneficiaries may be attributed to a Vermont ACO without being a resident in the state. The data in this report include all beneficiaries attributed to the ACO, regardless of residency.

- Results in this report are paid amounts whereas the data in the All-Payer TCOC reporting are allowed amounts. Allowed amounts include members' expected share of reimbursements. It's important to include the members' share in the All-Payer results to help make comparisons as apples-to-apples as possible.

- Where applicable, COVID episodes are included in the membership and expenditures results for this report.

The Agreement limits the Medicare TCOC per beneficiary compounding annual growth target to beneficiaries aligned to Scale Target ACO initiatives in the first three performance years.[3] During this time, the only Scale Target ACO initiative operating was OneCare Vermont. The results here will also differ from the financial settlement results between OneCare Vermont and CMS. This is because this report includes expenditures for any months an ACO-aligned beneficiary retains their eligibility. In contrast, these beneficiaries are excluded from the calculations at the time of settlement with the ACO.

3. Medicare TCOC per Beneficiary Growth Target

Unlike the All-Payer TCOC per Beneficiary Growth Target, the targets for Medicare change annually, based on the projections for fee-for-service FFS expenditures nationally. These projections are released annually in the Medicare Advantage United States Per Capita Cost (MA USPCC) Final Announcement. Since projections are refined each year, estimates for the same year change between announcements.

Vermont's performance will be measured as an aggregated CAGR for Performance Years 1 through the end of the Agreement. The Agreement is structured such that the Medicare TCOC is limited to ACO-aligned beneficiaries in PY1 through 3. In PY4 and 5, the Medicare TCOC will be based on all Medicare beneficiaries. The population used for PY3 (2020) was based on Vermont performance on the Medicare ACO Scale Target performance. Since the

[3] If Vermont had achieved its ACO Scale Target for Medicare in PY3, 65%, the measurement would have been based on Vermont Medicare beneficiaries. PY4 and PY5 will be based on all Vermont Medicare beneficiaries, regardless of ACO Scale Target performance.

state failed to achieve the target of 65% alignment, PY3 uses an additional year of Medicare beneficiaries aligned to the ACO.

As outlined in Section 8.b.ii.1.b, the 2018 MA USPCC announcement resulted in a value that allowed the state to use a growth target of 3.7% in the first PY (2018). Therefore, the target shall be calculated as specified in Section 9.b.iv of the Agreement:

$$\left(1.037 * \left(\frac{MA\ USPCC\ FFS_{2019}}{MA\ USPCC\ FFS_{2018}}\right)_{Announced\ in\ 2018} * \left(\frac{MA\ USPCC\ FFS_{2020}}{MA\ USPCC\ FFS_{2019}}\right)_{Announced\ in\ 2019} * \left(\frac{MA\ USPCC\ FFS_{2021}}{MA\ USPCC\ FFS_{2020}}\right)_{Announced\ in\ 2020} * \left(\frac{MA\ USPCC\ FFS_{2022}}{MA\ USPCC\ FFS_{2021}}\right)_{Announced\ in\ 2021}\right)^{\frac{1}{5}} - 1$$

Vermont's target is to maintain growth within a range of -0.2 below to +0.1 above the national CAGR target to date. Table 2 summarizes the announcements to date and shows how the targets to date were derived.

Table 2: MA USPCC FFS Estimates and Vermont APM Targets, 2018 to 2022

	Performance Year	Baseline PBPM	Performance Year PBPM	Annual Growth Rate	CAGR to Date	Target to Date
Non-ESRD	2018†	$825.00	$847.73	3.7%	3.7%	3.5% - 3.8%
	2019	$856.41	$891.07	4.0%	3.9%	3.7% - 4.0%
	2020	$903.21	$940.81	4.2%	4.5%	4.3% - 4.6%
	2021	$932.34	$975.06	4.6%	4.3%	4.1% - 4.4%
	2022	$929.69	$1,028.38	10.6%	4.5%	4.3% - 4.6%
ESRD	2018†	$6,933.11	$7,133.42	3.7%	3.7%	3.5% - 3.8%
	2019	$7,586.28	$7,833.28	3.3%	6.3%	6.1% - 6.4%
	2020	$7,563.53	$7,795.38	3.1%	4.0%	3.8% - 4.1%
	2021	$7,910.87	$8,110.21	2.5%	4.0%	3.8% - 4.1%
	2022	$7,897.64	$8,515.64	7.8%	4.2%	4.0% - 4.3%

†The Agreement allowed Vermont to use a target of 3.7% per Section 8.b.ii.1.b of the Agreement.

4. Summary of Results

Vermont's results through PY5 are substantially lower than the targets included in the APM Agreement. As previously discussed, the significant decrease in 2020 cannot be attributed to performance. However, the state was on track to achieve its targets through the first two years of the Agreement with the non-ESRD results 2.4 percentage points below the target and ESRD 12.3 percentage points below (Table 3). Vermont's expenditures declined relatively more than was observed nationally. As predicted, Vermont experienced higher relative growth in post-COVID years 2021 and 2022.

Table 3: Medicare TCOC Results to Date

Population	PY	Baseline PBPY	PY PBPY	Model Annual Growth	Model CAGR	National Annual Growth	National Annual Growth Target	National CAGR	National CAGR Target	Model CAGR Diff from Target
Non-ESRD	PY1 (2018)	$ 9,285	$ 9,203	-0.9%	-0.9%	3.7%	3.5%	3.5%	3.3%	-4.2%
Non-ESRD	PY2 (2019)	$ 9,386	$ 9,672	3.0%	1.1%	4.0%	3.8%	3.7%	3.5%	-2.4%
Non-ESRD	PY3 (2020)	$ 9,686	$ 9,060	-6.5%	-1.5%	4.2%	4.0%	3.8%	3.6%	-5.1%
Non-ESRD	PY4 (2021)	$ 8,810	$ 10,313	17.1%	3.7%	4.2%	4.0%	3.6%	3.4%	0.3%
Non-ESRD	PY5 (2022)	$ 10,380	$ 10,472	0.9%	3.1%	10.6%	10.4%	5.0%	4.8%	-1.7%
ESRD	PY1 (2018)	$ 76,708	$ 61,979	-19.2%	-19.2%	3.7%	3.5%	3.5%	3.3%	-22.5%
ESRD	PY2 (2019)	$ 72,346	$ 73,759	2.0%	-9.2%	3.3%	3.1%	3.3%	3.1%	-12.3%
ESRD	PY3 (2020)	$ 73,694	$ 70,272	-4.6%	-7.7%	3.1%	2.9%	3.1%	2.9%	-10.7%
ESRD	PY4 (2021)	$ 75,538	$ 81,588	8.0%	2.7%	11.4%	11.2%	11.8%	11.6%	-8.8%
ESRD	PY5 (2022)	$ 82,118	$ 84,589	3.0%	2.8%	7.8%	7.6%	9.0%	8.8%	-6.0%

For all years, COVID-19 expenditures are included as applicable. For 2021 and 2022, population is All Medicare, other years is ACO only.

The calculation for the PBPY expenditures includes a few components. Traditional FFS expenditures are included for any month that an aligned beneficiary maintained their eligibility for alignment to the APM. The FFS-equivalent values are included for any claims that were paid prospectively through the All-Inclusive Population Based Payments (AIPBP) made to OneCare Vermont. Uncompensated care payments (UCC) made as part of Medicare's Disproportionate Share Hospital adjustment are deducted from the total.

In accordance with the Agreement, any shared savings payments must be included in the TCOC calculation. Shared savings are returned to providers participating in the ACO program. Since these dollars are used for all patients, regardless of whether the patient is aligned to the ACO or not, the payments are calculated as a per member basis for all Vermont Medicare beneficiaries. The per member values used are derived as part of the All-Payer TCOC and those values are used in this report for consistency.

Once the claims-based expenditures and shared savings payments are added together, the values are divided by the number of member months associated with eligible membership and multiplied by 12 to arrive at the PBPY estimate.

$$\text{Medicare TCOC PBPY} = \frac{\text{FFS expenditures} + \text{AIPBP FFS equivalents - UCC}}{\text{Eligible months of ACO alignment}} * 12 + \text{Shared Savings PBPY}$$

The baseline expenditures for each performance year are calculated based on a hypothetical comparison population. For example, in 2018 (PY 1), the baseline experience is computed based on the beneficiaries who would have aligned to the ACO in 2017 based on the providers participating in the model in 2018. Table 4 demonstrates the calculations behind each performance year's PBPY. It is critical to have a representative comparison group for a prospectively aligned Medicare cohort due to the high costs associated with end-of-life care. Shared Savings estimates are summarized in Table 5.

Table 4: Components of Medicare TCOC PBPY

Year	Population	Total FFS + AIPBP Payments	Adjustments (+/-)*	Member Months	Claims-Based PBPY	Shared Savings PBPY	Total PBPY
PY1 (2018)	Non- ESRD	306,740,949	$ 6,134,818.97	396,586	$ 9,467.07	$108.92	$ 9,575.99
	ESRD	9,044,068	$ 180,881.36	1,498	$ 73,898.13	$108.92	$74,007.05
PY2 (2019)	Non- ESRD	476,258,847	$ (5,103,630.00)	587,961	$ 9,616.05	$ 91.59	$ 9,707.64
	ESRD	13,292,365	$ (120,123.00)	2,211	$ 71,491.14	$ 91.59	$71,582.73
PY3 (2020)	Non- ESRD	374,122,086	$ (3,326,525.00)	542,249	$ 8,205.73	$131.62	$ 8,337.35
	ESRD	10,105,969	$ (67,373.00)	1,817	$ 66,297.83	$131.62	$66,429.45
PY4 (2021)	Non- ESRD	471,217,892	$ (3,676,625.00)	581,547	$ 9,647.54	$ 80.17	$ 9,727.71
	ESRD	11,525,550	$ (72,823.00)	1,830	$ 75,099.85	$ 80.17	$75,180.02
PY5 (2022)	Blended**	481,801,919	$ (25,250,428.00)	539,874	$ 10,147.96	$ 76.32	$10,224.28

*Adjustments include subtracting Uncompensated Care, COVID expenditures in applicable years, IP outliers, and adding sequestration. See published Shared Savings reports for details.

**Non-ESRD and ESRD separate settlements were not available on the most recent Shared Savings report

Table 5: Shared Savings PBPY

	Shared Savings	Vermont All-Payer TCOC Medicare Member Months	PBPY
2017	$7,500,000	1,439,691	$ 62.51
2018	$13,345,337	1,470,356	$108.92
2019	$11,285,496	1,478,673	$ 91.59
2020	$16,313,471	1,487,290	$131.62
2021	$10,001,059	1,496,980	$ 80.17
2022	$9,564,667	1,503,852	$ 76.32

5. Comparative Performance

The following sections are provided to put Vermont's performance to date in context, both across the United States and within Vermont.

National and Other States

Vermont's Medicare expenditures per beneficiary have consistently been lower than those observed nationally (Figure 1). However, prior to the execution of the Agreement, Vermont's per beneficiary *growth* exceeded that observed nationally. In the five years prior to the base year of the Agreement (2012 to 2017), Vermont's average annual growth was higher than that observed nationally. From 2017 to 2019, Vermont's average annual growth was 0.6 percentage points below national. As previously stated, results from 2020 and thereafter are associated with the global pandemic and resulting Public Health Emergency.

Nationally and within Vermont, the average annual growth was considerable, likely from delayed care during the pandemic and other health care cost increases.

Medicare's TCOC PBPY varies significantly by state. As summarized in Figure 2, Vermont consistently demonstrates one of the lowest per capita TCOCs in the nation. Vermont's expenditures have not only been considerably lower than national expenditures, but also notably lower than the other states currently participating in All-Payer Models with CMS.

These results are consistent with findings from the Vermont All-Payer Model's evaluation reports.[4] As Vermont looks to extend its efforts to transform the way care is delivered, it is important to note that the contributions of well-established, proven investments. These include the Blueprint for Health's advanced primary care practices, Community Health Teams, and Hub and Spoke program, as well as Vermont's Support and Services at Home program. These initiatives are a critical foundation from which the APM is built, and which have already demonstrated substantial returns on their investments.

Vermont Subpopulations

Vermont's Medicare beneficiaries must meet certain criteria to be eligible for alignment in CMS's ACO model:

- have both Part A and Part B coverage
- are not covered by Medicare Advantage
- have Medicare as their primary health insurance coverage
- be a resident of the United States

Various factors may prevent eligible beneficiaries from being aligned to the ACO. Beneficiaries eligible for alignment may or may not incur claims associated with primary care. They also may also have primary care relationships with providers outside of Vermont and/or those not participating in an ACO.

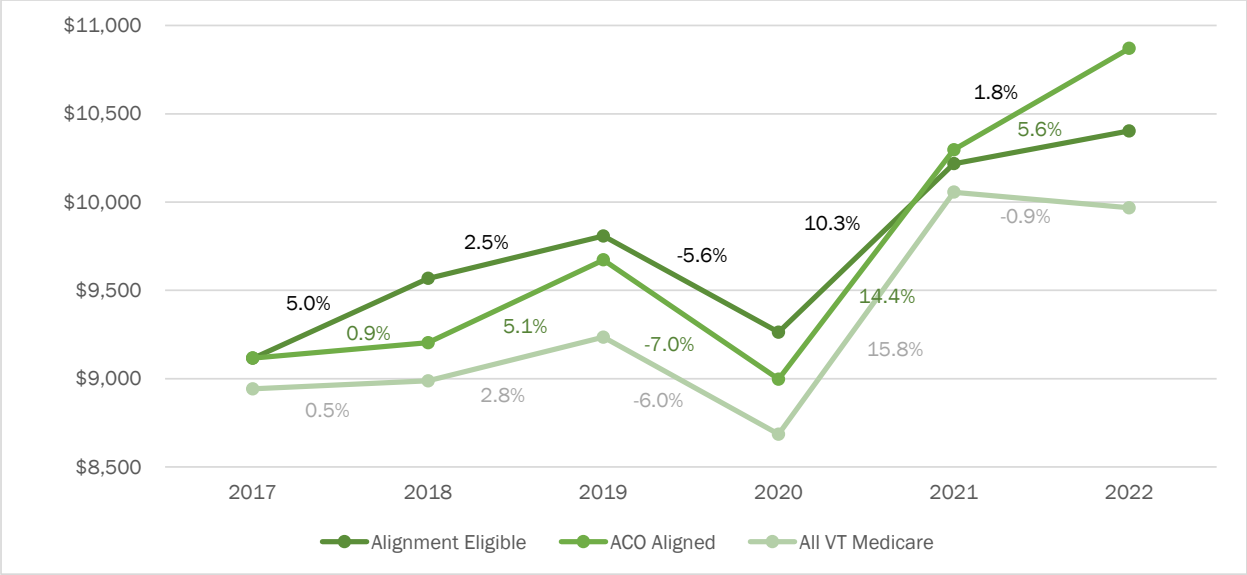
This groups Vermont's Medicare beneficiaries into three major categories across which PBPY expenditures differ:

(1) All Vermont beneficiaries (alignment-eligible beneficiaries and those not eligible)
(2) Alignment-eligible beneficiaries
(3) Beneficiaries aligned to the ACO.

Beneficiaries who meet eligibility requirements have a higher PBPY expenditure than the full Vermont population. Beneficiaries who are ineligible for alignment may not have full Medicare coverage or Medicare may be their secondary payer, which means their PBPY expenditures are lower. The entire group of beneficiaries eligible for alignment has the highest PBPY with the group aligned to the ACO in the middle.

[4] https://innovation.cms.gov/data-and-reports/2021/vtapm-1st-eval-full-report.
https://innovation.cms.gov/data-and-reports/2023/vtapm-2nd-eval-full-report.
https://innovation.cms.gov/data-and-reports/2023/vtapm-3rd-eval-full-report.

Figure 2: Vermont Non-ESRD Medicare TCOC PBPY by Vermont Subpopulation

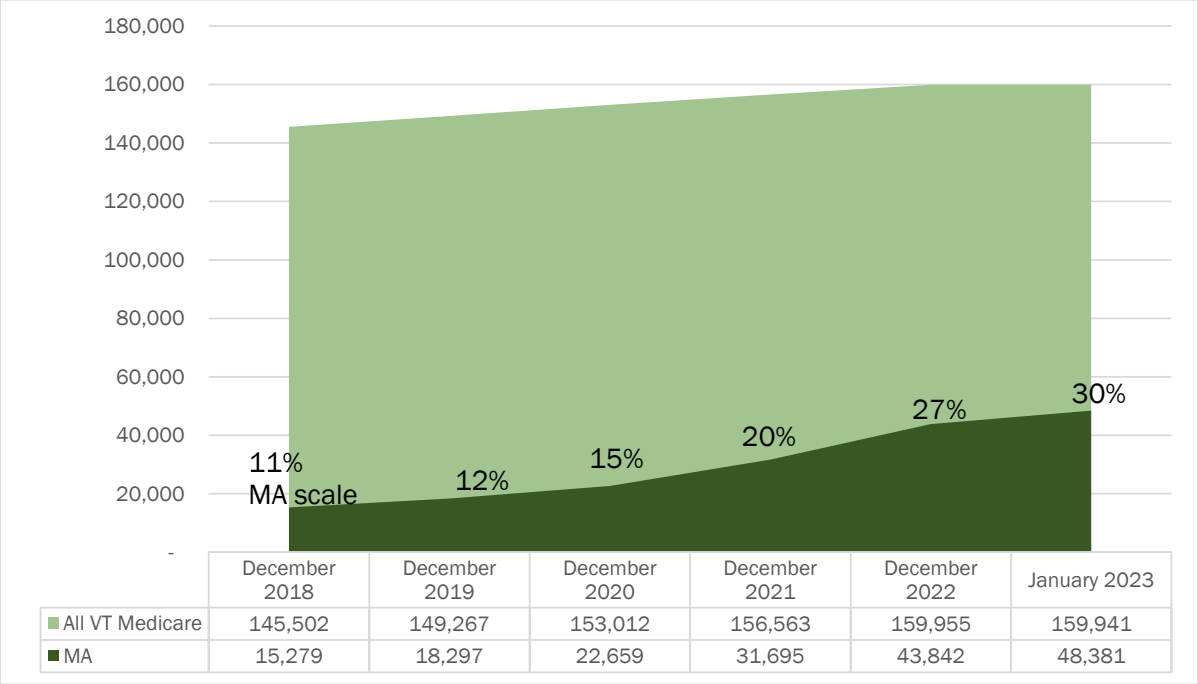


The group of beneficiaries aligned to the ACO exhibited the most significant decline in the TCOC PBPY during the pandemic in 2020. Part of the relative difference is likely due to the cyber-attack on the University of Vermont Health Network, as many practices attributing patients to the model are affiliated with that hospital system. However, the beneficiaries aligned to the ACO also exhibited some of the highest growth in expenditures between 2020 and 2021, and their total expenditures outpace the other groups in 2022. The higher costing ACO-aligned group compared to the alignment eligible group over time reflects the shift from traditional Medicare to Medicare Advantage.

Medicare Advantage

Until recently, Vermont's Medicare Advantage (MA) penetration rate had been under 10% of beneficiaries. Since 2018 enrollment has tripled, and one third of Vermont beneficiaries are now enrolled in MA plans.

Figure 3: Vermont's Medicare Advantage uptake as a percentage of total Medicare eligible



	December 2018	December 2019	December 2020	December 2021	December 2022	January 2023
All VT Medicare	145,502	149,267	153,012	156,563	159,955	159,941
MA	15,279	18,297	22,659	31,695	43,842	48,381

The population of beneficiaries newly enrolling in MA plans show lower PBPY expenditures. If this trend continues, the PBPY of the remaining traditional Medicare population may increase as beneficiaries with lower PBPY expenditures opt to enroll in MA plans.

The increased penetration of MA members affects the APM, as beneficiaries who elect MA plans are not eligible for alignment. It also adds an additional challenge to developing accurate financial benchmarks, as the reference population may include lower cost beneficiaries that are no longer eligible for alignment during the PY. For example, estimates provided by CMS suggest that removing the newly enrolled MA beneficiaries from the current PY population increased the PBPY expenditures by $147 in 2021. When applied to the full aligned population, this suggests that the historical TCOC may be inflated by $7.5 million dollars.[5]

Navigating these population changes will be an important challenge to overcome to provide accurate, prospective financial targets.

6. Conclusion and Lessons Learned to Date

Despite the pandemic and subsequent Public Health Emergency in the years 2020-2022, Vermont's first two PYs of the APM showed promising results for slowing growth in the TCOC for Medicare. Prior to the APM, Vermont had notably lower PBPY expenditures compared to the national Medicare PBPY, but much higher growth year over year. The Agreement added a critical mechanism for increasing the State of Vermont's leverage for an additional 10% of the state population and total healthcare expenditures (Figure 1).[6]

[5] Comparing the 50,611 beneficiaries eligible for settlement using 2021 claims at $9,366 vs $9,219 PBPY. Note: This analysis was not updated for 2023 so these are the latest estimates available.

[6] From the PY5 2022 Scale report: 62,607 Medicare ACO-aligned out of 645,570 Vermonters. From the PY4 2021 TCOC report: $606.9 million in expenditures for Medicare ACO-aligned out of $6.36 billion for total healthcare expenditures on behalf of VT residents in 2020.

NORC's third evaluation report validates these findings, indicating statistically significant savings for both Medicare ACO-aligned beneficiaries and VT Medicare beneficiaries statewide.[7] The total aggregate savings for VT Medicare beneficiaries is estimated to be $379.8 million in the first four years of the model, and $146.5 million in PY4 (2021) alone. The State looks forward to additional insights from NORC's final evaluation.

[7] Exhibits ES.1 and ES.2, page 7: https://innovation.cms.gov/data-and-reports/2023/vtapm-3rd-eval-full-report.