

---

**DELIVERED ELECTRONICALLY**

To: Fatema Salam

From: Michele Degree

Date: Thursday, December 31, 2020

Re: All-Payer ACO Model Payer Differential Reporting Package

Dear Fatema,

This report package was developed by Mathematica Policy Research and Green Mountain Care Board staff, in collaboration with the Agency of Human Services (AHS) and Department of Vermont Health Access (DVHA), **a redacted version of this report will be issued for public consumption**. The goal of the Differential reporting is to determine whether the ACO program is impacting access to care for Medicaid patients and to assess how it is impacting provider revenue. This report package satisfies the requirements set forth in Section 10(a-c) of the Vermont All-Payer Accountable Care Organization Agreement and is organized in three parts:

1. Payer Differential Assessment Report
2. Payer Differential Options Report
3. Annual Payer Differential Report

Taken together, these reports offer several key insights. First and foremost, there is no evidence that the ACO is contributing to the “cost shift”; the ACO program is not exacerbating the payer differential and the likely underlying cause of the differential is fee-for-service payment amounts. This is evidenced by several factors, notably, that the Medicaid ACO benchmark rates are not set artificially low relative to historical payments; and, both Medicaid and Medicare benchmarks do not differ substantially from their respective PMPM costs. That said, changes in baseline utilization and updates to provider networks may affect the annual growth rate of ACO benchmarks. Second, it is shown that ACO members have slightly higher risk (1.016), on average, than the population included in VHCURES. Third, between 2018 and 2019, after adjusting for risk, the ACO benchmark declined in both Medicare and Medicaid, increasing only slightly in the Commercial population. Finally, there was no evidence of geographic variation contributing to lower Medicaid benchmarks.

It is also important to note caveats that potentially impact analyses presented in these reports. While widely utilized, ACG risk scores do not account for all variation in risk. Specifically, risk adjustment can only capture factors observed in claims data, excluding important characteristics like disease severity and



socio-economic status that could affect risk. In addition, analysis contained within is limited to evaluating prospective ACO benchmarks.

This report package leads us to three potential options for future exploration; (1) shifting focus to the Scale Targets set forth in the Agreement, that is, continuing to calculate prospective benchmarks to ensure that the ACO payments continue to not exacerbate fee-for-service differentials; (2) uncouple benchmark calculations from fee-for-service payments; (3) recalculate the differential by expanding the full suite of Medicaid services when determining the payer differential.

While existing fee-for-service payment differentials in Medicaid carry through to the ACO program, Medicaid has been a leader in innovation in this realm. The Medicaid Next Generation program is piloting a new attribution method to increase participation and its fixed payment methodology is considered reliable and stable by providers. In fact, during the early months of the Public Health Emergency, this payment methodology was key in sustaining providers during the cessation of elective procedures.

Sincerely,

A handwritten signature in blue ink, reading "Michele Degree". The signature is fluid and cursive, with the first name "Michele" written in a larger, more prominent script than the last name "Degree".

Michele Degree  
Health Policy Advisor  
Green Mountain Care Board

cc: Kevin Mullin, Mike Barber, Sarah Lindberg, Alena Berube, and Susan Barrett, GMCB; Ena Backus, AHS; Alicia Cooper, DVHA



# Payer Differential Reporting for the OneCare ACO

## Combined Report

- 2019 Annual Report
- Assessment Report
- Options Report

**December 2020**

R. Vincent Pohl, Sule Gerovich, and KeriAnn Wells

---

**Submitted to:**

State of Vermont Green Mountain Care Board  
Project Officer: Michele Degree  
Contract Number: 35452

**Submitted by:**

Mathematica  
955 Massachusetts Avenue, Suite 801  
Cambridge, MA 02139  
Telephone: (617) 491-7900  
Facsimile: (617) 491-8044  
Project Director: KeriAnn Wells  
Reference Number: 50487

**This page has been left blank for double-sided copying.**

## Contents

Executive Summary .....	viii
I. Introduction .....	1
II. Assessment Report.....	3
A. Methodology .....	3
B. Payer differential .....	5
C. Validation .....	8
D. Geographic analysis of Medicaid PMPM payment-to-benchmark ratios .....	9
E. Limitations.....	11
III. Options Report.....	13
A. Introduction .....	13
B. Shift the focus to the scale target .....	13
C. Uncouple benchmark calculation from FFS payments.....	14
D. Include expanded Medicaid services when determining the differential .....	14
1. Possible approach to recalculate the payer differential.....	15
2. Payer differential by provider type .....	16
IV. 2019 Annual Report .....	19
A. 2019 annual growth rates in ACO benchmarks .....	19
B. Comparison of updates to baseline costs, by payer .....	20
Appendix A: Payer Differential Assessment and Annual Reporting Specification .....	22
A. Background.....	24
B. Summary of risk score calculation and reporting .....	24
C. Calculating risk scores: John Hopkins Adjusted Clinical Groups (ACGs).....	24
1. Input Parameters Setting.....	24
2. Input Inclusions and Exclusions .....	25
3. Payer Differential Reporting Populations .....	26
D. Data tables for analysis .....	26
1. Report Stratifications .....	26
2. Report measures.....	27

- E. Assessment .....29
  - Step 1: Aggregating risk scores by payers and payer subgroups .....29
  - Step 2: Reporting risk-adjusted payments and allowed amounts.....30
  - Step 3: Assessing the payer differential .....30
- F. Annual report .....31
- G. Crosswalk with all payer TCOC.....32
- H. Background model agreement language: Payer Differential .....32
- Appendix B: Complete Annual Report Tables .....34

**This page has been left blank for double-sided copying.**

## Tables

ES.1. Payer differential summary (2018).....	ix
ES.2. PMPM payment to benchmark ratio by payer (2018) .....	ix
ES.3. Change in ACO benchmarks from 2018 to 2019 .....	x
II.1. Aligning benchmark definitions.....	4
II.2. Payer differential (2018) .....	6
II.3. PMPM payment-to-benchmark ratio by payer (2018) .....	8
II.4. Payer differential member month validation (2018) .....	8
II.5. Ratios of risk-adjusted actual payments to risk-adjusted benchmarks and Medicaid-Medicare payer differential, by HSA <sup>a</sup> .....	10
III.1. Provider participation rates, 2018–2019 .....	14
III.2. Recalculated payer differential (2018) .....	16
III.3. Payer differential by provider type (2018) .....	17
IV.1. Annual growth rates in ACO payment targets, by payer .....	20
IV.2. Updates to factors in 2018 and 2019, by payer .....	21
A.1. Differential Report Tabulation - All-payer data .....	28
A.2. Template for payer differential assessment reporting.....	30
A.3. Template for payer differential annual reporting .....	31
A.4. Crosswalk between All Payer TCOC and differential assessment.....	32
B.1. Annual growth rates in ACO payment targets, by payer .....	36
B.2. Updates to factors in 2018 and 2019, by payer .....	38



**This page has been left blank for double-sided copying.**

## Executive Summary

The Vermont All-Payer Accountable Care Organization (ACO) Model agreement requires Vermont to submit payer differential information to the Centers for Medicare & Medicaid Services (CMS). The agreement defines the payer differential as “different levels of payments made to providers and suppliers by Medicare FFS [fee-for-service], Vermont Medicaid, and Vermont commercial plans for [a] similar set of services.”<sup>1</sup> Vermont submits three reports: (1) a Payer Differential Assessment Report that compares risk-adjusted benchmark rates at a point in time, (2) an Annual Report showing the change in benchmark rates over time, and (3) an Options Report that provides alternatives to address or reduce the payer differential. **A redacted version of this report package will be available for the general public.**

### Payer Differential Assessment Report

The goal of the Assessment Report is to compare payments the ACO receives from different payers (i.e., Medicare, Medicaid, and commercial payers) to assess the payer differential. To this end, we compared payer-specific ACO benchmark rates after making them comparable across payers. Specifically, benchmark adjustments fall in two categories:

- 1. Aligning ACO covered services/payments:** Given that plans vary in their design and reimbursement mechanisms, we aligned benchmarks by using final settlement rates for Medicare and commercial payers (Medicaid uses prospective benchmark rates) and excluding components such as administrative and care coordination fees that do not reflect services the ACO provided to members. We also adjusted benchmarks to better align services across payers; for example, we removed retail pharmacy payments from the commercial benchmark. We also excluded Medicare beneficiaries with end-stage renal disease, for whom Medicare established a separate per member per month (PMPM) benchmark rate due to the disproportionate risk and higher costs among this population.
- 2. Adjusting for population differences:** Because ACO members have different expected costs due to variation in underlying health care needs by payer, we risk-adjusted benchmark rates. Specifically, we used the Adjusted Clinical Group (ACG) risk adjustment to generate prospective risk scores that reflect expected health care use for the 2018 ACO population based on 2017 claims. A higher prospective risk score implies higher expected health care use. To ease interpretation, we first rescaled the average VHCURES population risk to 1.0. We then divided benchmark rates by payers’ average rescaled risk scores to calculate payer-specific risk adjusted benchmark rates.

Table ES.1 summarizes the results for the payer differential by payer (the full Assessment Report also shows the payer differential for payer subgroups). We calculated risk-adjusted differential ratios by comparing both commercial and Medicaid risk-adjusted benchmarks to the Medicare risk-adjusted benchmark. As expected, Medicare members have higher than average risk, resulting in a lower risk-adjusted benchmark compared to the actual ACO benchmark, whereas Medicaid and commercial members have lower than average risk, resulting in higher risk-adjusted benchmark rates. When using the average risk scores to adjust the ACO benchmark rates, we found that the ACO receives 5 percent higher payments for commercial members than for Medicare members, and the risk-adjusted benchmark rate is 55 percent lower for Medicaid than for Medicare.

---

<sup>1</sup> See page 4 of the Vermont All-Payer ACO Model agreement.

**Table ES.1. Payer differential summary (2018)**

Payer group	Member months	Average rescaled risk score	ACO benchmark rate	Risk-adjusted benchmark rate <sup>a</sup>	Differential ratio compared to Medicare
All members	1,061,558	1.016	\$485.84	\$501.69	
Medicare FFS	337,597	1.483	\$806.82	\$645.21	1.00
Medicaid	456,836	0.842	\$245.82	\$292.52	0.45
Commercial	267,125	0.724	\$490.66	\$678.01	1.05

<sup>a</sup> Medicare and Medicaid risk-adjusted benchmark rates divided by paid-to-allowed ratio; the “all members” row equals the average of Medicare FFS, Medicaid, and commercial, weighted by member months.

ACO = accountable care organization; FFS = fee-for-service

We explored multiple potential factors contributing to the payer differential between Medicare and Medicaid. First, Medicaid and Medicare benchmarks reflect respective historical payments, and Medicaid pays less than Medicare. When we compared the ratio of payments PMPM to benchmark rates, we found that they were similar (0.98 for Medicare and 1.02 for Medicaid; see Table ES.2). Therefore, both the historical payments and the benchmark rates appear to reflect (1) actual cost differences between these populations and (2) cost shifting (i.e., providers negotiating higher commercial payments to subsidize lower Medicaid payments). Second, we hypothesized that geographic variation could explain some of the payer differential if more Medicaid members live in low-cost areas of the state. However, when comparing the ratio of PMPM payments to benchmark rates across hospital service areas, we did not find any systematic variation.

**Table ES.2. PMPM payment to benchmark ratio by payer (2018)**

Payer group	Risk-adjusted PMPM payment	Risk-adjusted benchmark	Payment-to-benchmark ratio
All members	\$498.84	\$501.69	0.99
Medicare FFS	\$635.14	\$645.21	0.98
Medicaid	\$298.89	\$292.52	1.02
Commercial	\$668.52	\$678.01	0.99

FFS = fee-for-service; PMPM = per member per month.

Although the payer differential analysis aligns and risk-adjusts benchmark rates, it has several limitations: (1) the ACO risk adjustment accounts for some but not all variation in risk, (2) we did not examine differences between service sites, (3) plans vary in benchmark construction and plan design, and (4) factors external to the ACO affect benchmark rates, such as services not provided by the ACO.

## Annual Report

The Annual Report tracks yearly changes in payer specific benchmark rates. Specifically, in the 2019 Annual Report, we compared the change in benchmark rates between 2018 and 2019. To make benchmarks comparable across payers, we made the same adjustments as in the Payer Differential Assessment Report (i.e., we aligned services covered across payers and risk-adjusted using prospective

ACG risk scores). Table ES.3 shows annual changes in risk-adjusted benchmarks by payer (the full Annual Report also shows changes for each payer subgroup separately). The Medicaid and Medicare benchmarks declined by 2.0 and 2.4 percent, respectively, while the commercial benchmark rates increased by 0.4 percent.

**Table ES.3. Change in ACO benchmarks from 2018 to 2019**

Payer	2018 benchmark	2019 benchmark	Change in ACO benchmark rates in 2019 vs. 2018
Medicare	\$806.82	\$795.00	−2.4%
Medicaid	\$245.82	\$240.44	−2.0%
			0.4%

## Options Report

We describe three options for addressing the payer differential: (1) maintaining the status quo, that is, no change in the benchmark calculation; (2) changing the Medicaid benchmark methodology; and (3) recalculating the payer differential, taking into consideration differentials across different types of providers and/or non-ACO services. For the first option, we discuss contextual factors in the state, including a new Medicaid ACO attribution method, and outline a potential analysis of the new method’s impact on provider participation in the ACO. For the second option, we discuss the potential for a new benchmarking methodology uncoupled from FFS payments to reduce the payer differential. To provide a perspective on the payer differential that goes beyond the ACO, the third option is to recalculate the differential. For the third option, we outline two potential analyses: (1) calculating provider type specific payer differentials, such as for hospitals and primary care providers and (2) adding services covered by Medicare and Medicaid not provided by the ACO into the payer differential calculation.

**This page has been left blank for double-sided copying.**

## I. Introduction

The Vermont All-Payer Accountable Care Organization (ACO) Model agreement requires Vermont to submit payer differential information to the Centers for Medicare & Medicaid Services (CMS). The agreement defines the payer differential as “different levels of payments made to providers and suppliers by Medicare FFS [fee-for-service], Vermont Medicaid, and Vermont commercial plans for [a] similar set of services.”<sup>2</sup> The agreement stipulates that “[t]he GMCB, after collaboration with AHS [Vermont Agency of Human Services], shall submit to CMS by the end of Performance Year 2 an assessment of the Payer Differential as it affects Vermont ACOs.”<sup>3</sup> OneCare Vermont is the only ACO currently operating in the state and has contracts with four payers as of Performance Year 2020: Medicare (CMS), Medicaid, Blue Cross and Blue Shield of Vermont (BCBSVT), and the University of Vermont Medical Center (UVMHC). Specific contracted entities are noted within each of the three reports presented in this package, as not all were in place for the review period.

The Payer Differential Assessment Report (Chapter II) compares risk-adjusted benchmark rates in 2018. The agreement defines an ACO benchmark as “a payer-specific financial target against which the expenditures for health care services furnished to an ACO-aligned [attributed] beneficiary will be assessed. Payer-specific shared savings and shared losses will be determined based on this assessment.” The 2019 annual payer differential report (Chapter III) covers the percent increase between 2018 and 2019 in ACO benchmarks by payer for Vermont ACOs. As per the terms of the contracts between the Vermont ACOs and each payer, ACO benchmarks can be a per-member-per-month (PMPM) fixed capitated payment rate or a per-member-per-year (PMPY) payment target to calculate shared savings or losses. In the Options Report (Chapter IV), we describe three options for addressing the payer differential: (1) maintaining the status quo, that is, no change in the benchmark calculation; (2) changing the Medicaid benchmark methodology; and (3) recalculating the payer differential taking into consideration non-ACO services and specific types of provider.

---

<sup>2</sup> See page 4 of the Vermont All-Payer ACO Model agreement.

<sup>3</sup> See page 23 of the Vermont All-Payer ACO Model agreement.

**This page has been left blank for double-sided copying.**

## II. Assessment Report

In this section, we describe the proprietary results of the Payer Differential Assessment Report, **a redacted version of this report will be posted for public consumption**. We used the Johns Hopkins Adjusted Clinical Groups (ACG) System<sup>®</sup> grouper to calculate risk scores and to risk-adjust ACO benchmarks.<sup>4</sup> OneCare Vermont is the only ACO currently operating in the state and had contracts with four payer groups during the timeframe represented within this report (2018 – 2019): Medicare (CMS), Medicaid, BCBSVT, and UVMHC; UVMHC is covered by a self-insured BCBSVT plan. For this report, in addition to ACO benchmarks, we also compared risk-adjusted payments in 2018 for four payers: Medicare, Medicaid, BCBSVT, and UVMHC.<sup>5</sup> We first briefly describe the underlying methodology and then discuss the payer differential assessment and validation results.<sup>6</sup>

### A. Methodology

To derive comparable benchmark rates across payers, we proceeded in two steps. First, we aligned benchmark definitions and then we risk-adjusted benchmark rates using the ACG model.

In aligning benchmark definitions, we identified discrepancies across payers in how they derive benchmarks and which services are included in benchmark rates. For example, Medicare and Medicaid base their benchmarks on paid amounts whereas commercial payers base their benchmarks on allowed amounts. In addition to paid amounts, the allowed amount also includes member copayments. To make benchmarks comparable across payers, we transformed Medicare and Medicaid benchmarks from paid amounts to allowed amounts using the paid-to-allowed ratio for PMPM costs from the Vermont Health Care Uniform Reporting and Evaluation System (VHCURES). Specifically, we calculated the average paid amount PMPM, which includes pre-paid costs for Medicaid members and population-based payment (PBP) amounts for Medicare members. These copayments equal about 16 percent of the allowed amount for Medicare members and close to zero for Medicaid members. We excluded Medicare members who were eligible for coverage because they had end-stage renal disease (ESRD), as their health care needs differ substantially from all other member categories.<sup>7</sup> Benchmark rates also differ in terms of included services and non-service fees. The Medicare benchmark excludes Blueprint and Support and Services at Home (SASH) payments and the Medicaid benchmarks exclude a \$2.50 primary care case management (PCCM) fee and a 0.2 percent efficiency adjustment. Payers use different methods to construct ACO benchmark rates: commercial payers base their benchmark rates on allowed amounts whereas Medicare and Medicaid base their benchmark rates on paid amounts (including population-based payments [PBP] in the case of Medicare and pre-paid costs in the case of Medicaid).<sup>8</sup> See Table II.1 for all differences and how we aligned them.

---

<sup>4</sup> <https://www.hopkinsacg.org/>

<sup>5</sup> In 2017 and 2018, the ACO did not have enough members covered by the UVMHC to include them in the risk score algorithm.

<sup>6</sup> Details on the methodology can be found in the appendix of this report.

<sup>7</sup> 0.4 percent of Medicare FFS member months corresponded to members who were eligible for Medicare because of ESRD in 2018.

<sup>8</sup> Per the ACO agreements with commercial payers, actual spending “shall include: Allowed Amount for all claims for Health Care Services for Attributed Beneficiaries plus the per Attributed Beneficiary per month fee paid to ACO, and TPA costs incurred by Plan in connection with this Program.”



Table II.1. Aligning benchmark definitions

	Medicare	Medicaid	Commercial	Comparison adjustments
Paid/allowed amount	Paid amount	Paid amount		Convert paid to allowed amounts
Targets	Separate targets for aged/disabled and ESRD	Separate targets for ABD, adults, and children		Excluded ESRD from Medicare
Rate setting	Shared savings/losses	Prospective rate paid to ACO	Shared savings/losses	Use of settlement rates for Medicare and commercial
Services included in benchmark	Part A and B services	Similar services as Medicare Part A and B	Includes retail prescription drugs; BCBS includes MH/SU	Excluded retail prescription drugs from commercial
Services excluded from benchmark	Part D prescription drugs	Long-term support services, some home and community-based services	UVMHC excludes MH/SU	No adjustments necessary
Non-service fees and adjustments	Includes DSH and IME; excludes BP and SASH	Includes administrative fee; excludes BP, SASH, PCCM and efficiency adjustment		Excluded administrative fees; excluded care coordination and ITS fees from commercial

ABD = aged, blind or disabled; ACO = accountable care organization; BCBS = Blue Cross Blue Shield; BP = Blueprint; DSH = Disproportionate Share Payment; ESRD = end-stage renal disease; IME = Indirect Medical Education; ITS = Information Technology Services; MH/SU = mental health and substance use; PCCM = primary care case management SASH = Support and Services at Home; UVMHC = University of Vermont Medical Center.

Using the ACG model, we produced prospective risk scores. To accomplish this, we used 2017 claims to predict the risk of ACO members in 2018, the year to which this assessment report applies. We chose prospective risk scores because payers set the benchmark rate based on historical claims. We started with the entire VHCURES Total Cost of Care (TCOC) Report population with the following restrictions:

1. We required members to have at least nine months of enrollment for any payer in 2017. This ensured that risk scores were not artificially lowered by members with little health care use due to a short enrollment period. However, including partial-year enrollment may have introduced bias if members who were enrolled less than 12 months had a systematically different risk.<sup>9</sup>
2. We used claims paid by primary payers and excluded payments from secondary payers to avoid double counting claims. For example, for a resident primarily covered by a commercial plan but with a supplemental Medicare plan, we only included commercial payments. We also excluded prescription claims because they typically do not have a significant impact on risk scores and may introduce bias due to data quality issues.
3. We used all primary medical claims regardless of payer. For example, if a member was enrolled in Medicare for the last eight months of 2017 but had commercial coverage for the first four months, we

<sup>9</sup> Among Medicaid members, aged, blind, or disabled (ABD) adults with partial year enrollment (who often leave Medicaid to enroll in Medicare or due to death) tend to have a higher risk, while adult and child non-ABD members with partial year enrollment tend to have a lower risk, according to the Department of Vermont Health Access.

also included the commercial claims in the risk score algorithm. Because the goal of risk adjustment is to predict health care use in the subsequent year, payer identity is not relevant at this stage of the analysis.

- 4. We included all ACO enrolled members, including those who were partially attributed in 2018.
- 5. To make risk scores more intuitively understandable, we rescaled them to 1.0 using the VHCURES population. A risk score above 1.0 implies that a member has a higher risk than the average VHCURES member. We then aggregated the rescaled risk scores for each cell defined by payer (and payer subgroup, if applicable), gender, age group, and hospital service area (HSA). In aggregating the risk scores, we weighted risk scores by total number of member months in each demographic and payer cell.

B. Payer differential

Table II.2 shows our payer differential results. Column (1) shows member months for 2018, overall and by payer and payer subgroup. The member months correspond to the total number of months that members were attributed to the ACO and covered by the respective payer. Column (2) displays the average rescaled risk score for each group. We calculated, rescaled, and aggregated the risk scores as described above. The average risk score for all ACO members is 1.016, which implies that ACO members have a slightly higher risk, on average, than the population included in VHCURES. Column (3) shows the ACO benchmark rates for each payer subgroup and their weighted averages for Medicaid and commercial members overall and for all members combined. These rates reflect adjustments described in the methods section to improve comparability across payers, such as removal of Blueprint and SASH payments from Medicare and removal of administrative fees from Medicaid and commercial. Column (4) shows the paid-to-allowed ratio for all payers. In Column (5), we show the risk-adjusted benchmark rate, applying the paid-to-allowed adjustment for Medicare and Medicaid, as described in the methods section. Specifically, for Medicare and Medicaid members, we divided the benchmark rate in Column (3) by the average risk score in Column (2) and then we divided the resulting number by the paid-to-allowed ratio in Column (4).


We then calculated the payer differential relative to the risk-adjusted Medicare benchmark by dividing the risk-adjusted benchmark for each payer in Column (5) by the corresponding value for Medicare. Intuitively, this payer differential shows how much less (or more) the ACO receives PMPM from other payers compared to Medicare when adjusting for different member risks and expressing benchmarks in terms of allowed amounts for all payers. The results show that the risk-adjusted benchmarks for Medicaid are 45 percent as large as for Medicare. For commercial members, the benchmarks are 5 percent higher than for Medicare on average.

--	--	--	--	--

Table II.2. Payer differential (2018)

Payer group	Member months (1)	Average rescaled risk score (2)	ACO benchmark rate (3)	Paid-to-allowed ratio (4)	Risk-adjusted benchmark using allowed amount (5) <sup>a</sup>	Payer differential as fraction of Medicare (6)
All members	1,061,558	1.016	\$485.84	0.88	\$501.69	
<b>Medicare FFS</b>	<b>337,597</b>	<b>1.483</b>	<b>\$806.82</b>	<b>0.84</b>	<b>\$645.21</b>	<b>1.00</b>
Medicare only	291,903	1.418	\$806.82	0.84	\$677.66	1.05
Dual eligible	45,694	1.902	\$806.82	0.86	\$495.97	0.77
<b>Medicaid</b>	<b>456,836</b>	<b>0.842</b>	<b>\$245.82</b>	<b>1.00</b>	<b>\$292.52</b>	<b>0.45</b>
Adult	188,366	1.199	\$353.93	1.00	\$296.23	0.46
Child	237,361	0.392	\$112.38	1.00	\$286.96	0.44
ABD	31,109	2.122	\$609.40	1.00	\$287.90	0.45
<b>Commercial</b>	<b>267,125</b>	<b>0.724</b>	<b>\$490.66</b>	<b>0.87</b>	<b>\$678.01</b>	<b>1.05</b>

<sup>a</sup> Column (5) was calculated as "[Column (3) / Column (2)] / Column (4)" for Medicare and Medicaid and as "Column (3) / Column (2)" for commercial payers.  
 ABD = aged, blind, or disabled; ACO = Accountable Care Organization; FFS = fee-for-service.

There are several caveats that underscore the difficulty in comparing ACO benchmarks across payers. First, the self-insured UVMHC plan is geographically concentrated in Burlington and has a tiered reimbursement arrangement with its provider network and may therefore not be generalizable to the larger Vermont ACO population. Second, in contrast to Medicaid and commercial payers, the Medicare ACO benchmark rate includes a Disproportionate Share Hospital payment totaling about \$1.9 million—less than 1 percent of total costs—and a small Graduate Medical Education payment. These additional fees are not part of the ACO arrangement. In addition, there may be factors external to the ACO that influence benchmark rates, such as Medicaid’s coverage of long-term care. Finally, there might have been unusual claims patterns during the years that payers used to set their benchmarks.

Given this context, differences in the risk-adjusted ACO benchmark rates among payers observed in Table II.1 could be due to: (1) historically lower payment rates from Medicaid to providers (assuming risk scores adjusted for differences in utilization), (2) payers’ varying assumptions about ACO’s cost reduction strategies, and (3) varying risk-levels among groups not captured in the ACG algorithm.

In Table II.3, we compare risk-adjusted PMPM payments to risk-adjusted benchmark rates overall and by payer. The purpose of this analysis is to show that the payer differential shown in Table II.2 aligns with underlying differences in payments. That is, we provide evidence that the ACO does not negatively affect the underlying payment differential between Medicare and Medicaid. To account for the different methods that payers use to construct ACO benchmark rates and to make a cross-payer comparison possible, we adjusted Medicaid and Medicare benchmarks to reflect allowed risk-adjusted PMPM costs (as in Table II.2). We calculated PMPM payments from 2018 VHCURES claims and risk-adjusted by the average rescaled risk scores shown in Table II.2.

For all members combined, risk-adjusted payments are about 1 percent lower than the weighted average of risk-adjusted benchmarks. For Medicare and commercial members, risk-adjusted actual payments are slightly lower than the risk-adjusted benchmarks, 2 percent lower for Medicare members, and 1 percent lower for commercial payers. Medicare set a non-ESRD benchmark that included beneficiaries dually eligible for Medicaid. Excluding Medicare beneficiaries dually eligible for Medicaid results in risk-adjusted payments 10 percent lower than the risk-adjusted benchmark. For dual eligible members, risk-adjusted payments are 55 percentage points higher than the risk-adjusted benchmark. For Medicaid members overall, PMPM payments and the benchmark are within 2 percent of each other. Therefore, taking all Medicaid members together, we do not find evidence that the Medicaid benchmark rates are too low to cover costs. However, for different types of Medicaid members, the benchmarks and PMPM payments diverge, even though Medicaid set separate targets for each subpopulation. For adult non-ABD Medicaid members, the payments are 5 percent lower and for Medicaid children, they are 19 percent higher than the respective benchmark. Commercial payers set separate benchmarks for each ACO agreement.

Note again that the PMPM payments are only for medical services and do not include administrative costs, or services provided outside of claim records such as care coordination. The differences observed in adjusted PMPM payment-to-benchmark ratios indicates that the lower Medicaid ACO benchmark rates observed in Table II.2 do not suggest that Medicaid set ACO benchmark rates artificially low relative to historical payments (differential ratio of 0.53 [Table II.2] compared to PMPM payments-to-benchmark ratio of 1.01 [Table II.3]). It is implausible that the ACO reduced PMPM costs by 48 percent in one year. A rigorous evaluation of the ACO’s impact on PMPM costs in 2018 would provide much better estimates



to understand the extent to which PMPM payment-to-benchmark ratio differences are due to ACO's performance or to different payment rates across payers.

**Table II.3. PMPM payment-to-benchmark ratio by payer (2018)**

Payer group	Risk-adjusted PMPM payment	Risk-adjusted benchmark	Payment-to-benchmark ratio
All members	\$498.84	\$501.69	0.99
<b>Medicare FFS</b>	<b>\$635.14</b>	<b>\$645.21</b>	<b>0.98</b>
Medicare only	\$606.85	\$677.66	0.90
Dual eligible	\$769.86	\$495.97	1.55
<b>Medicaid</b>	<b>\$298.89</b>	<b>\$292.52</b>	<b>1.02</b>
Adult	\$282.41	\$296.23	0.95
Child	\$340.08	\$286.96	1.19
ABD	\$297.30	\$287.90	1.03
<b>Commercial</b>	<b>\$668.52</b>	<b>\$678.01</b>	<b>0.99</b>

ABD = aged, blind, or disabled; FFS = fee-for-service; PMPM = per member per month.

### C. Validation

To validate the payer differential results, we compared member months in Table II.2 with 2018 ACO member month data from the All Payer TCOC Report (Table II.4). For Medicare, we limited TCOC data to members ages 65 and older with both Medicare Parts A and B and excluded members with ESRD. Overall, there are 2.2 percent more member months in the All Payer TCOC Report than in the payer differential results. This difference aligns with our expectations and is likely due to the nine-month enrollment requirement for the payer differential calculation. The higher difference for commercial payers might be related to the commercial attribution methodology; specifically, many new members in qualified health plans may have had fewer than nine months of continuous 2017 enrollment, thus excluding them from our risk-adjusted population.

**Table II.4. Payer differential member month validation (2018)**

Payer group	Member months payer differential	Member months TCOC report	Difference	Percent difference
All members	1,061,658	1,085,530	23,972	2.2%
Medicare FFS	337,597	338,760	1,163	0.3%
Medicaid	456,836	463,597	6,761	1.5%
Non-ABD <sup>a</sup>	425,727	432,505	6,778	1.6%
ABD	31,109	31,092	-17	-0.1%
Commercial	267,125	283,147	16,022	5.7%
Fully-insured	192,006	202,038	10,032	5.0%
Self-insured	75,119	81,109	5,990	7.4%

<sup>a</sup> Includes the categories non-ABD adult and non-ABD child.

ABD = aged, blind, or disabled; FFS = fee-for-service; TCOC = total cost of care.

We also compared unadjusted 2018 PMPM amounts to settlement reports for commercial plans. BCBSVT and UVMHC PMPM payments as calculated in VHCURES were respectively about 4 percent and 5 percent lower than in settlement reports. Settlement reports include about 21 percent more member months and about 24 percent higher costs than VHCURES data across both plans. VHCURES shows fewer member months for two main reasons: (1) ACO flags in VHCURES were not added to commercial members until February 2018, resulting in far fewer member months in the first quarter than in subsequent quarters, and (2) we required nine months of continuous enrollment in 2017 in VHCURES for inclusion in the differential report. We believe the first factor explains about three-quarters of the difference with settlement report member months, and the second factor about one-quarter. Additionally, settlement reports include some non-claims payments not included in VHCURES data, such as care coordination fees.

Finally, to validate Medicaid child payments, which were about 19 percent higher than the benchmark, we compared member months and paid amounts to 2018 TCOC data. As expected, the number of member months was slightly lower in the differential data due to the nine months of continuous enrollment requirement, and associated payments were similarly lower.

### D. Geographic analysis of Medicaid PMPM payment-to-benchmark ratios

To further explore payment-to-benchmark ratios among Medicaid members, we also examined risk-adjusted PMPM payments relative to the risk-adjusted benchmarks by HSA, stratified results by Medicaid adults and Medicaid children, and compared to Medicare non-duals (Table II.5). We hypothesized that geographic variation could explain some of the payer differential if more Medicaid members live in low-cost areas of the state. Specifically, we hypothesized that HSAs with lower PMPM payments might have larger than average shares of Medicaid members, which might explain Medicaid's lower benchmark rate. However, when we compared the ratio of PMPM payments to benchmark rates across hospital service areas, we did not find any systematic variation. In general, we observed similar results between Medicaid adult and Medicare non-duals. Burlington, Middlebury, and Randolph have lower payment-to-benchmark ratios than the statewide average across the three groups. In Morrisville, payment-to-benchmark ratios were lower than the statewide average among Medicaid adults and non-dually eligible Medicare beneficiaries, but not among Medicaid children, and in White River Junction, they were lower for Medicaid adults but higher for Medicaid children and Medicare. Therefore, we did not find evidence that geographical variation contributes to the lower Medicaid benchmark relative to other payers. A more robust statistical approach may be needed to evaluate the potential impact of geographical variation on the payer benchmark differential, which was not in-scope for this report.

**Table II.5. Ratios of risk-adjusted actual payments to risk-adjusted benchmarks and Medicaid-Medicare payer differential, by HSA<sup>a</sup>**

HAS	Medicaid adult	Medicaid child	Medicare	Payer differential <sup>b</sup>
Randolph	0.99	0.81	0.84	0.52
Morrisville	0.79	1.49	0.88	0.43
St. Johnsbury	0.77	0.87	0.90	0.61
St. Albans	1.00	1.13	0.91	0.47
Bennington	0.91	1.31	0.93	0.48
Burlington	0.92	1.15	0.94	0.46
Middlebury	1.09	1.09	0.96	0.49
Barre	1.00	1.21	0.99	0.47
Rutland	1.11	0.97	1.00	0.52
Springfield	1.23	1.13	1.11	0.48
White River Jct	0.77	1.28	1.15	0.50
Brattleboro	0.85	1.35	1.16	0.41
Newport	0.91	1.11	1.41	0.55
Vermont total	0.96	1.18	0.98	0.46

Notes: Red cells indicate payment-to-benchmark ratios lower than the statewide average. Table is sorted by Medicare ratio.

<sup>a</sup> Medicaid populations exclude the ABD population. Medicare includes beneficiaries enrolled in FFS plans who are not dually eligible for Medicaid.

<sup>b</sup> Ratio of Medicaid adult benchmark to Medicare benchmark.

ABD = aged, blind, disabled; FFS = fee-for-service; HSA = hospital service area.

To understand whether geographic variation contributes to the payer differential, we also calculated payer-specific risk-adjusted ACO benchmarks for each of Vermont's 13 HSAs and used them to calculate HSA-specific payer differentials. The last column in Table II.5 shows that payer differentials between Medicaid adult and Medicare range from 0.41 in the Brattleboro HSA to 0.61 in the St. Johnsbury HSA. However, the payer differential is close to the statewide average in most other HSAs.

Although the payer differential is not directly explained by geographic factors, it is possible that differences in demographic characteristics across HSAs explain part of the geographic variation in the payer differential. For example, an HSA may have a low risk-adjusted Medicaid ACO benchmark because many Medicaid members in that HSA belong to a demographic group with a high risk score. To assess whether such differences can explain the payer differential, we reweighted the average risk score that we used to calculate the HSA-specific differential ratios by using the population fractions for the HSA with the highest differential ratio when compared to Medicare (Middlebury for Medicaid and St. Albans for commercial).<sup>10</sup> However, this adjustment did not change our conclusions about the geographic variation in the payer differential.

<sup>10</sup> The average risk score in HSA  $h$  for payer  $p$  is defined as  $R_h^p = \sum_j W_{j,h}^p R_{j,h}^p / \sum_j W_{j,h}^p$ , where  $W_{j,h}^p$  is the number of member months for payer  $p$  and demographic group  $j$  in HSA  $h$  and  $R_{j,h}^p$  is the corresponding average risk score. A demographic group is defined by age and gender—for example, women aged 35–44. We then reweighted the

## E. Limitations

Although the payer differential analysis aligns and risk-adjusts benchmarks rates, it has several limitations. First, the ACG risk adjustment accounts for some but not all variation in risk. Specifically, the risk adjustment can only capture factors that are observed in claims data, excluding factors such as disease severity and members' socio-economic background that could affect risk. Second, we did not examine differences between service sites. For example, it is possible that Medicare members use hospital-based outpatient clinics (which have a different cost structure from independent practices) more frequently than Medicaid members. Third, plans vary in benchmark construction and plan design. Although we attempted to align benchmarks as much as possible, there may be remaining factors that we could not account for. For example, patient cost-sharing is lower among self-insured than fully-insured commercial members. Moreover, Medicare includes disproportionate share hospital (DSH) and indirect medical education (IME) payments and the UVMHC plan excludes mental health and substance use services. Some payers also incentivize the ACO to effect cost savings: Medicare includes a shared savings incentive mechanism and Medicaid includes a 0.2 percent efficiency adjustment. Finally, factors external to the ACO affect benchmark rates. For example, Medicaid covers high-cost services, such as long-term care, that are not provided by the ACO. We will revisit this last point in the Options Report in Chapter IV.

---

average risk score by using the number of member months for Middlebury and St. Albans, respectively. Denoting these member months numbers by  $W_{j,H}^p$ , the reweighted average risk score is defined as  $\hat{R}_h^p = \sum_j W_{j,H}^p R_{j,h}^p / \sum_j W_{j,H}^p$ .



**This page has been left blank for double-sided copying.**

### III. Options Report

#### A. Introduction

The Payer Differential Assessment Report showed a risk-adjusted Medicaid ACO benchmark that was 55 percent lower than its counterpart for Medicare ACO members. We also found that both benchmarks do not differ substantially from PMPM costs for Medicaid and Medicare, respectively, meaning the payer differential is likely driven by underlying fee-schedule differences. In this Options Report, we present alternatives for addressing the payer differential in the ACO program and outline possible future research to further assess these options and their potential to feasibly reduce the payer differential.

The purpose of the ACO Payer Differential Assessment Report is to determine whether the ACO program is impacting access to care for Medicaid patients and to assess how it is impacting provider revenue. This report is limited to evaluating ACO benchmarks, which showed the ACO benchmark setting did not substantially change the underlying payer differentials in Vermont. We did not analyze the cost of providing services nor differences in fee-schedules of different types of providers, which was not in-scope for this report. Focusing on ACO benchmarks, we developed the options discussed in this report in close collaboration with the GMCB and Department of Vermont Health Access (DHVA). After presenting results from the Payer Differential Assessment Report, we met with stakeholders in October 2020 to discuss potential options and which options to prioritize.

We describe three options in this report: (1) maintain the status quo, that is, make no change to the benchmark calculation and shift the focus to the scale target; (2) uncouple the benchmark calculation from FFS payments; and (3) include expanded Medicaid services when determining the differential.

#### B. Shift the focus to the scale target

Before considering changes to the benchmark methodology and re-interpretation of the payer differential, we discuss the option of maintaining the status quo. We found that the ACO program is not exacerbating the payer differential and the likely underlying cause of the differential is fee-for-service payer amounts. Because the ACO program is not the source of the differential, one option is to maintain the current benchmark calculation methodologies and assess other ways of addressing payment issues. If the state chose, it could address the fee-for-services issues, however, making a recommendation on fee-for-service reimbursement is beyond the scope of this report.

In addition, there are other ways that the Medicaid Next Generation ACO program may be positively impacting provider revenue. Specifically, increasing the number of Medicaid members attributed to the ACO could lower the per-member cost and generate savings for the ACO, in addition to enabling hospitals and other providers to receive true fixed prospective payments in lieu of Medicaid fee-for-service reimbursement for a broader proportion of their Medicaid patient panels. In furtherance of promoting these goals, in 2019, DVHA added an expanded attribution approach based on members' geographic location. Using the expanded attribution methodology, attribution of Medicaid members no longer relies on their having claims-history with an ACO-participating primary care provider. This enabled members with specialist utilization (but not primary care utilization) to be attributed, along with members having no Medicaid claims history at all (including both members who did not utilize services and members who were newly enrolled with Medicaid) to be attributed to the ACO. The ACO receives a lower PMPM payment for members attributed using expanded attribution than it receives for Medicaid members who are attributed using the traditional attribution methodology. With this expanded attribution

approach, Medicaid was able to attribute more of its members to the ACO, which should increase progress toward the scale target. To date, Medicaid has made the most progress of all payers to meeting the scale target, though statewide ACO attribution continues to fall short. Assuming a larger scale lowers overall Medicaid per-member costs, Medicaid's attribution method benefits the ACO despite the payer differential and without increasing the Medicaid benchmark rate. If providers achieve cost-savings for ACO aligned members as intended, they can also benefit via ACO incentives such as shared savings.

To assess the expanded attribution method's implications for the payer differential, the state could compare PMPM payments and costs between traditionally attributed Medicaid members and members attributed via expanded attribution. If ACO payments exceed costs for geographically attributed members, it would increase revenue for ACO providers without increasing benchmark rates. However, the geographic attribution could also lead to more engagement with the health care system among Medicaid members and hence increased utilization.

Researching providers' perspectives may also help contextualize the payer differential. Specifically, analyzing the fraction of Medicaid and Medicare providers who participate in the ACO over time would provide information about the status quo from the provider perspective. An important concern related to the payer differential is the possibility that some providers may not accept Medicaid members as patients if reimbursement is too low. To assess this issue, the state could compare participation rates for Medicare and Medicaid in 2018 and 2019 (see Sample Table III.1 for a proposed table shell). This analysis could also incorporate an assessment of the potential correlation between expanded attribution and provider ACO participation.

**Sample Table III.1. Provider participation rates, 2018–2019**

	Participation rate	
	2018	2019
Medicaid ACO participation rate		
Medicare ACO participation rate		

ACO = accountable care organization.

### C. Uncouple benchmark calculation from FFS payments

A second option is to change the methodology used by payers, particularly Medicaid, to set the benchmark, rather than changing benchmark *rates* explicitly. The current Medicaid benchmark methodology is based on historical claim-based cost estimates. Because Medicaid costs are a function of Medicaid FFS rates, the Medicaid benchmark is implicitly tied to FFS rates. If ACO benchmarks were uncoupled from FFS rates, ACO benchmarks would need to be calculated using a different methodology and would likely involve setting capitated rates. As the state prepares for a second phase of the model, it has an opportunity to explore and evaluate potential alternative benchmark methodologies and model their effects on the payer differential.

### D. Include expanded Medicaid services when determining the differential

To provide a perspective on the payer differential that goes beyond the ACO, stakeholders suggested recalculating the differential, considering services covered by Medicare and Medicaid that are not part of the ACO Total Cost of Care. By its nature, the ACO payer differential only includes ACO-covered

services, but Medicaid members have access to additional services, such as long-term services and supports (LTSS), home and community-based services (HCBS), and specific mental health and substance use (MH/SU) programs. Hence, from both a patient and payer perspective, it is important to account for these services to obtain a more complete picture for comparing PMPM costs across different payers. In addition, understanding the differences across payers in PMPM costs for specific types of providers may be important to creating a strategy to combine the goal of reducing the payer differential with policy goals such as increasing spending on primary care.

### **1. Possible approach to recalculate the payer differential**

The state may opt to recalculate the payer differential for Medicare and Medicaid members by comparing PMPM costs including all services that these payers cover. Below we outline our proposed approach to this research if GMCB chooses this option.

First, we will work with DHVA and the Agency of Human Services to identify services covered by Medicaid but not provided by ACO-affiliated providers. (To our knowledge, ACO-affiliated providers provide all medical services covered by Medicare except pharmacy.) Once we establish which services to include in the recalculated payer differential, there are two potential data sources for calculating PMPM costs for Medicaid members, both of which have drawbacks:

1. CMS's Medicaid Budget and Expenditure System collects aggregate Medicaid cost data from states. Specifically, states submit Form CMS-64 annually, which lists total expenditures by category (such as nursing facility services, HCBS, and inpatient services). Currently, these data are publicly available up to 2019. Because Form CMS-64 only lists aggregate expenditures, we may not be able to distinguish between costs associated with Medicaid members who are attributed to the ACO and those who are not attributed. Furthermore, a cursory review of Vermont's CMS-64 suggests services included in ACO payments might be excluded from these reports.<sup>11</sup>
2. VHCURES claims data contain claims payments for individual members and indicators of ACO attribution. We could use VHCURES data to sum payments associated with ACO-attributed members for services not provided by the ACO. However, VHCURES claims data do not contain claims for some Medicaid-covered services, such as HCBS and MH/SU services provided by community centers. These costs might be available from an alternative data source, such as Blueprint Cost Growth data, but not at the individual level.

Although each data source does not include all the necessary information to recalculate the payer differential, we may be able to estimate PMPM costs of non-ACO provided services covered by Medicaid. For example, we could estimate total expenditures for ACO-attributed Medicaid members for services not included in VHCURES assuming the fraction of costs for ACO-attributed members and non-attributed members is the same across service categories. For example, if 80 percent of Medicaid-covered physician services in VHCURES are associated with ACO-attributed members, we would assume that 80 percent of expenditures for nursing facility services on Form CMS-64 are due to service use by ACO members. Alternatively, if we can verify that only non-ACO service costs are reported on the CMS-64,

---

<sup>11</sup> Vermont's 2019 Medical Assistance Program (MAP) form showing \$0 in regular inpatient hospital payments. <https://www.medicaid.gov/medicaid/financial-management/state-expenditure-reporting-for-medicaid-chip/expenditure-reports-mbescbes/index.html>. A researcher familiar with CMS-64 forms suggested Vermont might have irregular MAP reporting compared to other states and recollected that ACO services might be excluded.

we may be able assign a portion of these costs to ACO members based on the statewide distribution of ACO-attributed and unattributed Medicaid members.

We could then use a similar methodology as used for the assessment report to risk-adjust PMPM costs. That is, we would first calculate total costs based on Form CMS-64 and/or VHCURES data (including for services not provided by the ACO) and divide the total by member months and average risk scores. We would report our results in a manner consistent with the table shell shown in Sample Table III.2 where we could contrast the recalculated payer differential with the original payer differential based on PMPM costs. The latter will differ from the payer differential shown in the assessment report because we would use risk-adjusted PMPM costs instead of risk-adjusted benchmark rates.

**Sample Table III.2. Recalculated payer differential (2018)**

Payer group	From assessment report		Recalculated	
	Risk-adjusted PMPM cost	Payer differential as fraction of Medicare	Risk-adjusted PMPM cost	Payer differential as fraction of Medicare
<b>Medicare FFS</b>				
Medicare only				
Dual eligible				
<b>Medicaid</b>				
Adult				
Child				
ABD				

ABD = aged, blind, or disabled; FFS = fee-for-service; PMPM = per member per month.

## 2. Payer differential by provider type

Based on our payer differential assessment, benchmark rates appear to be tied to PMPM payments across payers. However, payments for specific services and provider types may differ across payers, and we did not measure this differential in our analysis. To shed further light on this issue, the state may consider assessing if payments are more concentrated at certain providers (such as hospitals versus physician offices) for certain payers. For example, Medicare might pay relatively more to hospitals and physicians than Medicaid. One approach to better understand the payer differential between Medicare and Medicaid is to calculate provider type-specific payer differentials. The state could use VHCURES data to calculate PMPM payments for different payer groups, but in contrast to the assessment report, stratify costs by provider type (such as hospitals, primary care physicians in office settings, and specialists in office settings).<sup>12</sup> Risk-adjusting the PMPM costs and expressing the payer differential as a fraction of Medicare PMPM costs would facilitate comparability to the existing payer differential assessment analysis. Sample Table III.3 shows a proposed table shell for reporting results. In addition, further analysis can separate the provider specific payer differential into a price component and a use rate component. That is, a provider

<sup>12</sup> This kind of analysis would potentially be helpful for highlighting how hospitals and other providers receiving prospective payments can benefit from the Medicaid fixed payment construct relative to FFS reimbursement. However, benefits from prospective payment are partly offset by ACO dues and providers bearing risk.

type specific differential could arise because Medicare and Medicaid pay different prices for the same service or because Medicaid and Medicare members have different use rates. This would yield insights into whether the differential is driven by differences in prices or health care use.

**Sample Table III.3. Payer differential by provider type (2018)**

Payer group	Hospitals (inpatient and outpatient)		Professional services – primary care		Professional services – specialists	
	Risk-adjusted PMPM payments	Payer differential as fraction of Medicare	Risk-adjusted PMPM payments	Payer differential as fraction of Medicare	Risk-adjusted PMPM payments	Payer differential as fraction of Medicare
<b>Medicare FFS</b>						
Medicare only						
Dual eligible						
<b>Medicaid</b>						
Adult						
Child						
ABD						

ABD = aged, blind, or disabled; FFS = fee-for-service; PMPM = per member per month.

**This page has been left blank for double-sided copying.**



## IV. 2019 Annual Report

In this chapter, we describe the updated results of the first Annual Payer Differential Report submitted in April 2019. We used ACO benchmarks from OneCare Vermont and obtained risk scores using the ACG grouper from Johns Hopkins University to calculate annual risk-adjusted ACO benchmark differences for this report. As of the end of 2019, OneCare Vermont was the only ACO currently operating in the state and had contracts with four payers during the timeframe for which this report applies: Medicare (CMS), Medicaid, BCBSVT, and UVMHC.

For this report, we compared ACO benchmarks in 2018 and 2019 for all payers to analyze if the rate of change is similar across participating payers.<sup>13</sup> We found that benchmarks decreased for Medicare and Medicaid and increased for commercial payers. Risk adjusting benchmarks further decreased the Medicare and Medicaid benchmarks, and reduced the increase in the commercial benchmark. The rate of change in 2019 was similar in Medicaid and Medicare benchmarks (Table IV.1).

The annual changes in risk adjusted benchmarks are a function of baseline cost changes due to newly attributed members and newly aligned providers, and therefore do not necessarily indicate reduced provider payments. However, we compared ACO benchmarks to baseline costs to calculate an update factor, which helps control for newly attributed members and providers and is therefore a better reflection of changes to provider payments. Update factors suggest that ACO rates increased in 2018 and 2019. We see a similar trend for Medicare and Medicaid with a lower increase in 2019 than 2018, while commercial rates increased more in 2019 (Table IV.2).

### A. 2019 annual growth rates in ACO benchmarks

The annual growth rates show by how much payer specific ACO benchmarks change from one year to the next. To make benchmark rates comparable across years, we adjusted them by the average payer specific risk scores in each year to capture potential changes in risk and hence health care needs. For example, a decrease in the benchmark rate would not imply negative benchmark growth if ACO-attributed members' risk declined by more than the benchmark.

Each payer has its own unique approach to risk-sharing and its own payment arrangements with the ACO. Thus, the first step to examining changes in ACO benchmarks is to calculate a weighted ACO payment target across all payers so we can compare the annual growth rates. We used ACO-attributed member months in the base-year estimates from 2018 to create weights for this calculation. The second step is to adjust for any changes in risk scores within each payment category to account for changes in attributed members over two years. For both steps, we used the same approach as described in the 2018 Payer Differential Assessment Report methods (Section II.A). Specifically, to calculate 2018 prospective risk scores, we used ACO-attributed members in VHCURES with nine months of continuous enrollment in 2017 and used ACG risk scores for risk adjustment. To calculate 2019 risk scores, we used the same approach but with ACO-attributed members in VHCURES with nine months of continuous enrollment in 2018. There were no changes to the ACO covered services or quality adjustments over two years in the ACO contracts.

---

<sup>13</sup> Our initial report from March 25, 2019 did not include benchmark growth rates for commercial payers. In addition, we used risk scores provided by OneCare whereas we now use risk scores that we calculated using the ACG grouper. For commercial payers, we focus on Blue Cross Blue Shield of Vermont.



Table IV.1 shows the annual growth rates in ACO benchmarks. (Table B.1 in Appendix B shows the detailed calculations.) For Medicaid, we observed an overall decline of 2.2 percent in the ACO benchmark in 2019 compared with 2018. The ACO benchmark declined by 1.5 percent in Medicare. After adjusting for risk-score changes in each payment category, the ACO benchmark declined by 2.4 percent in Medicaid and by 2.0 percent in Medicare.

Overall, Table IV.1 only shows minor changes in risk-adjusted ACO benchmarks from 2018 to 2019.

**Table IV.1. Annual growth rates in ACO payment targets, by payer**

Payer	Growth rate of ACO benchmark	Growth rate of risk-adjusted ACO benchmark
Medicaid	-2.2%	-2.4%
Medicare	-1.5%	-2.0%

Note: See Table B.1 in Appendix B for detailed calculations and sources.

## B. Comparison of updates to baseline costs, by payer

Changes in baseline utilization and updates to providers in the ACO's network may affect the annual growth rates in ACO benchmarks. To account for these differences, we compared how each payer updated its baseline PMPM/PMPY costs to determine the ACO benchmarks for the performance year.

Each payer uses a different method to calculate and adjust baseline costs. Medicaid and BCBSVT use historical claims two years before the performance year (e.g., 2019 ACO rates are based on 2017 claims history), UVMMC uses historical claims one year before the performance year, and Medicare uses nine months of historical claims from the previous year (e.g., 2019 ACO rates are based on the claims history from January to September 2018). In addition to different time periods used for baseline cost estimates, payers make additional adjustments such as completion factors and efficiency adjustments which may change over time. We did not account for the changes in these assumptions when calculating the overall differences between the baseline estimates and the ACO benchmarks for the performance year, which we refer to as the update factor. We calculated the update factors for all payers using the same calculation approach used for the ACO benchmark growth rates, and we annualized the Medicaid and BCBSVT update factors to facilitate comparison with the Medicare update factor. To be consistent with the payers' calculations of update factors, we used payer reported member months to make adjustments rather than member months from VHCURES data reported in Table IV.1. Using the payer reported member months reported by payers does not change the findings in Table IV.1.

Table IV.2 compares the update factors for the 2019 and 2018 ACO benchmarks. (Table B.2 in Appendix B shows the detailed calculations.) In 2018, Medicaid had a higher update factor (5.1 percent) compared with Medicare (3.5 percent). In 2019, the ACO benchmark was 2.2 percent higher than the baseline estimate for both Medicaid and Medicare. The two-year combined update factor for ACO benchmarks was 7.4 percent for Medicaid and 5.8 percent for Medicare (not shown).<sup>14</sup> The update factors for commercial payers were higher than for Medicare.

<sup>14</sup> The formula to calculate the two-year update factor is  $(1 + \text{year1 update factor}) * (1 + \text{year2 update factor}) - 1$ .

[REDACTED]

[REDACTED]

Table IV.2. Updates to factors in 2018 and 2019, by payer

Payer	Update to 2019 factor	Update to 2018 factor
Medicaid	2.2%	5.1%
Medicare	2.2%	3.5%
[REDACTED]	[REDACTED]	[REDACTED]

Note: See Table B.2 in Appendix B for detailed calculations and sources.

[REDACTED]

## **Appendix A:**

### **Payer Differential Assessment and Annual Reporting Specification**

**This page has been left blank for double-sided copying.**

### A. Background

This appendix specifies the methodology for creating VHURES extracts to for the Differential Assessment Report and the Annual Differential Report and to assess the Vermont ACO payer differential and how it affects the Vermont ACO. This may involve evaluating the level of payment rates to Vermont ACOs, adjusted based on the risk profiles of ACO-attributed members as well as their utilization rates in 2017. It may also involve evaluating ACO profit margins by payer.

We specify comparisons that we will review from the tabulation report that OnPoint will provide, discuss methodological differences from Task 2 All Payer TCOC reporting, such as selection criteria and exclusion of certain members or claims, and describe how the data will be stratified by payer, sub-payer, age, gender, HSA, and ACO-alignment if different from all-payer TCOC reporting.

### B. Summary of risk score calculation and reporting

Calculation of risk scores may be replicated for other reports in the future. Below we describe the steps to calculate the risk scores for 2018 population which includes the ACO aligned beneficiaries for the differential assessment report.

1. Run ACG algorithm for the entire 2018 VHCURES TCOC population if they meet the following criteria using 2017 claims with 6-months of run out.
  - a. Require members have at least 9-months of enrollment in 2017.
  - b. Use primary medical claims only, i.e. no secondary or prescription claims.
  - c. Use all primary medical claims, regardless of payer.
  - d. Produce prospective risk scores.
  - e. Rescale the risk scores to 1.0 for the entire population included in this step. 2017 would be fixed for future runs as well.
2. Save risk scores in the VHCURES database for future use.
3. Create a report for payer differential reporting
  - a. Select 2018 VHCURES TCOC Population if they are ACO-aligned in 2018 and satisfy the restrictions imposed in step 1.
  - b. Use the reporting template (Table 1).
  - c. Sum the unscaled and rescaled risk scores for each payer-gender-age-HSA group.
  - d. Add ACS socio-demographic measures to the reporting template.

### C. Calculating risk scores: John Hopkins Adjusted Clinical Groups (ACGs)

GMCB has selected ACGs for member risk-scoring for the All-Payer Model and other uses.<sup>15</sup> This is the same grouper used by the ACO OneCare.

#### 1. Input Parameters Setting

Parameter setting for running the ACG on VHCURES data will be as follows:

---

<sup>15</sup> See <https://www.hopkinsacg.org/> and <http://mchp-appserv.cpe.umanitoba.ca/viewConcept.php?printer=Y&conceptID=1304>

- The All Ages vs. Elderly, Non-Elderly.<sup>16</sup>
- Each incurred year in reporting will use 6 months of runout from the previous year to calculate the risk scores (i.e., service start date 1/1/2017 – 12/31/2017, paid 1/1/2017 through 6/30/2018). For the assessment report, we will use 2017 claims with 6 months of runout to calculate risk scores for 2018 members. For the 2019 annual report, we will use 2018 claims with 6 months of runout for 2019 members.
- Pharmacy option. Pharmacy will not be included per GMCB decision (Sarah 2/6/2020).<sup>17</sup>
- Concurrent vs. **Prospective** Risk Scores.<sup>18</sup> For prospective risk scores the ACG grouper will output both unscaled and rescaled prospective risk scores and these will be retained.

### 2. Input Inclusions and Exclusions

With Medical Coverage, where ME018 Medical Coverage (ELIGIBILITY\_COVERAGE CLASS) = MEDICAL and;

With primary insurance coverage, where ME028 Primary Insurance Indicator (PRIMARY\_INSURANCE\_INDICATOR\_CODE) = 1 or the member is Medicare FFS defined as ME003 Product Type = AB (Medicare Parts A & B), MA (Medicare Part A), or MB (Medicare Part B)

Medical Claims with service start date for a member and month included in the denominator

All primary medical claims to be included. For dual Medicare and Medicaid eligibles, primary Medicaid claims will be included in the risk score calculation. Note that we will have a dual eligible flag in reporting, so we can exclude them from the payer differential to assess their impact.

For Commercial and Medicaid claims, we will include claims with the following Insurance Type/Product Codes in the numerator: HM (Health Maintenance Organization), HN (Medicare Advantage), EP (Exclusive Provider Organization), IN (Indemnity), PR (Preferred Provider Organization), PS (Point of Service), MC (Medicaid) . For Medicare claims, we will include claims with Insurance Type/Product Codes AB (Medicare Parts A & B), MA (Medicare Part A), or MB (Medicare Part B)

- All VHCURES medical membership and medical claims paid as primary will be input to the grouper following same restrictions as Task 2 Total Cost of Care, unless noted above. For the purposes of generating risk-scores, all of a member's medical claims paid as primary input into ACG software. For example, if a Medicare member is dual-eligible with Medicaid, the Medicare claims will be included and any Medicaid claims paid as primary by Medicaid (e.g., long-term care institutional) will also be included. Therefore, for some members more claims will be input to the ACG grouper than are included in the Task 2 Total Cost of Care cost outcomes. Claims unsupported by enrollment during a month will not be included.
- Each incurred year in reporting will use 6 months of runout (i.e., date of service 1/1/2017 – 12/31/2017, paid 1/1/2017 through 6/30/2018). Using 6-months of runout aligns with annual TCOC reporting.

---

<sup>16</sup> OneCare uses All Ages and this will be used for VHCURES.

<sup>17</sup> In contrast, OneCare uses pharmacy claims.

<sup>18</sup> OneCare uses rescaled total cost predicted risk.

- Due to use of prospective risk-scoring, claims from the prior year are used as inputs to the ACG software. For example, **for 2018 ACO-aligned members, we use 2017 medical claims with 6 months runout.**
- Members not identified in member gender (ME013) as male or female will be excluded from the input to ACGs.
- Members must be enrolled for at least 9 months in the year for which we pull the claims (2017 for the assessment report, 2018 for the 2019 annual report) to avoid biasing results with members with short enrollment who receive a low risk score. Determination of 9 months does not need to be continuous and will include data from all payers the member was covered by during 2017. For example, a member covered 4 months by commercial plans and 5 months by Medicaid will meet the 9 months criterion.

After calculating unscaled risk scores, they will be adjusted to a 1.00 average for the entire VHCURES population.

### 3. Payer Differential Reporting Populations

Though we will run the ACG grouper on the entire VCHURES population (subject to exclusions noted above), the VHCURES extract used to calculate payer differential will be limited to only the ACO-aligned members (ACO = yes). At this time, we do not plan to compare results to non-ACO members. Reports will also be limited to members with at least 9 months of enrollment during 2017.

Other restrictions include:

- Medicaid: children 0-17, adults 18-64, ABD 65+, blind or disabled. (Medicaid children are age 0-18, but we will use 0-17 as a simplification to align with the TCOC age ranges.) Non-ABD adults aged 65+ will be defaulted to Medicaid ABD.
- Medicare: 65+ only (ESRD will be excluded)
- Medicare: Part A and Part B coverage (exclude Part A only and Part B only)
- Commercial: all ages

### D. Data tables for analysis

Differential reporting is done once a year and the unit of analysis is a full incurred year – there are no quarterly reporting as in the Total Cost of Care.

#### 1. Report Stratifications

(Reporting stratifications will be the same as standard TCOC reporting stratification, with addition of dual-eligible strata on Medicare rows). We provide the full description for each stratification. Due to restrictions for ACO aligned population, some of the cells may be empty (for example we do not expect to see Medicare Advantage classification in the payer group strata).

- Payer Group (Commercial, Medicare FFS, Medicaid)
- Payer SubGroups: Commercial (Medicare Advantage, Fully-Insured, Self-Insured), Medicare (Part A&B; **not** Part A only or Part B only), Medicaid (ABD, Non-ABD Adult, Non-ABD Child). Only relevant payer subgroups will be shown for each payer. For example, ABD, non-ABD adult, and non-ABD child will only be shown for Medicaid.

- Dual eligible: Flag for members assigned to Medicare with Medicare Part A&B and Medicaid. Note that we used all claims including Medicaid claims for Medicare beneficiaries to calculate the risk scores, but for the payer differential reporting, we want the ability to exclude dual eligibles. The dual eligible flag defaults to 0 (no) for commercially insured members.
- Member age groups: <1, 1-4, 5-11, 12-17, 18-34, 35-44, 35-54, 55-64, 65-74, 75-84, 85+.
- Member gender (ME013): Female. Male.
- HSA: Barre, Bennington, Brattleboro, Burlington, Middlebury, Morrisville, Newport, Randolph, Rutland, Springfield, St. Albans, St. Johnsbury, White River Junction, Unknown.
- ACO Participation Indicator (ME031): We will only report risk scores for ACO members (ACO flag = yes).

## **2. Report measures**

All payment amounts refer to 2018 with a 6-month runout, that is 1/1/2018 to 6/30/2019 (for Differential Assessment Report only).

Differential measures will be created at the member level. The sum or weighted average of the member level for each possible row combination of all the stratifications will be provided. Differential measures include (measures marked with an asterisk (\*) appear in the Differential Assessment Report only):

- Unique Member count
- Member Month sum
- ACG unscaled risk score sum
- ACG rescaled risk score sum – scaled to the VHCURES population included in step 1. That is, unscaled risk score are divided by the average of risk score among all VHCURES members included in step 1 and then summed to obtain the rescaled risk score sum. Members who do satisfy the inclusion criteria in step 1 will be removed before calculating the average risk score for rescaling. (The average rescaled risk score in the included VHCURES population will be 1.0, but the average rescaled risk score among ACO aligned members may not necessarily be equal to 1.0.).
- Total Amount Paid\* – from VHCURES (MC063 PAID AMT)
- Total Medicare PBP\* – from VHCURES - Medicare ACO per beneficiary payments (PBP), also called 100% reduction amounts on claims, align with Medicare prospective ACO payments and are identified from the VHCURES Medicare companion file using the following submitted fields and logic:
  - $PBP = clm\_val\_amt [MC064(2)]$  if  $clm\_val\_cd [MC064(1)] = Q1$
  - $PBP = line\_othr\_apld\_amt1 [MC065]$  if  $line\_othr\_ind\_cd1 [MC0005A(1)] = L$
  - $PBP = line\_othr\_apld\_amt2 [MC068]$  if  $line\_othr\_ind\_cd2 [MC0005A(2)] = L$
  - $PBP = line\_othr\_apld\_amt3 [MC070]$  if  $line\_othr\_ind\_cd3 [MC0006] = L$
  - $PBP = line\_othr\_apld\_amt4 [MC072]$  if  $line\_othr\_ind\_cd4 [MC0009] = L$
  - $PBP = line\_othr\_apld\_amt5 [MC074]$  if  $line\_othr\_ind\_cd5 [MC014] = L$
- Total Medicaid Pre-Paid\* – ACO shadow claims – from VHCURES - Medicaid ACO “shadow” claims reported in VHCURES as pre-paid amounts (MC064) will be reported as a separate field in the



report tabulation. This will be used as needed for estimating total cost at various levels for stratification not available elsewhere (e.g., age, gender, HSA)

- Total Member Out-of-Pocket\* – from VHCURES - This will be the sum of the Copay amount (MC065 COPAY\_AMT), Coinsurance Amount (MC066 COINSURANCE\_AMT), and Deductible Amount (MC067 DEDUCTIBLE\_AMT)
- Total Allowed Amount\*

**Table A.1. Differential Report Tabulation - All-payer data**

Variable #	Variable Name	Variable Description	Values	Reports
1	REPORT_DATE	Report date	Data of File	Both
2	YEAR	Year	Data Year	Both
3	PAYER_GROUP	Payer Group	Commercial Medicare FFS Medicaid	Both
4	PAYER_SUBGROUP	Payer Subgroup	Medicare Advantage, Fully-Insured, Self-Insured, ABD, Non-ABD Adult, Non-ABD Child	Both
5	AGE_GROUP	Age group	<1 1 - 4 5 - 11 12 - 17 18 - 34 35 - 44 45 - 54 55 - 64 65 - 74 75 - 84 85 Plus	Both
6	GENDER	Gender	Male Female	Both
7	HSA	Member Health service area	Barre Bennington Brattleboro Burlington Middlebury Morrisville Newport Randolph Rutland Springfield St. Albans St. Johnsbury White River Junction UNKNOWN	Both
8	DUAL_ELIGIBLE	Flags members dually eligible for Medicaid and Medicare	1 = dually eligible; 0 = not dually eligible	Both
9	MEMBERS	Unique count of members		Both

Variable #	Variable Name	Variable Description	Values	Reports
10	TOTAL_MONTHS	Total number of beneficiary months enrolled	<i>Note: Based on 12 months of 2018 enrollment for assessment report and 9 months of 2019 enrollment for annual report.</i>	Both
11	ACG_UNSCALED	ACG unscaled risk score sum		Both
12	ACG_RESCALED	ACG rescaled risk score sum – average in included VHCURES population is 1.0		Both
13	TOTAL_AMOUNT_PAID*	Total paid on claims in VHCURES excluding Medicaid long-term care claims (ICF, SNF, residential, swing bed)		Assess. only
14	TOTAL_MEDICARE_PBP	Total Medicare ACO Per Beneficiary Payments		Assess. only
15	TOTAL_MEDICAID_PREPAID	Total Medicaid ACO shadow claims		Assess. only
16	TOTAL_MEDICAID_LTC	Total paid on Medicaid long-term care claims (ICF, SNF, residential, swing bed)		Assess. only
17	TOTAL_OUT_OF_POCKET	Member out-of-pocket responsibility		Assess. only
18	TOTAL_ALLOWED_AMOUNT	Sum of Total Amount Paid + Total_Out_Of_Pocket		Assess. only
19	TOTAL_COST	Sum of TOTAL_AMOUNT_PAID + TOTAL_OUT_OF_POCKET + TOTAL_MEDICAID_PREPAID + TOTAL_MEDICAID_LTC + TOTAL_MEDICARE_PBP		Assess. only

## E. Assessment

We will assess the ACO payer differential in several steps. First, we will aggregate the gender-age group-HSA-specific risk scores for each payer subgroup, using a weighted average. Second, we will use these aggregate risk scores to report risk-adjusted payments and allowed amounts. Depending on whether the resulting risk-adjusted payments and allowed amounts differ across payers, we will then use the disaggregated risk-adjusted payments and allowed amounts to understand the discrepancies. If risk adjustment is not enough to explain a potential payer differential, we will also use socio-economic measures from the ACS to further explain the differential. Below, we provide more details on each step.

### Step 1: Aggregating risk scores by payers and payer subgroups

As described in Section 5 above, we will report the ACG scaled risk score sum for each cell defined by gender, age group, HSA, and payer and payer subgroup. Using the sum of member months in each of these cells, we will obtain aggregate risk scores as follows:

$$RS_{p,s} = \frac{\sum_a \sum_g \sum_h RSS_{a,g,h,p,s}}{\sum_a \sum_g \sum_h \#member\ months_{a,g,h,p,s}}.$$

Here,  $RS_{p,s}$  is the aggregate risk score for payer  $p$  and payer subgroup  $s$  and  $RSS_{a,g,h,p,s}$  is the ACG rescaled risk score sum for age group  $a$ , gender  $g$ , HSA  $h$ , payer  $p$ , and payer subgroup  $s$  as reported in Section 5 above.

## Step 2: Reporting risk-adjusted payments and allowed amounts

As a first step in assessing the payer differential, we will report the risk-adjusted total payments and allowed amounts using the aggregate risk score  $RS_{p,s}$  from Step 1. We follow the template shown in Table 2. This table will show that risk adjusted payer differential, that is, it will reveal any discrepancies in allowed and paid amounts between payers after accounting for the fact that members vary in their underlying health and health care use, as captured by the risk score.

**Table A.2. Template for payer differential assessment reporting**

Payer and subgroup	Member months (1)	Average rescaled risk score (2)	ACO benchmark rate (3)	Paid-to-allowed ratio (4)	Risk-adjusted benchmark using allowed amount (5)	Payer differential as fraction of Medicare (6)
Medicare FFS						
Medicaid						
Adult						
Child						
ABD						
Commercial						
Fully-insured						
Self-insured						

<sup>a</sup> Commercial costs are based on allowed amount, not paid amount. Medicaid costs also include ACO hold harmless non-claims payment estimates. These non-claims payments are not available in VHCURES, instead we estimate the amount using a 2018 PMPM ACO hold harmless payment costs using data provided by DVHA via GMCB.

## Step 3: Assessing the payer differential

Based on the reported payer differential, we will explore which factors can explain differences in risk-adjusted allowed and paid amounts. First, we will determine whether specific demographic groups can account for these differences. For example, if many members associated with a particular payer reside in one HSA and this HSA has a higher than average health care use, this could affect the risk score for this group, which in turn would lead to a lower risk-adjusted amount paid for the payer. It is possible that differences in health conditions or health care use that enter the ACG grouper cannot account for observed variation in payments across payers. In this case, we will explore the socio-economic measures from the ACS to explain payer differential. For example, members associated with different payers could reside in areas with higher or lower poverty or unemployment levels, which in turn would affect payments in a way that is unrelated to factors captured by ACG risk scores. To relate differences in payments to differences in socio-economic factors, we will use visual tools such as tables and scatter plots and calculate pairwise correlations between group-specific payments and socio-economic variables.

## F. Annual report

For the annual report, we will aggregate the rescaled risk the same way as for the assessment report (see step 1 above). We will then report risk-adjusted PMPM capitation rates for each payer and subgroup along with their growth rates. Table 3 shows the template for this reporting.

**Table A.3. Template for payer differential annual reporting**

Definitions		Formulas		
Medicaid		Adult	Child	ABD
2018 PMPM capitation rate		A		
2018 member months		B		
2018 risk score		C		
2019 PMPM capitation rate		D		
2019 risk score		E		
PMPM capitation rate change		$F = D/A - 1$		
Growth of weighted ACO benchmark		$G = \text{sum}(D*B) / \text{sum}(A*B) - 1$		
Growth of risk-adjusted ACO benchmark		$G = \text{sum}(D/E*B) / \text{sum}(A/C*B) - 1$		
Medicare				
2018 PMPM capitation rate		A		
2018 member months		B		
2018 risk score		C		
2019 PMPM capitation rate		D		
2019 risk score		E		
PMPM capitation rate change		$F = D/A - 1$		
Growth of weighted ACO benchmark		$G = \text{sum}(D*B) / \text{sum}(A*B) - 1$		
Growth of risk-adjusted ACO benchmark		$G = \text{sum}(D/E*B) / \text{sum}(A/C*B) - 1$		
Commercial		Total	FI	SI
2018 PMPM capitation rate		A		
2018 member months		B		
2018 risk score		C		
2019 PMPM capitation rate		D		
2019 risk score		E		
PMPM capitation rate change		$F = D/A - 1$		
Growth of weighted ACO benchmark		$G = \text{sum}(D*B) / \text{sum}(A*B) - 1$		
Growth of risk-adjusted ACO benchmark		$G = \text{sum}(D/E*B) / \text{sum}(A/C*B) - 1$		

Note: That 2019 risk scores will be weighted across 9 months of enrollment data, while 2018 risk scores will be weighted across 12 months of enrollment data.

BCBS is the only commercial ACO provider. The self-insured BCBS plan is for UVMMC. In our initial report to GMCB, we will stratify commercial by fully- and self-insured, using the BCBSVT fully-insured rate for BCBS, and the UVMMC rate for self-insured. These rates are confidential, and therefore our initial report will be confidential. After reviewing results with GMCB, we will develop summary materials that mask confidential commercial rates that can be potentially shared publicly. Our method for masking these rates is TBD, but might involve grouping commercial into one category and limiting info provided so that rates cannot be calculated, or we may calculate one overall average rate and summarize the payer differential relative to the average rate.

### G. Crosswalk with all payer TCOC

The following table lists differences between the All Payer TCOC and the All Payer Differential Assessment inclusion and exclusion criteria.

**Table A.4. Crosswalk between All Payer TCOC and differential assessment**

All Payer TCOC	Differential Assessment ACO Grouper	Differential Assessment Reporting
Dually eligible individuals assigned to Medicare; only Medicare claims included	Both Medicaid and Medicare claims included for dually eligible individuals.	Dually eligible individuals assigned to Medicare; only Medicare claims included. Dual eligibles flagged and may be excluded
Includes members with Medicare Part A, Part B, or Parts A & B	Includes members with Medicare Part A, Part B, or Parts A & B	Includes members with Medicare Parts A & B
No age restriction for Medicare members	No age restriction for Medicare members	Medicare members aged 65+ included only
Includes Medicare ESRD	Includes Medicare ESRD	Excludes Medicare ESRD
Unknown gender set to female	Excludes unknown gender	Excludes unknown gender
No continuous enrollment criteria	Excludes members with less than 9 months enrollment during 2017	Excludes members with less than 9 months enrollment during 2017

### H. Background model agreement language: Payer Differential

- A. Beginning in Performance Year 2, the GMCB, after collaboration with AHS, shall submit to CMS, no later than 90 calendar days after the start of each Performance Year, the percent ACO Benchmarks will increase by payer for Vermont ACOs, an explanation for any differences in ACO Benchmark increases between payers, and the impact such differences may have on the Payer Differential as it affects Vermont ACOs.
- B. The GMCB, after collaboration with AHS, shall submit to CMS by the end of Performance Year 2 an assessment of the Payer Differential as it affects Vermont ACOs. This assessment may include, but is not limited to, payment rates and ACO profit margins by payer.
- C. The GMCB and AHS shall submit to CMS by the end of Performance Year 3 a report on options to reduce the Payer Differential between payers during and after the Performance Period.
- D. In order to encourage Vermont to address the Payer Differential, CMS shall make adjustments to the All-payer Total Cost of Care per Beneficiary Growth Target Calculation, as necessary and as specified in this subsection, to recognize that cumulative All-payer Financial Target Services growth

may be attributable to efforts by Vermont to increase Vermont Medicaid reimbursement rates to levels comparable to or greater than Medicare reimbursement rates, where a comparable service is available, or to rates sufficient to ensure greater access by Medicaid beneficiaries. The GMCB, after collaboration with AHS, may submit a written request that specific changes in payments to Medicaid providers be taken into consideration when assessing performance on the All-payer Total Cost of Care per Beneficiary Growth Target. Vermont must explain the impact of such factors on the All-payer Total Cost of Care per Beneficiary Growth Target performance and recommend how CMS should adjust the All-payer Total Cost of Care per Beneficiary Growth calculation to reflect these factors. CMS will accept such requests that it determines are consistent with the aforementioned goal of increasing Vermont Medicaid reimbursement rates to levels comparable to or greater than Medicare reimbursement rates, when comparable services are available, or to rates sufficient to ensure greater access by Medicaid beneficiaries.

- E.** The purpose of this subsection is to ensure Medicaid beneficiaries have access to ACO network providers that is equal to access of those with Medicare or commercial coverage. This subsection is not intended to modify the services covered by a payer nor to limit access to providers of services that are not covered by all payers. The GMCB shall ensure that a Vermont ACO shall not interfere with a patient's choice of health care providers under the patient's health plan, regardless of whether a provider is participating in the ACO.
- ii. The State shall ensure that Vermont ACOs have a single network of providers, regardless of payer, for All-payer Financial Target Services. If a payer covers services that are excluded by other payers, the State shall ensure that Vermont ACO(s) have a broader network of providers for that payer to ensure beneficiaries have full access to the services covered by their health plan.
  - ii. If any Vermont ACO does not have a single network of providers for All-payer Financial Target Services regardless of payer by the beginning of Performance Year 2, then AHS shall require the Vermont ACO, as a condition of its Medicaid contract, to ensure that at least 90 percent of all providers in the Vermont ACO's network accept Vermont Medicaid beneficiaries.
  - iii. If neither of the network access tests set forth in sections 1 O.e.i and 1 O.e.ii are satisfied, then CMS shall determine it a Triggering Event and issue the State a Warning Notice as described in section 21. The GMCB and AHS shall submit to CMS, for its approval, a CAP for this Triggering Event as set forth in section 21. The State shall include in such CAPs options for satisfying the network access tests set forth in either section 10.e.i or 10.e.ii. The State may include options that have the effect of increasing Medicaid rates to reduce the Payer Differential as a means of improving access. The State's CAP shall include criteria for completion and release of the CAP.

**Appendix B:**  
**Complete Annual Report Tables**

**This page has been left blank for double-sided copying.**



Tables B.1 and B.2 show the detailed calculations we used to derive the growth rates and update factors in Tables IV.1 and IV.2, respectively.

**Table B.1. Annual growth rates in ACO payment targets, by payer**

Definitions	Formulas	Payment category		
Medicaid		ABD (1)	Adult (2)	Child (3)
2018				
2018 PMPM capitation rate	A	\$609.40	\$353.93	\$112.88
2018 attributed member months in base year	B	31,109	188,366	237,361
2018 risk score	C	2.12	1.20	0.39
2019				
2019 PMPM capitation rate	D	\$540.96	\$349.13	\$114.80
2019 risk score	E	2.20	1.22	0.40
2019 PMPM capitation rate change	F = D/A-1	-11.2%	-1.4%	2.2%
2019 risk-adjusted PMPM capitation rate change	G = (D/E)/ (A/C) - 1	-14.5%	-3.0%	-0.4%
Growth rate of weighted ACO benchmark	H = sum of (D*B)/sum of (A*B)-1		-2.2%	
Growth rate of weighted risk-adjusted ACO benchmark	I = sum of (D/E*B)/sum of (A/C*B)-1		-2.4%	
Medicare	Non-ESRD (1)			
2018				
2018 PMPY ACO payment target	A		\$9,681.87	
2018 risk score	C		1.48	
2019				
2019 PMPY ACO payment target	D		\$9,536.52	
2019 risk score	E		1.49	
2019 PMPY ACO payment target change	F = D/A-1		-1.5%	
Growth rate of risk-adjusted ACO benchmark	G = (D/E)/(A/C)-1		-2.0%	
Commercial	BCBSVT (1)		UVMCM (2)	
2018				
2018 PMPM ACO payment target	A			n/a
2018 attributed member months in base year	B		192,006	n/a
2018 risk score	C		0.76	n/a
2019				
2019 PMPM ACO payment target	D			n/a
2019 risk score	E		0.80	n/a
2019 PMPM ACO payment target change	F = D/A-1			n/a

## Appendix B. Complete Annual Report Tables

Definitions	Formulas	Payment category
2019 risk-adjusted PMPM capitation rate change	$G = (D/E)/(A/C) - 1$	n/a
Growth rate of weighted ACO benchmark	$H = \text{sum of } (D*B)/\text{sum of } (A*B) - 1$	
Growth rate of risk-adjusted ACO benchmark	$I = \text{sum of } (D/E*B)/\text{sum of } (A/C*B) - 1$	

a

Sources: State of Vermont, Contract for Personal Services – Department of Vermont Health Access – OneCare Vermont Accountable Care Organization, LLC – Contract # 32318 (for 2019 Medicaid PMPM ACO payment targets); as reported by Medicare courtesy of Green Mountain Care Board (for 2018 and 2019 Medicare PMPY ACO payment targets);

ABD = aged, blind, or disabled; ACO = accountable care organization; BCBSVT = Blue Cross Blue Shield Vermont; ESRD = end-stage renal disease; n/a = not available; PMPM = per-member-per-month; PMPY = per-member-per-year; TBD = to be determined; UVMCC = University of Vermont Medical Center.

Table B.2. Updates to factors in 2018 and 2019, by payer

Definitions	Formulas	2019			2018		
Medicaid		ABD	Adult	Child	ABD	Adult	Child
PMPM cost estimate in base year	A	\$533.30	\$331.46	\$109.70	\$565.54	\$315.11	\$104.49
Attributed member months in base year	B	58,843	354,085	417,422	32,966	198,100	231,169
PMPM capitation rate in performance year	C	\$540.96	\$349.13	\$114.80	\$609.40	\$353.93	\$112.38
ACO benchmark update for two years	$D = C/A - 1$	1.4%	5.3%	4.6%	7.8%	12.3%	7.5%
Weighted annualized ACO benchmark update	$E = [\text{sum of } (C*B)/\text{sum of } (A*B)]^{(1/2)} - 1$		2.2%			5.1%	
Medicare		Non-ESRD			Non-ESRD		
PMPY cost estimate in base year	A		\$9,333.15			\$9,625.00	
ACO benchmark in performance year	C		\$9,536.52			\$9,961.98	
ACO benchmark update for one year	$D = C/A - 1$		2.2%			3.5%	
Commercial		BCBSVT		UVMHC	BCBSVT		UVMHC

Sources: See Table IV.1 for ACO benchmarks and BCBSVT cost estimates; courtesy of Green Mountain Care Board for Medicaid and Medicare cost estimates.

ABD = aged, blind, or disabled; ACO = accountable care organization; BCBSVT = Blue Cross Blue Shield Vermont; ESRD = end-stage renal disease; PMPM = per-member-per-month; PMPY = per-member-per-year; UVMHC = University of Vermont Medical Center.

---

## **Mathematica**

Princeton, NJ • Ann Arbor, MI • Cambridge, MA  
Chicago, IL • Oakland, CA • Seattle, WA  
Tucson, AZ • Woodlawn, MD • Washington, DC

## **EDI Global, a Mathematica Company**

Bukoba, Tanzania • High Wycombe, United Kingdom



[mathematica.org](https://mathematica.org)